

Observing Formalities – the Use of Functional Artefact Categories in Australian Historical Archaeology

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This paper seeks to examine and challenge issues surrounding the use of artefact function fields in Australian artefact catalogues. Functional analysis is often an important part of artefact work in Australia, with functional categories frequently included as basic fields in catalogues when other interpretive analytical categories are excluded. This paper will explore the roots of Australasian functional analysis in both Birmingham's use of functional categories at Regentville in the 1980s and North American theoretical and methodological debates of the 1970s. With this background in place, discussion will turn to current usage, with particular emphasis placed on examining the use of mandated terminology (such as Heritage Victoria's use of the Getty System), polyfunctionality, and the difference between cataloguing and analysis. The paper concludes with a discussion of how the use functional categories might continue to develop in Australia.

INTRODUCTION

Functional categories of some sort or another are now commonplace in Australasian artefact databases, and in at least one Australian state (Victoria) their use is mandatory under current state artefact guidelines. This paper seeks to challenge some of the assumptions underlying the use of those functional categories and to offer a thought-provoking deconstruction of related issues, without necessarily dictating specific suggestions on their use; in essence, this discussion serves as the Devil's Advocate of functional categories. Recent papers in this journal, particularly those by Lawrence (1998), Crook, Lawrence and Gibbs (2002), and Casey (2004), have immeasurably advanced Australian discussions on the role of artefacts and artefact catalogues in site analysis, and this paper aims to offer a further contribution to this ongoing debate on a single specific issue rather than the broader discussions of artefact cataloguing and analysis that were a feature of its predecessors.

At the most basic level, the use of functional categories in a database provides a means of identifying how an artefact was used. As such they can provide an important springboard for more in-depth analysis, as well as helping to organise data. Some archaeologists use only a single functional field in their databases, while others divide function into two fields, one dealing with broad-scale conceptual activity groups (usually called 'activity'), and the other dealing with more specific sub-functions (usually called 'function'). Terminology often varies from site to site, and this division between activity and function is not central to this paper; both are considered 'functional categories' herein. One issue that must, however, be sharply defined immediately is the difference between function and form. Function refers to how an artefact was used, and form refers to the shape of the object. Therefore 'food consumption', 'food preparation' and 'food storage' are functions, but 'plate', 'bowl' and 'bottle' are forms. This can be thought of in terms of the difference between verbs and nouns. 'Plate' is not a function as the role of a bottle is not 'to plate'. 'Plate' is a form and a noun. The primary intended function of a plate is for the serving and consumption of food. 'To serve' and 'to consume' are both functions and verbs. The analogy is perhaps imperfect (there is no verb for 'to architecture' even though 'architectural' is a very common functional category, and 'bottle' is both a noun and a verb), but serves to demonstrate the basic conceptual difference between the shape and use of objects.

THE DEVELOPMENT OF FUNCTIONAL CATEGORIES

Functional categories have a nearly 30-year tradition in historical archaeology. The following brief historiography by no means aims to be comprehensive, but rather offers a selected number of key points in the relevant history of the discipline from Australia and North America. Internationally, the most important influence on the early development of functional categories in historical archaeology was the North American (perhaps more accurately U.S. East Coast) work of South, particularly the models set forth in his *Method and Theory in Historical Archaeology* (1977). Of particular importance was South's development of functional activity categories in pattern recognition analysis (1977:83–139). This analysis was based on the hypothesis that 'a British family on the way to America in the eighteenth century would bring a basic set of behavioral modes, attitudes, and associated artefacts that would not vary regardless of whether their ship landed at Charleston, Savannah, or Philadelphia' (South 1977:86). Thus his 'Carolina Artifact Pattern' (one of several patterns developed) was based upon 'examining the ratios between artifact groups with the view of establishing certain broad regularities ... of culture process against which any deviation ... can be contrasted as reflecting behavior somewhat different from expected margins' (South 1977:86).

South's basic vehicle for exploring this point was to group artefacts into specific broad functional groups, including 'kitchen', 'bone' (which is, it should be noted, neither a function nor an activity, but rather a material), 'architectural', 'furniture', 'arms', 'clothing', 'personal', 'tobacco', and 'activities' (South 1977:96–102). Most of these categories are recognisable to archaeologists using functional categories today. The Carolina Artifact Pattern was then defined by comparing the percentage occurrence of these different groups across a range of sites. Those sites where the distribution of artefacts across the functional groups fit within the relevant percentage range were then said to adhere to the expected norms of cultural behaviour in the region under study. If sites demonstrated variation from the relevant percentage ranges, then an archaeological explanation of that variation would be necessary.

The concept of pattern analysis expanded rapidly in the United States in the late 1970s and 1980s following South's work. By the end of the 80s, Orser (1989:371) was able to cite the existence and testing of a 'Slave Artifact Pattern', a

'Carolina Slave Artifact Pattern', a 'Plantation Artifact Pattern' and a 'Tenant Artefact Pattern' in the Southern United States alone. Orser offered what was perhaps the most trenchant criticism of South's approach at that time:

When he [South] fails to introduce any semblance of cultural change among his hypothetical laborers, he condemns them to a synchronous existence in a world devoid of change ... South does not elucidate the social relations of colonial life in North America. His analytical units do not account for the association between social relations and material items, but merely the relations between the inert items themselves as secondary reflections of whole-cultural ... behaviour. (Orser 1989:379).

Orser also criticised the growth of *ad hoc* patterns for specific sites – 'an unconnected catalog of worldwide patterns', something which he recognised was certainly not South's intent, merely an unfortunate by-product of South-inspired analysis (Orser 1989:380). To Orser's criticisms might also be added South's unwillingness to grapple adequately with artefact polyfunctionality – an issue this paper will return to, but which South dismissed with the curious argument that there is no need to devise functional artefact classes that have no exceptions as virtually every artefact class can be used for a variety of purposes (South 1977:96).

Despite thematic and methodological criticisms, South's basic observations have nonetheless continued to serve as a framework for North American work. Prior to the introduction of functional analysis, the use of artefacts in analysis was often restricted to typological development and site dating rather than advancing our understating of how people lived in the past. Thus South offered a theoretically-aware means to focus analysis on the use consumers made of artefacts rather than only the mechanics of production and date. Historical archaeology has inevitably continued to develop since South. By no means would all North American practitioners use his original categories – or engage with patterns – in the same sense. Yet some American artefact catalogues, and the analysis that follows, are to this day often implicitly and explicitly based around Southian conceptions of function. Thus in the mid-1990s, leading East Coast consultancy firm John Milner Associates was using functional artefact groups as the primary determining category in the catalogue, even before material; a bone china decal-printed saucer would be classed as 'K' for kitchen before being classed as 'C' for ceramic (John Milner Associates 1994:20). Zierdan's analysis of the social concept of refinement at a Charleston (South Carolina) merchant's house openly uses the same eight artefact categories originally posited by South (Zierdan 1999), and Armstrong and Hauser's recent analysis of an East Indian labourer's household in Jamaica uses slightly less overtly Southian functional categories to posit a 'similar pattern of material use' amongst African and East Indian households before and after emancipation (Armstrong and Hauser 2004:14).

While the roots of functional categories in North American historical archaeology are fairly clear, their specific origins in Australia are less obvious. At the risk of oversimplification, two general approaches can be seen to have jointly influenced their early development. The first – and arguably more important – of these was the archaeological approach. Birmingham's work, as articulated in her 1990 overview of urban archaeology in Australia (itself a discussion of 'key issues' identified in the previous decade of fieldwork) demonstrates that they were in use by the 1980s. Birmingham touches on several issues in her 1990 overview, but the most relevant to the present topic is the section on the development of finds analysis in Australian urban archaeology. In terms of functional analysis, it is notable that Birmingham's approach,

as originally developed for the analysis of the Regentville site, deliberately chose to make little distinction between cataloguing and analytical phases in artefact work: 'The analytical stage began as soon as the material was sorted, since the variables selected for database entry determined the parameters of any future analysis' (Birmingham 1990:19). Birmingham then went on to list the more complex variables included in the original database:

Building materials and fittings were categorised by social and stylistic aspects as well as simply by material; tablewares by functional and decorative categories, together with pattern, set, object, and marks information as appropriate; containers by functional categories relevant to questions of diet and life style ... (Birmingham 1990:19)

Not all analytical data were collated directly through the database – 'often information at a higher level of individual complexity proved to be better handled manually' (Birmingham 1990:19). Significantly, by this time, 'function' had been identified as one of the key 'nature, fabric, and features' of an artefact (along with material and form) that served as one of the 'three dimensions' of artefact data (Birmingham and Murray 1987:97).

In that Birmingham explicitly stated that more 'complex' variables, such as functional categories, were chosen in order to study the socio-cultural self-categorisation of the wealthy British owner of the Regentville mansion, there are clear, if somewhat loose, analogies between this early Australian work and South-influenced American approaches. There are cases where this linkage is more explicit: Casella (2001:27) directly links her functional categories with work undertaken by Praetzellis and Praetzellis (1990) in California, and Casey's recent discussion of functional analysis at the CSR site at Pymont (Sydney, NSW) draws on a number of American studies (Casey 2004:31–32). Casey's study also simultaneously serves as the strongest existing defence of functional analysis in the Australian literature. Given the synergies involved, it seems likely that a general awareness of American approaches implicitly influenced Australian functional categories, without most researchers feeling a need to particularly emphasise the connection. To note the apparent lack of consistent trans-Pacific engagement on this specific issue is hardly a criticism. Birmingham, for example, had specific, clearly-stated reasons for pre-selecting certain analytical categories in the database, and these reasons were directly connected to the site's research design. The categories used were carefully grounded in both theory and method. Unfortunately, in the period following the Regentville research, Australian analysis was rarely so explicit in its approach to databases, and functional categories often seemed to be included in artefact catalogues more out of habit than design.

The second general approach in the early development of functional categories in Australia was museum classification. Here existing categories developed for museum curation were adapted – or, more frequently adopted wholesale – for the purpose of archaeological cataloguing. For example, the Port Arthur Archaeology Fieldwork Manual, while using its 'fabric key' as the primary determinant of artefact class, uses the American Association for State and Local History's *Nomenclature for Museum Cataloging* (Chenhall 1978) for defining the categories in its 'functional register' (Davies and Buckley 1987). The *Nomenclature* was designed to create 'an organised, internally consistent, hierarchical system for the classification and naming of man-made objects' (Chenhall 1978:7) based on the primary intended function of objects – and was also subsequently adapted (rather than adopted) for use by the Canadian Parks Service (Environment Canada

1992). While not necessarily a consistent thread in the history of Australian functional analysis, this approach has recently been revived through the Heritage Victoria archaeology laboratory's mandating the use of the Art and Architecture Thesaurus of the USA's Getty Research Institute (Heritage Victoria 2004:4) for describing functional categories. The advantage of basing archaeological classification on a pre-existing system lies in being able to cite a standardised – and hopefully clearly defined – system that can be consulted and used by other individuals working on different sites. Yet there is also a real danger that by using a system developed by non-archaeologists to categorise archaeological data, both the archaeological catalogue and subsequent analysis become divorced from broader archaeological debates and the specific needs of archaeological analysis.

ISSUES IN FUNCTIONAL CATEGORY USE

With a background in place, attention can turn to the challenges facing the application of functional categories today. This discussion will not debate whether or not the use of functional categories is desirable – it is assumed for the moment that Australian historical archaeologists have already decided to address some level of functional approach in their artefact catalogues – instead debate focuses on what challenges and issues face the archaeologist including these categories. Three issues are particularly crucial here: the distinction between cataloguing and analysis, artefact polyfunctionality, and the terminology of classification.

The distinction between cataloguing and analysis

One of the most important points in the broader conceptualisation of the role of functional categories is the distinction between artefact cataloguing on the one hand, and artefact analysis on the other. While issues arising from this distinction are increasingly recognised in Australasian artefact studies (Brooks 2005:16–17; Crook et al. 2002:30–31), it is still a matter of occasional confusion. Crook, Lawrence and Gibbs (2002:30) have pointed out the difference between *particularist* artefact studies, where the description of individual objects is the sole purpose of a catalogue, and *archaeological* studies, where the contextual study of the assemblage of the whole is the goal. In other words, there is a contrast between identifying the basic characteristics of individual objects, and understanding the broader meaning of the entirety of the assemblage. Crook, Lawrence and Gibbs (2002:31) rightly point out that artefact catalogues must be designed in order to contribute towards the latter. Yet their invaluable discussion arguably did not go far enough. In addition to the difference between particularistic and archaeological studies on the broader scale, there is also a need to closely define the difference between identification and analysis within individual catalogue entries. Without a carefully understanding of these two distinctions, artefact catalogues can often exhibit a curious, and function-specific, tension.

The *Archaeological Guide to British Ceramics in Australia* (Brooks 2005:15–18) offers a model for understanding the division between artefact identification and analysis (Table 1). Ceramics analysis is divided into two levels: the 'identification' level consisting of 'material', 'form', 'decoration' and 'date', and an 'analysis' level consisting of 'function', 'economy', 'status' and 'meaning'. The categories at the 'identification' level in this specific example are specifically geared towards ceramics work, but the general nature of this division holds true for all artefact classes.

Table 1: The Ceramics Analysis Model (from Brooks 2005:16).

LEVEL 2 – ANALYSIS
ECONOMY – STATUS – FUNCTION – MEANING
LEVEL 1 – IDENTIFICATION
WARE – FORM – DECORATION – DATE

The importance of this dual model for the present discussion lies in the recognition of the distinction between inherent artefact characteristics and socially-constructed artefact characteristics. Thus the categories in the 'identification' level

are those characteristics with which a fragment of pottery is: inherently imbued, and which exist objectively outside analysis. In other words, all researchers agree that ceramics are made of something (ware), have a certain shape (form), and have a certain external appearance (decoration) even if they disagree on how to define those categories. (Brooks 2005:17)

The categories in the 'analysis' level, however, are not inherent characteristics of the artefact, but are instead entirely socially constructed by the original user and the archaeologist, and do not exist outside of those social constructions – 'Thus while a ceramic vessel intrinsically has a ware and form type ... no ceramic vessel is automatically imbued with function, status, or meaning.' (Brooks 2005:17). Artefact identification and artefact analysis are two entirely separate things, even when they are by necessity combined in archaeological studies into a holistic whole, and even though analysis is indeed impossible without identification.

The needs of defining particularist studies versus archaeological studies on the one hand and artefact cataloguing and artefact analysis on the other may seem superficially compatible. Both draw a distinction between merely describing objects and understanding the broader social context of the assemblage. However, a curious tension exists in this regard in Australasia when it comes to functional categories. While 'Activity' and/or 'Function' are common fields in Australian archaeology catalogues, in the overwhelming majority of cases they are the only socially-constructed 'analysis' categories found in those catalogues – there is no attempt to include other issues such as 'status', 'economy' and 'meaning'. If the primary purpose of catalogues is 'to facilitate the holistic analysis and interpretation of the site assemblage' (Crook et al. 2002:30–31), then why should function be the only socially-constructed category in a database? Yet if the distinction between cataloguing and analysis is recognised, why should any socially-constructed analytical category be included in an initial accession catalogue?

The issue here is not one of deciding whether or not considerations of function should be included in archaeological analysis, but at what level of artefact work function should be included. Part of the problem lies in the traditional weakness, until recently, of artefact studies in Australian historical archaeology – something which has been discussed in considerable detail (Birmingham 1988:149; Brooks 2005:7; Crook et al. 2002:27–28; Lawrence 1998) and need hardly be covered here again. The specific issue here lies in that, for so many past studies, the production of the artefact catalogue was the end product of what passed for artefact 'analysis'; for any number of reasons, further work on the artefacts rarely took place (Crook et al. 2002:27–28). While it may well have been unintentional in most cases, the inclusion of functional categories in the artefact catalogue to a certain extent provided an illusion that 'analysis' had taken place even while other

socially-constructed analytical categories were excluded from both cataloguing and analysis. With theory-informed artefact work increasingly such a vital part of the discipline (e.g. Briggs 2005; Brooks 2005; Casey 2004; Casey and Lowe 2000; Lawrence 1998, 2001), this is now untenable.

Polyfunctionality

Artefact polyfunctionality is the simple and straightforward concept that an artefact can have multiple functions across its period of use. This background to this point has recently been discussed in detail elsewhere (Brooks 2005:63–65), but a summation of the main issues behind the concept are necessary for the present discussion. On one level, polyfunctionality is simply the use of one vessel form for several everyday tasks. With tea cups, for example, Scott has noted how ‘some ceramics vessels often assumed by archaeologists to have been used only in beverage consumption were also used in baking and boiling foods and other preparation activities’ (Scott 1997:142). Thus a cup might be used not only for drinking tea, but also for making rice soup, rendering rennet, moulding various different types of food, mixing and measuring liquid and dry ingredients, cutting biscuits in dough, and baking batter and custard. These are not unusual functions, but examples of using a form for several different common kitchen activities. Cups are but one of many possible examples, but Scott is quite correct in observing that:

the evidence from these cookbooks strongly suggests that we have to reconsider our interpretive strategies in light of information from the people who used the material culture we recover. To disregard such evidence, even if it complicates an already convoluted methodology, would be to claim a twentieth-century ‘scientific’ privilege and arrogance that has little basis in the past as it was lived. (Scott 1997:153–154)

The potential multiple food and drink-related use of tea cups and other vessels is far from the only issue of polyfunctionality. At least with the latter example, the general function might fit within a broad ‘kitchen’ activity group even if the specific functions remain fluid. A far greater conceptual problem arises in the social difference between objects acquired for everyday use, and identical objects acquired for display. The most-discussed example of this within archaeology is the extensive use of dressers as a vehicle for ceramics display, something which has most often been examined in the context the rural poor (Brooks 2003:132–133, 2005:65; Vincentelli 1992; Webster 1999). The effect of display items on the material culture record in Australia has hitherto been an understudied issue, but any activity so well attested in nineteenth-century Britain must be considered at some level for Britain’s Australian colonies. Unfortunately, it remains difficult to identify polyfunctionality through artefact analysis. While analysing artefacts within their specific site context can sometimes help as a guide, in most cases it will prove impossible to identify specifically how an artefact was used simply by looking at it. For example, use-wear (the cuts and marks made by cutlery and the like) on ceramic vessels are a poor guide as to whether or not an item was used for display. While a lack of use-wear marks might indicate that an item was used for display (though it might equally well indicate that the vessel was simply never used), the presence of use-wear marks need not indicate that a vessel was never used for display. A vessel might well have been used for display at some point in its life before being later used on an everyday basis – vessels can very much be used for alternating or multiple purposes within very short periods of time. Then there is the further possibility that broken objects might be

recycled after discard, whether as gaming pieces or religious objects (e.g. Majewski and O’Brien 1987:183; Patten 1992) – in this case objects have arguably gone through two separate manufacture processes providing two irreconcilable primary intended functions.

These complex issues of multiple function have divided archaeologists. Some stress the complexity of the issue, and that the function-related ‘cultural processes that form and transform the ... archaeological record are diverse and, in many instances, are difficult to pinpoint’ (Majewski and O’Brien 1987:183–186). Others argue that flexibility in functional category definition combined with an awareness of the nature of both site and artefacts make it possible to address function directly, and that multiple artefact use is less problematic than it may appear as artefacts are most often used for the purpose for which they were made (Casey 2004:32). While this argument has much to recommend it, the idea that items are acquired for the specific purpose for which they were designed, and were most often used for this specific purpose is too optimistic – as is the contention that artefacts were typically used for the purpose that they were made for, and any different functions are ‘not the reason why they were purchased for household use’ (Casey 2004:32). As demonstrated, cups were used for any number of uses in the kitchen (as were saucers for that matter), and vessels purchased for display were not used for the primary purpose for which they were made. Yet the differences between these perspectives are perhaps not as great as it might initially appear – both Majewski and O’Brien (1987:186) and Casey (2004:32), for example, essentially agree on the importance of employing functional classification systems appropriate for the type of site under investigation. Neither is claiming that analyses of artefact function are impossible or undesirable, and arguably they merely disagree on how they choose to emphasise the complexity of polyfunctionality and address its implications for analysis. A middle path can easily be found that goes some way towards reconciling both perspectives’ concerns while simultaneously recognising the strengths of both arguments.

It has previously been argued that Australian historical archaeologists should distinguish between *primary intended function*, *primary intended use*, and the various possible intended functions and uses beyond the primary (Brooks 2005:65). *Primary intended function* simply refers to the commonly intended function at the point of manufacture (a plate designed for food consumption), whereas *primary intended use* simply refers to the intended use by the consumer (a plate purchased for display on a dresser). In many cases, this distinction can be maintained through the simple means of being explicit about how catalogue fields are constructed. For example, the function fields in an accession catalogue could be explicitly restricted to primary intended function only. While this may not address polyfunctionality directly, it is at least methodologically consistent. This is in fact already done in Australia in some cases (e.g. Casey 2004:32). Another approach might be to acknowledge polyfunctionality by building multiple searchable fields into a database, one for primary intended function, another for primary intended use, and others for functions and uses beyond the primary. Nor are the two approaches described here necessarily incompatible; a basic accession catalogue could be explicitly restricted to primary intended function, while multiple function fields could be used for more detailed catalogues generated by minimum vessel count analysis and other in-depth artefact studies. As with the conceptual division between identification and analysis, an awareness of the potential problems underlying the use of functional categories need not mitigate against those categories so long as their use is queried and justified.

Terminology

This paper has so far focused on offering some thoughts on the organisation of functional analysis within cataloguing and analysis, but some attention must also be given to the question of what terminology to actually use. At the most basic level, it is vital to ensure a distinction between the terminology of function and form. This is not some minor matter of semantics, but is rather crucial to our understanding of an assemblage. Once again, 'function' is used to refer to how the vessel was used, whereas 'form' refers to what shape that vessel takes. In terms of the actual functional categories themselves, there are certain general categories that are common in Australian databases. Where distinctions between activity and function are made, categories such as 'architectural', 'clothing', 'kitchen' are in common usage – here there is a clear link to South's terminology (1977:96–102), to the point that even after nearly 30 years, much modern activity terminology could, for better or for worse, be taken directly from South. In catalogues where a second, more specific, level of function is included, there is perhaps more variation, but again certain categories tend to be repeated. The 'kitchen' activity, for example, is often broken down into 'consumption', 'serving', 'storage', and 'preparation', even though the precise terminology may vary. Despite these similarities, there is also variation between catalogues, with differing opinions on both levels not only on which terms to include, but also where some artefacts actually belong.

Yet some level of difference in terminology between sites and assemblages is arguably not only inevitable, but also desirable. Casey (2004:32) is quite correct in identifying a need for a flexibility of approach and thinking in defining categories. What is necessary within one context can be both unnecessary and inappropriate at another. For example, the recently developed Port Arthur artefact database (developed by a team consisting of this author, Bill Cohen, Greg Jackman, Catherine Tucker, and Richard Tuffin) features a 'penal' activity category divided into subfunctions of 'convict clothing', 'convict restraints', and 'penal architecture'. While of vital importance to gaining an understanding of the archaeological record within the specific socio-cultural context of the Port Arthur penal colony (and similar sites), a 'penal' function will be of more limited utility at most non-convict or non-police associated Australian sites. Likewise, an 'educational' functional category including slate pencils and writing slates that might potentially be extremely important for understanding the cultural context of a Moravian Aboriginal mission (Lydon et al. 2004:26) or school site, might equally well be re-named or re-organised as a 'writing' functional category at sites where education activities were less central to activity. Smoking-related artefacts are sometimes placed under a 'recreation' activity field (as is the case at Port Arthur), and are sometimes placed under a separate 'tobacco' activity (South 1977; John Milner Associates 1994:41). While stricter standardisation is arguably vital for the identification of intrinsic artefact qualities, such as material and form, context-aware flexibility is more important than total cross-disciplinary terminological conformity for many socially-constructed analytical concepts.

However, it cannot be stressed enough that where functional categories are included in a database, whatever the specific nature of the categories, they must in some way be defined so as to be accessible to other individuals reading catalogues or reports. This is so others know what assumptions and research questions underline those categories and – if necessary – can use them for comparative research. While differences in the specific terminology of functional categories are indeed a necessary evil to some extent, without

definitions there is a real danger that Australian historical archaeology will fall into the same trap that Orser identified for North American pattern analysis – and which has already befallen Australian ceramics pattern typeseries: a mass of unconnected site-specific data with little or no relevance to other sites. To call for definitions is not to call for all reports to feature a long theory-informed deconstruction of the nature of functional analysis (though they certainly can do so should anyone feel so inclined), although some mention of whether fields are limited to primary intended function or not would be helpful. Definitions in most cases need only consist of a paragraph describing what each field includes (e.g. Lydon et al. 2004:26) or a citation of another source if the categories are based on previous work (e.g. Casella 2001:27). All that is needed is enough data for others to know how the categories were formed.

In Victoria, however, the need to define functional categories, and the need to offer conceptual flexibility to archaeologists have collided in a cautionary terminological tale. While this specific example is directly applicable to only one Australian state, the broader issues and debates included here are relevant across Australasia. All historical archaeology collections lodged with the Victorian state archaeology lab are expected to use standard keyword lists for function (and, for that matter, materials). This is in order to 'ensure that data from all sites is consistent and easily searchable within our ARTEFACT database' (Heritage Victoria 2004:4). In and of itself, the intent is commendable and the goal admirable, but the unintended outcome is to arguably damage the production of quality archaeological research, and demonstrate how not to define functional categories. In a return to the old Port Arthur handbook's reliance on museum cataloguing terminology for functional definitions, the Heritage Victoria keywords are based on the Art and Architecture Thesaurus (AAT) generated by the Getty Research Institute in the USA (Heritage Victoria 2004:4), also sometimes referred to as the 'Getty System'.

There are four problems with using the AAT-based keywords. First of all, the Getty System is not archaeological; therefore terminology ignores archaeological terminology, forcing archaeologists to use categories with no archaeological tradition, or which are usually defined differently within archaeology. For example, while the 'architecture' and 'recreation' categories appear to be broadly defined as many archaeologists would use the categories, the 'domestic' category includes items that would surely be subdivided into separate areas by archaeologists; kitchen-related objects, faunal artefacts, fuel, and textiles are in the same general functional category (Heritage Victoria 2004:30–35). While Heritage Victoria only requires the use of the specific functions in databases, rather than the broad activity fields, this non-archaeological grouping of specific functions is conceptually unhelpful. Secondly, as pointed out by Crook, Lawrence, and Gibbs (2002:32) for an earlier version of the guidelines (Heritage Victoria 2001), the system makes no attempt to define data within a functional category – bowls and bottles are both considered containers, but no attempt is made to define what distinguishes a bowl from a bottle. Thirdly, there is no room for context-aware flexibility in the Getty system; by requiring archaeologists to use specific terminology, there is little scope for adapting terminology to the specific research demands of individual sites. While Heritage Victoria 'welcomes comments and suggestions for additions to these lists' (2004:4), those additions that have taken place paradoxically undermine the entire rationale of the system – a system that aims to offer internationally recognised standard terminology is no longer an internationally recognised standard terminology once it adds terms that are not part of that terminology.

The fourth, and most difficult, problem with the Getty System as currently required by Heritage Victoria is that it hopelessly confuses the boundary between function and form; in this regard it is not only unusably inconsistent, but is arguably decades behind archaeological debate. For example, under the general 'domestic' function category, there are sub-functions of both 'bottles' (for which no specific examples are included) and 'containers for storing or transporting food', examples of which include 'bottle (glass, ceramic)'; similarly, there is a sub-function category for 'containers', defined as 'open, often shallow, containers ... especially for holding or serving food', which includes 'plates, bowls, cups, eggcups, bottles' and a sub-function for 'serving and consuming food' which includes 'platter, bowl, drinking glass' (Heritage Victoria 2004:31). Thus not only are many sub-functions in fact forms or collections of forms, but other sub-functions in the same overall functional categories include those very forms separately listed as sub-functions; bottles can be catalogued under three different categories, including their own non-functional sub-function. This level of organisational chaos is not only hopelessly confused from a theoretical and methodological perspective, but is so inconsistent so as to be useless for formal archaeological analysis. Indeed, any archaeologist who so confused function and form in interpretation would almost certainly immediately be considered guilty of undertaking poor analysis.

Historical archaeology functional categories are based on research that has a citable track record dating back to the 70s (South 1977) internationally and at least the 80s (Birmingham 1990; Birmingham and Murray 1987) in Australia. To reject this archaeological tradition in favour of a museum system that not only ignores archaeological debates, but is in fact counter-productive for consistent, quality archaeological research is – however admirable the intentions – simply misguided. That the Getty System is 'used by researchers overseas' (Heritage Victoria 2004:4) is essentially irrelevant since it is not the terminological tradition typically used by *archaeologists* overseas. While recognising that the very nature of archaeological research means that inconsistencies will exist in archaeological definitions of function, insisting that archaeologists use standardised systems based on non-archaeological research is clearly not the answer. There is no reason why Heritage Victoria and other state, territorial, and national heritage bodies should not hold a centrally-defined database of functional terminology. Such a database can in fact be vital in addressing some of the cataloguing quality assurance issues identified by Crook, Lawrence and Gibbs (2002:32). A centrally-held and defined terminology can help to avoid major errors such as incorrect attributions and minor errors of transcription and spelling, as well as aiding the viability of comparative studies. But any such system must also be based on archaeological traditions, such as those cited above, and allow for research-appropriate additions in consultation between the archaeologist and the central body. Within this context, the museum-based terminology as currently used by Heritage Victoria is simply not appropriate.

CONCLUSION – MOVING FORWARD

The goal of this paper has been to stimulate debate and challenge assumptions without necessarily providing any direct answers to the questions inevitably raised through that challenge. Nonetheless, it would be remiss to end without at least offering some thoughts on how these issues might be addressed. Practical issues of terminology and polyfunctionality, and more theoretical issues over the cataloguing/analysis divide might give pause for thought over how functional categories are used in Australian databases, but none of this

should be taken as attempting to claim that functional analysis is somehow so convoluted as to render the use of functional categories irrelevant or functional analysis itself pointless. Some consideration of function is clearly necessary if archaeology is not to regress to the days when artefacts were only described instead of interpreted. The very pause for thought caused by considering these issues is in fact a positive, offering archaeologists an opportunity to examine, query, and justify their use of functional categories from a far more theoretically and methodologically aware perspective.

From this perspective, there are at least three questions that researchers might benefit from asking before including functional categories in a database:

1. Why are functional categories being included in the database, and what will they be used for? Here Birmingham (1990:19) and Casey (2004:31–32) provide an ideal model for Australia – specific functional categories are used to answer rigorously-defined research questions, and (in at least Casey's case) continually tested and queried as analysis proceeds. This should not be isolated practice, but rather standard procedure at all historical archaeology excavations; that the two examples cited in this paragraph come from both academic and consultancy archaeology amply proves that the defining, questioning, and testing of categories is not the sole preserve of academia, and is entirely appropriate to consultancy work.
2. How will functional categories be thematically conceived and organised? This issue covers two separate themes. First of all, consideration should be given to whether the functional categories cover solely the primary intended function at the point of manufacture, or whether some allowance for polyfunctionality is to be included. If the latter is deemed necessary or desirable, then this can be done through two separate methods. The first is to include multiple functional fields in the initial catalogue covering primary intended function and primary intended use (and perhaps secondary functions and uses as appropriate). The second is to use the initial catalogue for primary intended function only, and to use specialist analysis catalogues (particularly glass and ceramics minimum vessel count catalogues) to include multiple fields allowing for polyfunctionality. Another organisational issue involves deciding whether or not functional categories will be hierarchical – whether a database will only include specific functions and uses (however conceived), or also include broader 'activity' fields. In other words, will the primary intended function of a plate be defined solely as 'food consumption', or will there be an additional functional field to catalogue the broader conceptual functional activity as 'kitchen'.
3. What terminology will be used in the functional fields, however constructed? On this question alone has the present paper made a specific recommendation: that terminology based on archaeological tradition and the needs of archaeological research should ideally be favoured over non-archaeological museum curation systems. Many examples of this archaeological tradition exist in the literature for the archaeologist seeking to develop a functional terminology, and several of these from both Australia and the United States – some prominent, others perhaps less so – have been cited in this paper. It is vital that the terminology eventually used be defined, whether in the actual text of the final report or through citation of an otherwise accessible source. Definitions can certainly be collated, standardised and hosted by a central or governmental body in order to ensure terminological consistency, but archaeologists

should be able to add new terms to those standardised terms according to the research needs of their project – though his addition of new terms should be done in consultation with the central body where such an institution exists.

If the goal of this paper has been to challenge existing assumptions, then perhaps it is appropriate that the Devil's Advocate should end by briefly raising the greatest heresy of all: while discussion in this paper has been based on the assumption that Australian archaeologists will be including functional categories in their databases and catalogues, perhaps they are in fact entirely unnecessary. Perhaps the easiest way to deal with the conceptual difference between cataloguing and analysis on the one hand, and the complex intertwining of polyfunctionality, is to exclude functional categories from catalogues entirely. Not for a second should this somehow be taken as an argument that functional analysis should never be undertaken. On the contrary, issues of artefact use are, and always will be, central to our understanding of an artefact assemblage as something used and manipulated by humans within their broader socio-cultural environment. Yet artefact function is a socially-constructed concept, not an inherent quality of the artefact, and by forcing artefacts into pre-defined categories, there is a very real risk that we as archaeologists reify those categories into artificially narrow constructs. Socially constructed ideological concepts are not always best studied through narrowly defined database fields.

Taken from another perspective, archaeologists are perfectly capable of engaging in subtle examinations of status, ideological meaning, and economic value – whether for individual artefacts or the assemblage as a whole – without including 'status', 'meaning' or 'value' categories in a standard database. These issues are rightly seen, implicitly or explicitly, as best examined through in-depth analysis of the assemblage – not a simple catalogue database field. There exist many examples of artefact studies in the Northern Hemisphere where considerations of function were crucial to the understanding of all or part of the assemblage, but where no functional categories were included in the original artefact database (e.g. Brooks 2000, 2003; Heath 1999:47–64). The absence of the latter issues from Australasian databases should therefore not always be seen as failure on the part of a young discipline to come to grips with or adequately theorise these areas; sometimes it is simply in keeping with international practice. Within the Australian context, once it is recognised that function is not an inherent quality of artefacts, Birmingham's statement that 'often information at a higher level of individual complexity proved to be better handled manually' (Birmingham 1990:19) might as well apply to functional analysis than to any other type of analysis. Thus while this paper has offered thoughts on how to conceptualise and approach functional categories on the assumption that they will be used, perhaps some thought should ultimately be given as to whether they are necessary at all. Perhaps in the end database functional categories are little more than an archaeological magic feather – for the time being we believe them to be absolutely necessary, but one day we will discover that our analysis can fly without them.

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