

Typologies: questions and examples in historical perspective

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Abstract

In this contribution, the various questions that can be asked of artefacts to be classified will be briefly addressed. Questions on chronology and technology; questions on the techno-anthropological context of use that force us to raise our gaze from the single artefact to the surrounding universe; questions on what was the social use of artefacts (for distinctions of rank, gender, age, etc., but also for interactions aimed at establishing, or overcoming, limits and boundaries); questions on artefacts as means of exchange (of goods, but also of information or values); questions on what people thought of the artefacts they had (importance, but also indifference or rejection).

In conclusion, a brief reflection on the definition of material culture and the fact that distinguishing attributes to identify types (and variants) is important if it is to recognise and explain unique items, exceptions and variants.

Keywords: study questions and approaches, global archaeology, material culture, attributes, types, variants.

Introduction

Adopting a historical perspective to think about archaeological classifications means two things. Reasoning about how, over time, archaeology has changed its way of looking at objects and addressing the problem in the long term and without disciplinary chronological partitions. All this, of course, considering the present, which is not easy, in order to look to the future.

From its origins, archaeology has had to deal with the complexity (qualitative and quantitative) of reality by reducing the mass of finds to data that can be organised in tables, charts and, of course, reflections. Hence the endless attempts to create typologies, often in an empirical and naive manner. **Typologies not** always explicitly defined but adopted by specialists in different fields because they are functional and workable. **Useful,** that is, to recognise periods, techniques, uses, but also social variability, modes of economic development, cultural specificities. Constructed typologies, learnt in the course of work, **completely** different from those in use in everyday life.

There is no denying that prehistoric archaeology anticipated what has been discussed by classical archaeologists since the mid-20th **century.** **To** be then taken up, sometimes with an original

mix, by the post-classics. But the problem is not, in my opinion, dependent on chronology. The problem depends on the nature of the data.

It is one thing to have artefacts that are almost entirely attributable to a limited technical toolkit, it is quite another to deal with the issue of classifying non-functional objects. And, in fact, the criteria adopted in studies of prehistoric lithotechnics differ little from those required to study artefacts found in a blacksmith's workshop in the classical, medieval and post-medieval periods (materials, shapes, dimensions, wear and, in the best cases, association with other artefacts).

On the other hand, both the prehistoric archaeologist and the classical and medieval or post-medieval archaeologist will reason about the style and shape of decorated pottery or, even more so, about a statuette, statue, monument, etc. **With the different possibility of resorting to what we will call extra-archaeological data: in particular, references in written and iconographic sources, but also ethnographic observations of situations of use.** What differentiates the study of a Palaeolithic Venus from that of a mediaeval Madonna is not the methods of observation - description - categorisation (nor even the importance or rarity of the object), but the set in which to place it. **A whole lot** of course, depends on the loss of information over time that determines different cases and problems. **To be precise, possible absence of a historical cultural context (but not only), partiality of data, ambiguities arising from the scholar's ideas.** And, therefore, from the expectations of the scholarly community regarding, in one case, the expected role of women (fertility, matriarchy, etc.); in the other from the reasoning of the ways of a religiosity otherwise known from the sources.

In this contribution, the various questions that can be asked of the finds to be classified will be addressed in a synthetic manner. **Questions about chronology and technology (which can always be answered in some way); questions about the techno-anthropological context of use that force us to raise our gaze from the individual artefact to the surrounding universe; questions about what the social use of artefacts was (for distinctions of rank, gender, age, etc., but also for interactions aimed at establishing, or overcoming, limits and boundaries); questions about artefacts as means of exchange (of goods, but also of information or values); questions about what people thought of the artefacts they had (importance but also indifference or rejection).**

This will be followed by a brief reflection on the definition of material culture and on the fact that distinguishing attributes to identify types (and variants) is important if it is to be able to recognise and explain unique items, exceptions and variants. **For reasons of space and having recently dealt with the subject in a volume (Giannichedda 2021), the bibliography will be kept to a minimum.**

1. Questions and approaches to materials

A statement seemingly thrown in there almost by chance by Amilcare Bietti, an important Italian prehistoricist, comes in handy in introducing this chapter **despite the passing of years**. When the contrasts imposed by Bordes', Laplace's and Binford's reflections on typology were still alive, Bietti argued that one must understand "type as a design correlation of attributes" (Bietti 1978, p. 18).

In this statement, we read the two pivotal elements of every classificatory proposal: the concrete and irreducible attributes detectable on artefacts, and the type that for producers and users was the design outcome, and intuitive, of an activity, but for us is the object of desire. **Sometimes that it is convenient to define, case by case, by asking explicit questions and looking precisely in the detectable attributes for answers.** Knowing that different questions will lead to different answers.

Picking up on previous works (Giannichedda 2014 and 2016a) devoted to global archaeology and the multiple ways of studying objects, we will proceed **below** to outline the approaches that each researcher can adopt. Approaches resulting from adhering to some intra-disciplinary tradition, or to a specific school, which, **as we have seen, has noble fathers** and is held together by small shared paradigms. In order to seek some clarity of exposition, we will **clearly** distinguish six different approaches. **And**, with the help of a diagram (figure 1), we will highlight for each approach the peculiar features, the role attributed to the artefacts being studied, the recurring keywords and also the reference authors and the areas that, in the academic and cultural geography, have become poles of aggregation. **And** we will reason about the relevant attributes, the consequent types and, thus, the very ways of classifying.

To do so, we will use as an example the results of an excavation in a **monastery**, medieval and female, carried out in Piedmont (Giannichedda 2012). A monastery whose refectory, part of the cloister, common rooms and open spaces were identified. **For each question, or study approach, a brief example will be proposed to remind us of two things: each artefact is a consequence of cycles of production - use - discard and, at the very least, archaeological recovery; any attempt we make to construct typologies must take into account that these are analytical tools aimed at studying other people's classifications.**

The defect of the text divided into paragraphs and the diagram in Figure 1 will be that it will make the differences even more rigid. Knowing, however, that reality is never simple and discussing the different approaches in sequence does not mean that one preceded the other or that one question must be answered in order to move on to the next. Each of the different ways of looking at artefacts has, in fact, antecedents. And the contaminations between some are very strong. Unfortunately, there are also frequent cases where scholars have very partial research perspectives.

With the consequence that studies aimed at a single purpose, for instance the dating of specific cultures or the technologies in use in a given period, will only with difficulty provide useful data for the reconstruction of other aspects of material life.

Chrono-typological and cultural-historical approach

An approach that aims at dating artefacts is an indispensable prerequisite to any historical reconstruction. And, indeed, in the introduction to *L'età del Bronzo nella penisola italiana* (1971) Renato Peroni quoted an absolutely misplaced but important passage by Carlo Cattaneo from *L'insurrezione di Milano nel 1848*: 'Chronology is the eye of history'. Thus risking making people think that chronology is history understood as a sequence of changes. History, however, is also something else.

In some ways, the chronotypological approach is the one that most simplifies the complexity of the relationship between men and things. In fact, artefacts are reduced to mere fossils - guides in a perspective aimed at dating them, the stratigraphies in which they were found, the context. Not that this is not indispensable, but it is a reductive and peculiar research perspective. A perspective that can only be pursued for certain classes of artefacts and that could sometimes be fulfilled by resorting to scientific dating methods. An approach, therefore, that postpones the search for any archaeological historical interpretation to other and subsequent stages. The first of which is when chrono typologies serve to define cultural facies, stylistic provinces, regional identities and the like. All of which are almost always based on the appreciation of formal, stylistic, decorative attributes. Almost never, for reasons we shall see, productive or functional. Gordon Childe's well-known definition of culture is, in fact, indicative of what we might call fossil-historical cultural guides: "We find certain types of remains - pots, implements, ornaments, burial rites, house forms - constantly recurring together. Such a complex of regularly associated traits we shall term a cultural group or just a 'culture'. We assume that such a complex is the material expression of what today be called a 'people' ... ' (1929, pp. i - ii).

The chronotypological approach, in trying to answer the question of how we date, is, therefore, a zero level from which to start, but it is important because it determines the disciplinary partitions into periods and ages. A theme, that of time, which cannot be addressed here and which does not only concern deep history, but also influences the way of understanding, and narrating, even historically close periods. The Middle Ages, for example, although one of the best known periods, for some can be divided into two parts (high and low). For some in at least five (Late Antiquity, High Middle Ages, Classical or Middle Ages, Late Middle Ages). And its conclusion is debated as to whether it should coincide with geographical explorations (the canonical 1492),

anticipated at the end of the 14th century or consequent to the formation of nation states in several parts of Europe.

In many cases, the first step in the chronological and historical approach is to distinguish formal characters. Not all artefacts, however, will show characters that can be dated with the same precision, and research will therefore be selective and aimed at defining types. In doing so, preference will be given to this or that attribute, but it will certainly be done in a rational, systematic, objective, analytical, hierarchical and quasi-scientific manner. The classification system will resemble those adopted by naturalists and will be used, with relative ease, to establish relative chronologies and origins. Classification, at this stage, is still a relatively simple and compilative operation that builds working tools (drawings, cards and so-called catalogues) and nothing more. Much more difficult, however, will be to move from chronology to phases and, whatever you call them, to 'cultures'.

To achieve this, the starting point is almost never the simplistic subdivision by material classes (stone, bone, wood, ceramics, bronze, iron, glass, etc.), but almost always goes a little further. For example, it is normal to consider amphorae, terra sigillata, thin-walled ceramics, and metals as distinct classes. As Ada Gabucci (2013, p. 20) points out, the first of these classes is based on the recognition of form and function, the second and third on a technical production datum, the last on the material, however heterogeneous it may be. Evidently these are classes that already presuppose some competence on the part of the researcher, who otherwise would not distinguish amphorae from pots and pans and pipe fragments, or would not have lumped metals together knowing that, at a later stage of the work, he would necessarily have to distinguish them.

Significant examples of this approach, in addition to numismatic studies, are the works on tableware ceramics from the Classical period, which often propose quarter-century dates. This is a significant point of arrival because it is analogous to the duration of a generation, to the duration of a wooden house (without intervention), to the cultivation of an area.

In the case of the monastery of Santa Maria di Bano at Tagliolo Monferrato, an epigraph that mentions, with precision, the construction of the refectory in 1298, some 'archaic graffito' ceramics that testify to a previous presence in neighbouring areas, a large number of 14th-century finds, and a few later artefacts that can be traced back to phases of abandonment contribute to the dating of the phases of frequentation.

Technological approach

This type of approach considers things as the concrete outcome of a working process aimed at transforming natural materials. The question is: How were things made? How did people go from raw materials, animal or plant minerals, to finished products?

This is the aim of technological investigation.

Technique is therefore seen as a recipe. A sequence of operations in which fundamental, unavoidable steps can be distinguished from other, less important, accessory ones. The reconstruction of the production cycle, with its internal concatenation, is the objective pursued. Sometimes even pushing the analysis towards extremely minute details. For example, by recognising the material outcome of a single operation or, even, of a specific muscular contraction of the maker: the finger of the potter attaching the handle to a jug, the mark of a single hammering of the smith, the groove left by the engraver's blade. Technological is also the approach that characterises many archaeometric studies, although these can also address other issues. For example, determinations of provenance and, therefore, the study of trade and commerce.

All the different categories of artefacts, including fragmentary ones, can be studied, but there are different cases depending on the production cycles. The study of finished products is always important, all the more so if they are intact, but in the case of the stone cycle (chipped but also for construction), processing waste is important. And the same is true for metal and glass cycles, but also for bone and the like. Less so for ceramics, which are almost always classified technologically by looking at the modes of shaping (by hand, columbine, mould, lathe) and coatings (without coating, with surface treatments, glaze, engobe, enamel, etc.).

The millions of prehistoric flint knives and the hundreds of iron knives of later ages will, therefore, be studied in the same way: assessing their shape, size, the material from which they are made, characteristic wear, re-use, comparisons with objects of other origins. When possible, even by resorting to experimental archaeology. In this way, each individual tool, a particular case, becomes evidence of a general technical trend. In the best situations corroborated, not by the examination of one or a few finds, but by the quantitative study of the entire association of materials.

The risk of this approach is well rendered, for the historical age but also for other periods, by the positivist, evolutionist, economicist logic that assumes the simple always precedes the complex. First stone, then bronze, then iron. A 'technicist' approach, well expressed by the museums of science and technology, recurring for example in the classification of knives, weapons, stirrups, mechanical frames and medieval and post-medieval machines in general. Sometimes also of

ceramics looking, for example, at the introduction of ever larger and more efficient kilns in the modern sense of the term.

In all cases, whether for long-lasting phenomena or for changes occurring in short periods of time, the technological approach runs the risk of overestimating the importance of the technical fact in itself, **contrasting hot societies, in which technology changes rapidly, with cold or blocked ones.** And, then, the different relationship that people and societies have with technology risks becoming a discriminating historical yardstick. Indeed, it is precisely the logic of progress and technical evolution, sometimes implicit and unspoken, that links the technological approach to the chronotypological with classifications based on the belief, often without any proof, that the simpler an artefact is, the older it is.




In the case of the monastery of Bano, the most interesting technological aspect is the construction of the buildings in brick, some with decorations made by carving with a knife. In an area where at the time almost only stone was built. A technique, therefore, imported and a production cycle adapted to the purpose in the absence of specific skills, for example on how to construct the decorative moulds that were known at the time, but in use only in other regions.

Techno-anthropological approach


The technoanthropological approach aims to study artefacts in order to understand how things worked in relation to humans and, inevitably, to the passage of time. Not only, therefore, how men made things, but, for example, how things interacted, influenced (or were active), in social relationships. What relationships existed with past traditions or with new and different ideas? How did producers intervene to address or satisfy new needs?




Obviously, the techno-anthropological approach is among the most articulate. Largely thanks to the **lesson** of André Leroi-Gourhan, the techno-anthropological approach has as its object of study the **man who is 'skilled' in performing activities, be he a craftsman but likewise the man who produces for himself or the user of objects made by others. Man in the sense of a social person, including women and children as well as those gender distinctions that are often archaeologically difficult to detect and which are dealt with in greater depth by other approaches.**

Beginning with Bronislaw Malinowski's (1971, but original edition 1941), sociologists and anthropologists have noted that, in any society, **men** have the same needs: to eat, drink, rest, have sex and reproduce, ensure comfort and security, play, and learn. If we do not dwell on the terms used, **we must admit that this is all Sapiens know how to do** (and even the innumerable objects in a **hypermarket** can all be grouped into as many groups as the needs mentioned).

 The sampler of needs is therefore finished, known and, importantly, adequate to help us classify. Even if we cannot have direct experience of what material equipment was in prehistory, or in other periods, we know what needs it satisfied. And, from direct experience, not historical but techno-anthropological, we also know what  characterises an object  must have in order to satisfy those needs: the pot must resist fire (but may be made of leather), the knife must be sharp (but may be made of a material that systematically breaks during use), the bed should be comfortable but in a relative sense (sometimes it is just a space cleaned of chipping scraps or the like).

The recurring, and specific, characteristics of each category of functional artefacts can be defined as 'tendencies' to satisfy a need that seems 'natural' but is not. The tendency is, therefore, predictable, logical, convenient, recognisable in the artefacts. It is, however, realised in historical 'facts' that are 'cultural' and, therefore, different in each place and period. Different in both quality (the modes) and quantity (the frequencies). (André Leroi-Gourhan 1993, p. 21 ff.; original edition 1943).

Complicating the techno-anthropological approach are the uses of artefacts in symbolic, ritual, communicative terms. In a word, in addition to use, the meaning attributed to the objects. In this case, the trends will be  weaker (even if the tombs remain in some parts 'human-sized') and the cultural facts much more heterogeneous. The issue is complex and refers back to the very definition of material culture (see below), but I think it suffices to argue that meaning is almost never completely independent of the material constituting the artefact (rarity, colour, visibility, durability, provenance, etc.), of the practical function the object recalls, and of the context of use.

The techno-anthropological approach is therefore based on recognising attributes that enabled an 'effective traditional act'. A definition, taken from a piece of writing as brief as it is fundamental by Marcell Mauss,  useful in emphasising that the artefact also had to function in a social key (Mauss 1965).  For technical is not only product  but also any satisfaction of needs: from hunting to the management of natural resources, cooking practices, the way of setting the table, the way of burying, the transfer of information and skills, dance, magic, ritual. What is important, therefore, are not the individual artefacts that bear witness to a technique, but the associations of artefacts that have consequences for the environmental, social and cultural context. What is of interest is not the detailed reconstruction of each technical cycle, or ergology, but the modes of transmission of knowledge, individual and collective memory, stability and change in time and space.

In this direction, André Leroi-Gourhan has been able to organise, in a manner that cannot be improved upon because it is synthetic, irreducible and objective, a kind of minimal technical alphabet. In the sense that any technical operation can be traced back to a few elementary means, hence the tendencies that, in every period, take the form of functional types that are always similar:

'knife', 'container', 'hearth'. It is techno-anthropological, however, to place the findings under study in the focus between the needs of the producer and those of the consumer. Not by trivialising either one or the other, but by assessing, for example, whether a set of dishes was such because it served to distinguish, socially, feast days from others rather than, technically, liquid courses from solid ones, large from small.

Technoanthropological is to study quality and quantity, to reason about standardisation and variability, to reconstruct associations of contemporary use, to evaluate sequences and transformations. The recognisable attributes in the majority of artefacts will thus inform trends, but some artefacts can inform in greater detail the concrete uses characteristic of the context.

Characteristic of the monastery of Bano is one fact. Similar to that found for example in the cities, the tendency was to use plates and bowls of regional production or imported from Spain. However, the quantitative study showed that all the tableware was graffitied with the initials of the nuns' names. This is specific to the monastery and absent in contemporary towns and villages. In a place where the **monastic** rule dictated that everything should be communal, nuns affirmed their personal identity by engraving their own tableware. A situation also known from other situations of constraint, from Roman encampments to post-medieval prisons, in which scratching one's own vessel was an attempt to preserve some residual individual freedom.

Social approach

The social approach is not unrelated to the previous one and to the cognitive approach when it deals with issues of power or others in which objects mediate interpersonal relationships. At the centre of interest is not the individual man, his corporeality or intelligence and memory, but the social animal man. The question that characterises this approach is more vague than others because human societies can be very different from one another and what is being asked can only be summarised in a general way: What role did things play in relations between men?

A question, if you like, not very different from the techno-anthropological approach, but less conditioned by the concrete production and functioning of objects. There will be less focus on technique, or production cycles, and more on finished products and conditions of use.

In this sense, looking at the products and thus the artefacts that the archaeologist studies, it is possible to make some observations that refer to the definition of attributes and types.

The first is, roughly speaking, between objects of use and objects of value. On the one hand, the earthenware pot, on the other, the royal crown. In between, a whole world of uncertainties. How to think about, for example, ornaments, necklaces, decorated crockery? The answers to the above questions, trivially, could be sought in the interpretation of the contexts, but in reality they are also

detectable, at least in part, in the characteristics of the artefacts: cost and possibility of procuring materials, presence of constructive and/or decorative complications, relative and absolute rarity.

Secondly, a distinction must be made between goods, whether of use or value it does not matter, durable goods that could, for example, be passed on from generation to generation, and goods destined for consumption and which had to be continually replenished (food, first and foremost). Important evidence of these are animal and plant remains, resulting from preparation, slaughtering, portioning, cooking and the like, for which the specialist skills of archaeozoologists and archaeobotanists are needed (Sigaut 1980). Considering that the more efficient food consumption is, the less traces are left behind. It is important to search for information by studying particular attributes. For example, having identified a pot, we can with some reason speculate on what it was used for, and a slaughter knife informs an elusive but local practice.

It is important not to stop at techno-anthropological logic, but to look at social occasions of consumption. In the case of the monastery of Bano, from the number of seats in the refectory to the functional association between pots and food residues, knives and bone remains. **Attention,** therefore, to the repeated and shared norms of behaviour (habitus) specific to individual situations, but also to historically informative exceptions. Valuing the data provided by those artefacts that more than others appear as active agents (agency). **In our case, there are a few ceramics with the IHS symbol, but above all a Savona-produced bowl decorated by the potter with a noble coat of arms or a silver ageminato knife (a unicum) as proof of social roles clearly legible, today and in the past, in artefacts.** On the other hand, the variety of tableware is such that no two decorations are the same and, therefore, the 'good manners' of setting the table that we know to be characteristic of more complex and somewhat more recent social situations had not yet been established in the **monastery.**

Finally, the social approach does not study the real effectiveness (the technique) of artefacts, but the social effectiveness that may even conflict with the former whenever the communicative needs of the object prevail over its practical function. For example, the richly decorated silver knife 'works' less well than others because it is delicate. **An example chosen because important pages have been written on functioning by Francois Sigaut (1991)**

Socio-economic approach

Although distinct, the socio-economic approach, as the term makes clear, cannot be separated from the social approach of which it enhances one aspect above all others. **In this case, the consideration and study of artefacts by equating them with commodities. More correctly,** however, the research topic is how things were exchanged. **From gift to barter, from rent to taxes, from theft**

to spoils of war. **Remembering** that commercial exchange (the transaction that, in the modern age, often satisfies the rule of supply and demand) is a special case **case** that, in historical times, determines the quantity and quality of material associations.

The socio-economic approach looks at artefacts for what they are worth and not for what they serve or mean. However, transferring typically modern ideas and behaviour into the past should be avoided. First of all, it is a mistake to consider exchange as a rational operation guided only by convenience; secondly, it is wrong to think that the market regulates the world.

In the case of the **monastery** of Bano, for example, the nuns had the best pottery of the time as a family dowry, but broken pottery was systematically repaired with copper wire. Although the nuns were from wealthy families, the repair indicates a choice that could not be justified by supply difficulties or anything else. Savings were in fact economically irrelevant for noble Genoese families.

In general, the focus on socio-economic facts drives archaeologists to the study of particular attributes and types: numismatic finds; valuable or imported materials; transport containers that offer an enormous, widespread amount of data that can be organised both diachronically and geographically. Sometimes even with the help of written sources and looking at contexts. Knowing full well that the rich grave goods, in every period, reveal choices that cannot be read in economic terms, but refer to other areas of interpretation (identity, social roles, ideas about the afterlife, etc.).

Aware **the** exchange normally took place between 'different' people (potter and buyer, noble parents and nuns' daughters, but also countryside and city) this approach makes it possible to move from studying artefacts to identifying social groups: from the **g**uling classes to professional merchants, agricultural producers, artisans and so on. **And, for each one, determining which objects were exchanged by assessing their price; which objects were instead destined for different practices (e.g. gift-giving); which objects were excluded from exchange circuits or had their own special ones (from documents to family jewellery; works of art, cult objects); which objects were produced to be sacrificed on particular occasions. Information that can almost never be obtained from the totality of finds and is best perceived by looking at particular finds whose lives are known.** In our monastery, in addition to repaired ceramics, there are in fact ceramics that have been hidden in the phases of abandonment to be found later. And we can imagine that in the unexcavated burials, simple family objects, centuries old and rich only in sentimental and cultic value, were placed.

Cognitive approach

The cognitive approach to the study of artefacts is certainly the one that poses the greatest problems in verifying interpretations. The most important question is, in fact, **How** did things 'think'?

The relationship between things, whether natural materials or products of some process, and the human mind is a field as intriguing as it is elusive and unsuitable for experimental verification. The arbitrariness of thinking, over time, apparently leaves the field open to every possible interpretative solution. **In reality, the cognitive approach starts from the assumption that no artefact is the result of technology alone and that no artefact is 100% functional.** People not only use objects, an operation they share with a fair number of animals, but they never stop thinking about them, designing them, judging them.

It is useless here to reason about neuroscience, knowledge transmission, semiotics, structuralism or anything else, **because the problem comes first and that** is to recognise the attributes of artefacts useful for historical reconstruction.

A **first** trend in current archaeology goes by the name of materialisation. It looks at the way new objects were invented: the 'first' pottery or glass and whatnot. Inventive processes that, as is well known, are never totally rational or merely consequent to the desire to satisfy particular needs. The materialisation of an idea may depend on random associations of previous and unrelated facts; elaboration of ideas triggered during games; following accidents that altered the normal unfolding of established processes. In addition to this, some studies look at the conceptualisation of objects. For example, in the case of a vase maker, the distinction of materials into pure and impure, forms into open or closed or as the sum of parts, operations as sequences **also** compelled by extratechnical facts.

In the case of the **monastery**, the noble coat of arms, a social indicator, was placed on a bowl for individual use because the kitchen pot, for example, was thought to be unsuitable for carrying a message. Although the saucepan was certainly more visible than the inside of the bowl.

A second trend, **on the contrary**, studies the possibility that new ideas were deduced from the observation of existing things. In this case we speak of engagement, **and well known is Colin Renfrew's** study of protohistoric weights in the Indus valley (Renfrew, Bahn 2006, p. 400). Weights and measures have not been found in the **monastery**, but in Genoa, in the same period, oil and wine measures were periodically 'rethought' for advantage. **An attribute, the changing of measures, can be found on bronze vessels and tells of norms, knowledge, disregarded norms, hidden knowledge and cheating. Up to the formation of new measures (with old names) differently known to weighers, administrators, local and foreign merchants (Giannichedda 2008).**

The relationships between objects and ways of thinking about them are therefore complex and, for example, a funerary item, recognised as exotic in relation to the burial context, may have been a consequence of wanting to 'materialise' a pre-existing relationship or, on the other hand, be an attempt to 'engage', stabilising a relationship that had just begun as a result of a gift.

In general, objects are also means of conveying information, with objects providing explicit information, but also with 'symbolic' objects, including signs and placards already used in the ancient world. The biggest problem arises, however, when the transmission of information or sensations occurs in mediated ways that cannot be perceived with certainty. Not to mention the possibility of objects that perhaps conveyed nothing, hardly anything at all. In archaeology, the focus on objects with an obvious signifying function has changed over time and, today, we often discuss active (attanti for Bruno Latour) and speaking, technical and cognitive artefacts.

In the monastery of Bano, a stone ashlar above a door bears a complex decoration with five different circular motifs connected by straight lines. Some have seen in it the hypothetical sunburst structure of the monastery with its dependencies; others Mount Calvary and the triple crucifixion; others a generic flower. For some, it is futile to try to interpret the meaning, although it meant something at least to those who had thought of it. Admitting, therefore, our lack of information puts us in the position of those who entered the refectory to eat without being interested in the architectural decorations. Different people could have different knowledge.

Conveying information effectively requires a system of understanding whereby more people know that the colour red means danger, the drawing of a woman with a child relates, but not always, to the sphere of the sacred, a radiating circle can indicate the sun or much more. In many situations, but not always.

But herein lies the problem. When can we establish that an attribute, a type or an object conveyed information to the point of informing us about it and the system of understanding? When did a vase or decorated stone convey information? And between whom? Between producer and buyer? Between those who used it in a single household? Between those who owned it and those who did not? Answering in non-trivial ways is difficult. Especially when general historical information does not allow the dangerous freedom of interpretation possible for periods without sources.

In the monastery, in front of the refectory door we have to stop; some message might have been there, but we do not have the means to understand it (and, perhaps, contemporaries did not even care). And the same was true of the epigraph even if even an illiterate person could understand that it meant something important.

In general, when reasoning about attributes, types and classifications, one must start by admitting that not all things were 'thought of' with the same intensity. Some, although they functioned technically and socially, could be taken for granted even though they contributed to the perception of self and the world. The cognitive approach must therefore be considered without reducing it to an emotional and affective approach aimed at a few chosen pieces with the biography of the object with personality. A recurring risk, for example, when looking at the two keys that the nuns of the monastery of Bano hid near the doors of the refectory when they abandoned it.

Cognitive is to grasp their meaning, even practical, for those who intended to return; unnecessarily emotional is to reason that we all hide our keys under the doormat. Different times, different situations, different stories.

In summary, the cognitive approach can almost always be applicable to a few selected artefacts in known functional and cultural contexts. In our case, a low-medieval female monastery. Despite this, the task remains difficult and requires attention to historical context, awareness of interpretative risks, and explicit declaration of attributes deemed significant.

2. Wholeness as a summation of parts

The previous approaches are evidently functional to reasoning about attributes, types, classifications. Perhaps an artistic or an environmental approach could also have been invoked, because the findings certainly inform this as well. But in reality, stylistic and artistic issues can be well understood, at the very least, in the cognitive approach and others, especially when it comes to 'artistic' handicrafts that can also be studied as artefacts, commodities and so on. Similarly, the environmental approach is understood or referable to others: from the management of resources, their transformation, the attribution of values and meanings, and so on.

The management of the environment, which only in the contemporary age becomes a widespread concern, in the past was transversal to productive, social, economic and cultural needs. And, often, not only fields, but even forests, rivers and the sea, are 'artefacts' that can potentially be classified on the basis of material attributes and by recognising types. The environmental approach, including what might be called the biological approach, is thus, albeit subtly, included in the others. Obviously, it broadens the perspective of each of them from a naturalistic, geographical, landscape perspective.

Finally, for a different reason, we have not discussed an archaeometrical approach separately because it is implicit in the previous ones. The historical questions that archaeometry answers are in fact those already seen. And archaeometry is archaeology or it is nothing.

In an attempt to hold together what has been distinguished and separated so far, it should be noted that classifying almost always aims at defining types as a summation of informative attributes of some aspect of interest to the researcher. Still nothing like what classifications might have been in use in antiquity.

Having clearly distinguished individual approaches depends on the fact that the respective questions require different procedures to obtain answers. In the different cases, the choice of attributes and the consequent definition of types changes. The chronological approach will mainly look at formal attributes and treat variants as if they were a detail or defect of information (and a type will only be defined by differentiation from other earlier coeval and later types). The technological approach and the techno-anthropological approach will look at material characters, defining types as the outcome of specific cycles and treating variants as episodic facts especially if they are without consequences (the type a consequence of an established attribute). The social approach, on the other hand, will require an overall view of the totality of finds and will consider variants, of form and function, as indications of complexity (types defined by polythetic summation of attributes not always necessarily present). And a similar approach will generally be taken by socio-economic and cognitive studies, which will often look at the informational potential of unique and exceptional pieces.

The problem is not, therefore, to pit one against the other (chronotypologists vs. technologists, scholars of techniques and productions vs. scholars of rites and cultures, etc.), but to distinguish in the analysis phase in order to reconcile in the synthesis phase. This is the only way to make explicit the choices made in the study of materials (the recognition of chosen attributes) and to give substance to interpretations.

To simplify, in the case of the monastery of Bano we reconstruct the history of a settlement frequented between the 13th and 15th centuries by Genoese nuns, rich by family lineage (the fine ceramics), who lived in a mountainous context far from inhabited centres and in which they were almost abandoned (the sheltered ceramics). A place where they received locally produced wine and consumed meat fairly frequently (the ceramic and archaeozoological finds); they had almost nothing to flaunt (the knife and a few decorated ceramics) but tried to leave at least a mark of identity in the communal spaces of the refectory (the ceramics with graffiti). Nuns called artisans from distant countries to build with techniques not experimented in the area (bricks instead of stones and, in particular, the decorated bricks); they signalled their role to anyone who showed up (the epigraph with the name of the Astesana abbess who commissioned the work); they left the monastery with the intention of returning (the keys hidden in a basin).

Generally speaking, the reconstruction of the context, which in the case of the monastery made use of written sources and the study of the territory, passes through the definition of types as a summation of attributes, but without neglecting the variants that must be explained as a consequence of specific facts (from the lack of specialisation of the masons, to the particularity of the resources, to individual choices or in any case non-generalisable ones dependent on spatial or social location). Only in this way do we consider it possible to reconstruct archaeological contexts from the potential information of each component. Remembering that there are no types and typologies capable of answering every possible researcher's question. And, in my opinion, universalist attempts to normalise studies are doomed to failure because archaeological reality is more complex than any algorithm, glossary, catalogue.

3. The history of material culture

The approaches discussed suggest that an effective course of study is possible and should include attention to materials and forms, which are directly observable, to techniques and uses that can be reconstructed, and to other assessments that can only be hypothesised and are sometimes uncertain. At this point, one will often also have information useful for dating and one can lift one's gaze from the artefact to the context, from the site to the territory. **To reason about socio-economic and commercial aspects. Discovering that they are no longer reducible to the application of current mercantile logics to pre-modern societies, being the consequence of non-linear but cultural ways of activating resources and managing the spaces habitually frequented by people.** At the very least, evaluating not only what was made, and exchanged in multiple ways, but also what was not made, even though it was among the technically possible things, and what was dismantled, reused, recycled, valorised. In this sense, it is only partially true that not all different approaches require reliable quantitative assessments. A single artefact may be sufficient to date, and so to reconstruct a technique or use, but the quantification of artefacts, as well as for economic estimates, is almost always indispensable to grasp the relevance of any technical, productive, social, ritual or cognitive phenomenon.

In order to avoid being disoriented by studies that aim at maximum systems and by everyday ('earthly') working practices that are like dead-end traps, we propose a brief operational definition of what should be the aim of classificatory studies. A concise definition without too much smearing that follows the international debate but can perhaps be defined as an Italian way to the history of material culture. **Elsewhere** we have already addressed the history of the term material culture, the possible nuances of meaning, certainly not being synonymous with the association of artefacts or,

worse, with artefacts (Giannichedda 1997, 2000, 2006 pp. 30-48, 2016; Mannoni, Giannichedda 1996, p. 19 et seq.)

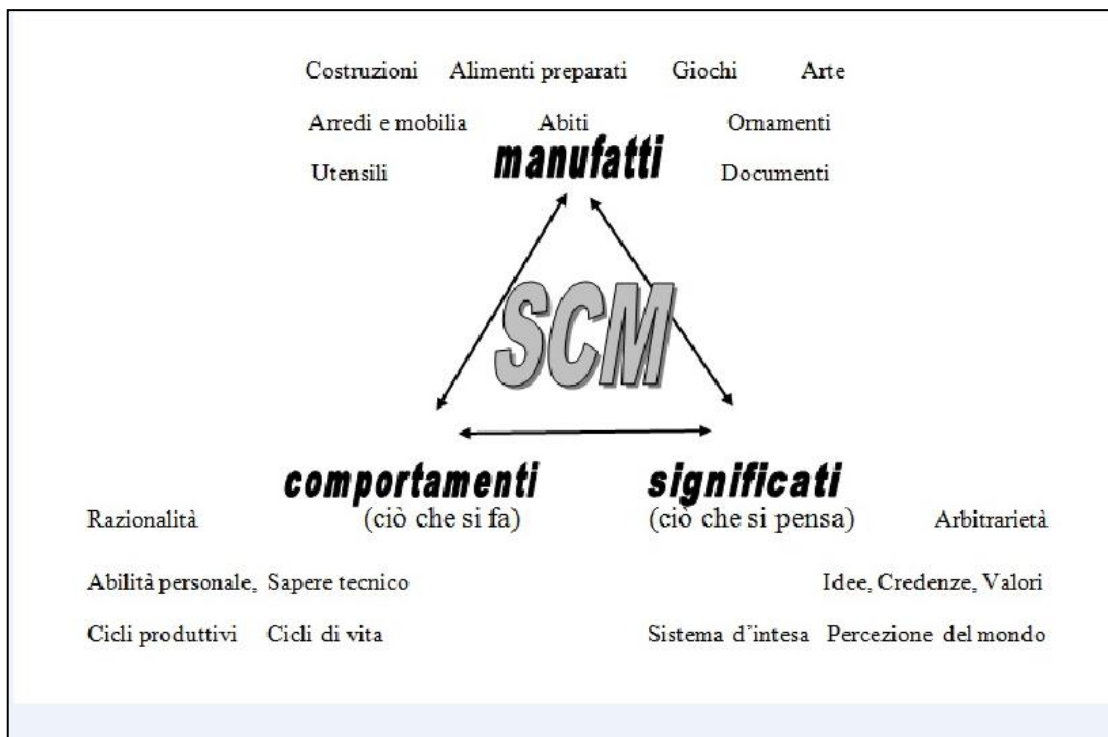
The history of material culture is the history of the relationship of people, individually and in society, with things and the history of the relationships between people in relation to things. In archaeology, the study of artefacts therefore makes it possible to recognise practical, and tendentially rational, behaviour from the recognition of arbitrary and system-dependent meanings. The diagram (figure 2) serves as a proposal and stimulus for reflection, while being aware that historical reality is enormously complex (the two-way arrows) and that classification systems must take this into account.

Figures

1. Table summarising the distinct approaches in the text. 1, the questions; 2, the most frequently applied findings; 3, some characteristic keywords; 4, references to some authors. From Giannichedda 2014 and 2021 modified.

	Approccio crono tipologico	Approccio tecnologico	Approccio tecnologico antropologico	Approccio sociale	Approccio socioeconomico	Approccio cognitivo
1	<p>Come si data?</p> <p>Tempi della storia</p>	<p>Come si facevano le cose?</p> <p>Materia prima → Prodotto finito</p>	<p>Come funzionavano le cose in relazione agli uomini?</p> <p>Mamufatti ↔ Corpo umano</p>	<p>Che ruolo avevano le cose nei rapporti fra gli uomini?</p> <p>Prodotti finiti ↔ Società</p>	<p>Come si scambiavano le cose?</p> <p>Merci ↔ Gruppi sociali</p>	<p>Come si 'pensavano' le cose?</p> <p>Oggetti ↔ Mente</p>
2	<p>Mamufatti d'uso, monete, opere d'arte</p>	<p>Macchine e utensili</p>	<p>Utensili e oggetti d'uso quotidiano</p>	<p>Omanenti, arte, giochi, abiti, abitazioni, monumenti...</p>	<p>Monete, contenitori da trasporto, oggetti d'importazione...</p>	<p>Omanenti, arte, giochi, abiti, misure, abitazioni, sepolture...</p>
3	<p>Tipologie formali Metodi datazioni</p>	<p>Archeologia sperimentale Storia della tecnica Archeologia industriale Catena operativa</p>	<p>Ergologia Archeologia sperimentale Etnografia e antropologia delle tecniche Forma - funzione Sapere tecnico</p>	<p>New archaeology Arch. Postprocessuale Storia dell'arte Antropologia culturale New material culture Questioni di status, leggi e regole... Percezioni Agenti attivi, habitus</p>	<p>Storia dell'economia Economia politica Strutture sociali Dono, baratto, bottino Studi quantitativi Territorio antropizzato</p>	<p>Arch. Postprocessuale Processi cognitivi Semiologia, storia Invenzioni, design Sapere tecnico Percezioni Stile Materialization Engagement</p>
	<p>Thomsen Montelius Flinders-Petrie Peroni</p>	<p>Pitt-Rivers Bordes Laplace</p>	<p>Malinowsky Leroi-Gourhan Binford Mannoni</p>	<p>Beazley Childe Peroni</p>	<p>Dressel Carandini</p>	<p>Lévi-Strauss Eco Hodder Ratjke</p>

2. The triangle of material culture as a graphic device linking artefacts (chronological and technical fields of study), behaviours (techno-anthropological, cognitive, social and socio-economic fields), and meanings (cognitive, social and, to a lesser extent, socio-economic fields).
 From Giannichedda 2014.



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