

Meaningful practices: The contemporary relevance of traditional making for sustainable material futures

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Abstract

This article explores the relationship between design for sustainability and traditional making practices. It presents results from key informant interviews and observational research into traditional hand making of functional goods in Santa Fe in the United States, Jingdezhen, China, various locations in New South Wales, Australia and Cumbria, UK. We find that such goods fall into three main categories, primarily utilitarian, symbolic and aesthetic. These practices are discussed in terms of their contemporary relevance, potential futures and relationship to current understandings of sustainability. More specifically, they are considered against the four elements of The Quadruple Bottom Line of Design for Sustainability (Walker 2014), a rigorous interpretation extended from the philosophy of Hick (1989), which comprises: practical meaning including environmental impacts; social meaning; personal meaning; and economic means. The originality of this research lies in the development of new arguments and insights with regard to the complex issues of design for sustainability and traditional making practices. Significantly, we find that many of these practices are intellectually consistent with broad, contemporary understandings of design for sustainability. However, we also find that it is often not easy to reconcile these practices with modern consumer culture. Our research shows that pursuing these practices part-time *for their own sake*, rather than for primarily commercial reasons can often facilitate the pursuit of excellence and the continuation of cultural traditions.

Keywords

traditional making practices

handmade artefacts

place-based making

sustainability

design

Introduction

This article investigates the meanings of traditional making practices and products and their relationship to current understandings of design for sustainability. Drawing on examples from around the world, it discusses traditional making practices in terms of their utilitarian, symbolic and aesthetic dimensions and relates these to the four elements of Walker's meaning-based Quadruple Bottom Line of Design for Sustainability (QBL) (Walker 2014), namely practical meaning including environmental impacts; social meaning; personal meaning; and economic means.

The article provides an overview of the research context, including reference to traditional making practices and contemporary understandings of design for sustainability. The methods section describes qualitative studies into these practices conducted in Australia, China, North America and the United Kingdom; each of these locations was linked to a funded research project. The wide range of artefacts resulting from these practices are considered in terms of their representation of human meaning in relation to current understandings of design for sustainability. This results in a more comprehensive appreciation of traditional making practices both for the makers and users of such artefacts. The links between practices and

artefacts, and sustainable futures are made in terms of the practical, environmental, social, personal and economic affordances.

Research context

Traditionally, handmade objects were made in communities to meet their everyday needs. Typically, these were not just utilitarian goods but included objects that represented beliefs, values, culture and identity, and artefacts for communal activities such as festivals, fairs and religious services. Traditional making practices were often localized and place-specific (Dillon and Kokko 2017) in terms of their techniques and designs and, prior to the emergence of mass-produced goods, they were common elements of daily life. Their decline resulted in a loss of knowledge, expertise and tradition (British Council 2019: 20). We discuss the various territories occupied by traditional making practices today to develop ways that may be personally and socioculturally beneficial as well as more positive and constructive in terms of their environmental impacts. We also discuss where and how traditional making practices might be made more economically viable as well as areas that are more debatable in terms of their meanings and cultural contribution.

Globalization has resulted in a dominant culture of mass-production and, increasingly, fully automated manufacturing that can be understood as a place-less, consumption-based economic system (Appadurai 2001). In this milieu, we consider the position and relevance of traditional making practices that result in functional artefacts such as baskets, pottery and textiles. Despite the advantages and disadvantages of mass production, traditional making practices still have a valuable and continuing role to play in society; not least in terms of their potential contribution to current debates about sustainability, which, as will become apparent, includes not only environmental considerations but also socio-economic and even personal

considerations (Walker 2011, 2014). Traditional making practices can involve sociocultural, spiritual, functional, aesthetic and/or economic elements (Dillon and Kokko 2017). These practices can also help us better understand the intimate, place-based nature of human endeavours (Mullagh et al. 2018) that are personally rewarding (Sennett 2008; Yair 2010), socially equitable (Ferraro et al. 2011) and environmentally responsible (Väänänen et al. 2017; Yair 2010). For example, traditional making practices were often conducted to create functional artefacts for use within the community in which the maker lived, and were not produced solely for individual commercial gain. In some cases, such as the Shaker religious groups of North America, high quality, unadorned craft furniture and smaller objects like boxes and coat hooks were made both for use within the community and to sell to outsiders as a source of income for the community as a whole (Sprigg and Larkin 1987: 110–11).

In relating traditional making practices to sustainability, it is important to recognize that contemporary approaches to sustainability can vary considerably. On the one hand, ecomodernism takes a technologically optimistic stance. Elkington's *triple bottom line of sustainable development* (1998) and McDonough and Braungart's *Cradle to Cradle* (2001) lean towards this approach. Ecomodernism, however, has been criticized as being, essentially, a continuation of the growth-based, consumption-oriented agenda associated with unsustainability (Davison 2001: 22–29). Other approaches are based more in notions of sufficiency, community and the development of different ways of living (e.g. Meroni 2012). The theoretical grounding of the research discussed here leans towards this latter approach. It is based on understandings of human needs (McLeod 2018), which can be understood in terms of three broad categories: (1) practical, social and personal needs; (2) values (Schwartz 2012), which can be understood in terms of self-enhancing, self-transcending and

change/stability values; and (3) human meanings (Hick 1989 129–71), including natural (physical world), ethical, religious or spiritual meanings.

The Quadruple Bottom Line of Design for Sustainability (QBL) (Walker 2014: 42, 65), based on needs, values and meanings, offers a useful lens through which traditional maker practices can be examined. It combines:

- **Practical meaning:** utilitarian needs plus their environmental impacts
- **Social meaning:** social justice, equity, community, charity
- **Personal meaning:** spirituality, inner values, conscience
- **Economic means:** financial viability to ensure provision of the above

Extending Hick's explanation of human meanings, the QBL recognizes that meaningful actions at the practical, social and personal levels have to be understood within the context in which they occur (Hick 1999: 129–71). This relationship to context is supported by Van der Ryn and Cowan's work that links sustainability to the particularities of place (1996: 57–81). In our research, we use the QBL as a lens to better understand contemporary notions of design for sustainability.

Methods

This research combines theoretical understandings of sustainability with empirical research from field studies involving qualitative data collected through semi-structured key informant interviews, observations and site visits in New South Wales (Australia), Jingdezhen (China), New Mexico (US) and Cumbria (UK). While the sites for the research were to an extent opportunistic, the particular making practices selected from these locations was purposive

(Battaglia n.d.) focussing on traditional making practices leading to the production of utilitarian artefacts. Together these sites provide a range of artefacts from diverse contexts with different policies, support structures and local resources enabling us to compare and contrast the contextual and cultural differences and identify their relevance to sustainable material futures.

Exploratory in nature, the research adopts a constructivist position that draws on local knowledge (including makers, historians, policy experts and academics) and direct observations of local making practices. The constructivist position enabled the researchers to collect participant-generated data to understand their personal values and motivations in relation to their work (Gray 2004: 17). These were then examined in terms of their relationship to understandings of sustainability, particularly the QBL. Validation of findings was supported through exploration of traditional making practices in more than one setting to provide a pan-global perspective on their relationship to contemporary life.

Field studies were conducted during three linked research projects funded by the Arts and Humanities Research Council (UK) (for further details see Gateway to Research [2019a, 2019b, 2019c]). The selection criteria for field study locations differed from project to project. The first, *Design Routes* (2014–17) focussed on culturally significant designs, products and practices and included field studies in Santa Fe, New Mexico. This location was selected because it is an especially successful example of a thriving arts and crafts culture that involves three distinct cultural heritages – Indigenous, Hispanic and Anglo. The intention was to learn from the success of Santa Fe in order to examine other locations and if similar elements were present or could be developed (Gateway to Research 2019a). The second, *Design Ecologies* (2016–19) provided opportunities for knowledge exchange with colleagues

at the China Academy of Social Sciences in Beijing as well as field visits to a variety of traditional maker practices in China. The learning from the first two projects enabled additional field studies in Australia (Gateway to Research 2019b). The third, *Living Design* (2016–19), focuses on the potential of design to contribute to small maker enterprises in the United Kingdom, specifically Cumbria, a rural region in North West England. This location, close to the researchers' universities, enabled the development of meaningful relationships with participants over an extended period to better understand their values and motivations. This project enabled the inclusion of a variety of perspectives on traditional making practices, which further informs the thinking on sustainable material futures (Gateway to Research 2019c). In advance of commencing primary research activities, all participants were provided with details of the planned research and provided informed consent to willingly participate in the study.

A wide range of making practices

In many traditional cultures, the world is understood in an inclusive, holistic manner – as a continuous, unified whole (Kim et al. 2017: 9; Reo 2011: 2). From this perspective of multifarious dependencies and continual movement, there may be no specific word for 'art' and no definitive categories or divisions drawn between utilitarian or decorative artefacts. This contrasts markedly with modern, Western ways of thinking that privilege analysis, reductionism, and simplification through the development of classifications and the seeking of orderliness. In Western cultures, we have been conducting such classifications and orderings for centuries, ever since Carl Linnaeus made the first attempt to systematically categorize the whole of the natural world with his *Systema Naturae* (Linnaeus 1735; Wellcome 2017: 12–13). Such classifications, however, are limiting – they present an over-simplified view of the

world that prejudices our outlook; in the case of Linnaeus's classification, for example, it assumes a static, hierarchical world with, predictably, human beings at the top.

In the spirit of traditional ways of looking at the world, our discussion recognizes the fluid, dynamic nature of traditional practices and the fact that their resultant artefacts may be, at once, a mix of the functional, sacred or ceremonial and aesthetic. These three elements are the dimensions of contemporary product design, which Candi et al. (2017: 32) suggests should be dealt with in a holistic manner. In order to examine their various traits and features, it is useful to consider them in terms of three intersecting areas of emphasis – the utilitarian, the symbolic and the aesthetic:

Primarily utilitarian

Artefacts for practical use relate primarily to the element of *practical meaning* within the QBL, which focuses on utilitarian needs combined with attention to and mitigation of the environmental impacts of furnishing those needs. Here, we find practices such as traditional basket making; textile crafts like spinning, weaving and knitting to produce clothing and other functional items such as bed covers and rugs; pottery making for household goods such as tableware and vessels; and furniture making – chairs, tables, shelving and so on. Usually, these kinds of traditional making practices will result in plain, functional everyday items. They will often be exceptionally well suited to their function – not least because their designs will have evolved in a particular region over many generations and have been honed by many minds to fit with local needs and conditions. An example of such an artefact is the Cumbrian oak swill basket (Figure 1). They are handmade from thin, flexible strips of split oak harvested from locally grown coppiced woodland. Those who conduct such practices will regularly plant trees to restock supplies – but these trees may be ready for harvesting only by

the next generation; this reflects an ethos both of environmental stewardship and of longer term ‘beyond self’ thinking. The oak strips are fixed around a hoop of hazel, which serves as a firm upper rim to the baskets, and gaps in the weaving allow this hoop to be used as handles. They have been made in the region for centuries – they were used for carrying coal, seed in the fields when sowing, vegetables, and animal feed (Jones 2017).

Sometimes, traditional practices will yield utilitarian products that also have decorative elements or that feature symbols and emblems that have cultural or religious significance. One example is the so-called ‘Mouseman’ oak furniture produced by Robert Thompson’s Craftsmen Ltd. in Yorkshire. Each piece features a decorative, carved ‘church mouse’, which has become a recognized feature of this furniture (Thompson 2013). Similarly, among the indigenous people of northern New Mexico, the decorative patterns of handmade pottery are associated with specific Pueblo communities (Bol 2018: 267; Jung and Walker 2018: 17–18). In other cases, decorative motifs on traditional artefacts may have a mnemonic function – used for recounting historical events or stories, as in some examples of the Australian Aboriginal *coolaman*, which is a carved wooden vessel used for various tasks such as a baby cradle or for carrying water or food (Kelly 2016: 49–50).

In traditional societies, handmade, functional items were often made to be used in the home or the community rather than for sale outside the community for commercial gain. They might have been bartered but there was not necessarily any monetary exchange. Such items were often made by people as one of the many tasks they undertook in daily life. In other cases, there were full-time craftspeople – such as blacksmiths, basket makers, cabinetmakers and coopers – who made products on a commercial basis. In today’s world of inexpensive mass-produced goods, handmade alternatives are often economically uncompetitive. While the on-

going viability of such enterprises is challenging, some highly skilled makers are still able to sustain their practices. They achieve this in a number of ways. Many will offer classes to supplement their income. Some find they have to produce quantities of low-cost goods – for example, weavers making socks, small items that are affordable and will find a ready market (Rosenzweig 2019). While this type of repetitive, relatively low skill production enables them to pay the bills, often, they would prefer to be concentrating their efforts on higher end goods that they consider more creative and that better demonstrate their skills. A weaver we interviewed in northern New Mexico had developed a variation on this. He paid ‘piece work’ to a number of local weavers who produced small rugs, western-style waistcoats, woven mouse-pads and other affordable items. By making a living in this way, he was able to concentrate his own efforts on larger commissions that involved more refined techniques. In the case of oak swill basket making, one of the last remaining makers continues to produce baskets in the traditional way (see Figure 1), which he sells at craft markets and fairs. He supplements his income with teaching and demonstrations and by producing other traditional items – reed baskets, oak hurdles, gates and fences, and woven hats (Jones 2017).

<Insert Figure 1>

Another oak swill basket maker in the region takes a somewhat different approach. She has developed a range of products – from traditional oak swill baskets to handbags made from finely woven oak combined with leather fittings. She has a well-developed website (Singleton 2017) and her products command relatively high prices sold at The New Craftsmen in London’s prestigious Mayfair district (New Craftsmen 2017).

In China, we found rather different approaches. Rapid economic development over the last four decades has created much wealth and also led to a re-appreciation of traditional practices, with the creation of many new museums – some dedicated to traditional arts and crafts – such as the Arts and Crafts Museum in Hangzhou and the Ceramics History Museum and the Museum of Porcelain in Jingdezhen (Jaffe 2015). Often, making practices are conducted within the precincts of the museum – this takes a number of forms. The Daopo Huang Memorial and Museum in Shanghai celebrates the life and work of Daopo Huang who was a pioneer in textile crafts in the thirteenth century. One of the buildings is dedicated solely to the teaching and learning of textile skills. When we visited, use of the characteristic three spindle, peddle-driven spinning wheel, introduced by Daopo Huang, was evident; many of these wheels were set out for lessons (see Figure 2). Other wheels, in various states of dilapidation were piled in a corner; these had been collected from nearby villages and were waiting refurbishment to become teaching tools. The classes attract a range of learners, from young people with an interest in traditional practices to retirees who remember the practices from when they were young. The purpose is simply to learn and pass on the skills and knowledge; it is not a commercial endeavour. It has been recognized by UNESCO’s Intangible Cultural Heritage Programme as being of national significance. Notably, this programme focuses on the *practices* and their continuance, rather than the products that emerge from those practices or their commercial viability. Intangible cultural heritage comprises ‘traditions or living expressions inherited from our ancestors and passed on to our descendants’, and that it is ‘an important factor in maintaining cultural diversity in the face of growing globalization’ (UNESCO 2017). This highlights an important difference between the ways in which making practices are categorized in the United Kingdom and China. In the United Kingdom they fall under the auspices of the *Creative Industries* (DCMS 2001) and the United Kingdom has not ratified the UNESCO Convention on the Safeguarding of Cultural

Heritage (UK Parliament 2017). The UK approach tends to emphasize their merits in terms of their contributions to the economy. In contrast, in China we found that traditional making practices tend to be considered as part of the culture sector, which helps explain their enthusiastic participation in the UNESCO Intangible Cultural Heritage Programme (Shanghai Municipal Administration of Culture, Radio, Film and Television 2010).

<Insert Figure 2>

At Hangzhou Arts and Crafts Museum, craftspeople have studio spaces where they create and sell their work. Visitors can see the methods, skills and materials used in the making of various traditional products that combine functionality with decorative features, including parasol, fan and kite making, calligraphy and paper-cut book illustration (see Figure 3) (Hangzhou Arts and Crafts Museum 2018)

<Insert Figure 3>

At the Ceramics History Museum in Jingdezhen, an area of ancient ceramics making has been transformed into a museum where visitors can see the traditional kilns, temples to the local deities and a relatively large working operation of skilled craftspeople producing decorative tableware in the time-honoured manner. Again, the work produced is sold to provide income to support the running of the living museum (see Figure 4).

<Insert Figure 4>

These approaches, which combine traditional making practices with retail within the museum offer a number of benefits for sustaining the knowledge, skills and practices in the context of globalized mass-production and consumer culture. They offer subsidized and secure spaces and working environments for makers and a showroom for their wares. In doing so, there is an implicit recognition of the precariousness of such practices in the competitive world of the market. These museums enable the visitor to see highly skilled traditional making practices of the region and learn about the materials and techniques. They can see exactly how the artefacts in glass cabinets in other parts of the museum have been created. Perhaps of even greater importance is the very fact that these traditional making practices are given space within the museum, which implicitly affirms their cultural value and helps raise awareness among visitors. Thus, visitors can form a new appreciation of the practices and the artefacts – they can see them anew and recognize that they are a continuance of a rich cultural and aesthetic heritage. By seeing the artefacts in this way, they are distinguished from mass-produced equivalents and the reasons for their higher retail price can be better appreciated. As a result, the craftspeople are able to be better rewarded for their efforts and sustain themselves and their practices. On the other hand, such approaches hold the danger of the skills and the craftspeople themselves becoming objectified, of being seen as museum pieces to be observed by visiting tourists.

Primarily symbolic

Artefacts that are primarily symbolic in nature relate especially to the element of *personal meaning* within the QBL. These include objects that have sacred, ceremonial or spiritual significance (Holm 2015: 9). Examples include: iconography in Orthodox Christianity; the painting of *retablos* – small religious wooden panels, and the carving of *bultos* and *Santos* figures – wooden carvings of saints by the Hispanic people of New Mexico (Steele 1994: 52);

the carving of crucifixes; prayer-bead making in Islamic, Buddhist, Hindu and Christian cultures; religious statuary in various materials; and stained glass windows for churches (Cash 1998). Other symbolic items include handmade items for festivals, such as paper lanterns, kites and clothing, including traditional costumes; items created as gifts for loved ones, such as Welsh Love Spoons – an intricately carved wooden spoon traditionally made by a young man and given to his beloved.

The primary purpose of these artefacts is their symbolism. They represent ideas that have meaning to individuals and/or communities beyond any practical function they may possess. These might be ideas about love; respect for ancestors; recognition of place or environment; thanksgiving; anniversaries or historical events. Moreover, many of these kinds of artefacts are physical emblems of belief – they refer to intuitively known apprehensions that, for a person of faith, are incontrovertibly ‘true’ and profoundly meaningful and, because they cannot be fully explained or described in words, they are represented through symbolism and enacted through individual or communal practices. Such artefacts may be skilfully made using high quality or even precious materials or they might be made from inexpensive, local materials and their rendering may be naïve. Either way, they are often highly valued, sometimes even venerated, not for what they are as physical things but for the meanings with which they are imbued.

In terms of the motivations of the makers of such work, our research among the Hispanic crafts communities of New Mexico revealed a variety of drivers (Design Routes 2015). For a small proportion, their business is their primary source of income and they are able to make a decent living, sometimes supplemented with teaching. A number of these makers have a formal arts-based education and have worked as professional designers before returning home

to set up their own practice as makers. Others are self-taught or have learned from family members, often as young children. Many are highly skilled and deeply knowledgeable about their culture. We found that a number of makers of religious artefacts are financially unable to or not interested in practising as a full-time occupation. Among this group are a number of retirees who have taken up the practice to continue the traditions of their culture, to supplement their income, and as a basis for visiting craft fairs and markets where they can meet and socialize with people who have similar interests. Many swap pieces of work with other makers and their homes are often densely decorated with pieces that they made themselves or they have acquired through such exchanges (see Figure 5).

<Insert Figure 5>

In terms of monetary value, the price that can be asked for such work can be relatively high. People regard these traditional artefacts as art rather than craft and prices reflect this. However, we were also told that these prices can only be commanded in Santa Fe. Outside the region, such prices cannot generally be sustained. Hence, the primary market was local, although the buyers who appreciate the traditional making practices were often from far afield

We also found that a combination of additional factors facilitated understanding and appreciation of these practices. In northern New Mexico there are high quality commercial galleries; world class museums dedicated to the history of the region and to local and international folk and indigenous arts; juried craft markets and festivals, music, arts, dance and regional food; traditional architecture and urban planning that sustains a distinctive aesthetic to the city and helps create a unique sense of place; and a wide range of restaurants and hotels. All these factors contribute to making the place a cultural centre that is much

visited year-round and which, collectively, create significant interest in and demand for local arts and crafts. In addition, the religious significance of much of the work adds to its perceived meaning and value – many visitors from the wider region are devout Catholics who travel to holy sites in the district during their visit.

Primarily aesthetic

Artefacts that are primarily aesthetic also relate to the elements of social and/or personal meaning within the QBL. These include traditional practices such as embroidery and needlepoint; hand-printing of wallpapers; decorative quilting; and the delicate art of ceramic painting – as practised today, for example, in the Royal Delft Pottery in The Netherlands. Contemporary practices, such as the creation of *objets d'art* in wood, ceramics, metal and glass can also be included here. These kinds of objects range from those that foster, on the one hand, inner reflection (e.g. during the making process) and aesthetic appreciation of the finished artefacts, which relate to *personal meaning* to, on the other hand, extravagant pieces that convey a sense of prestige, which relates more to social standing and social meanings.

In China's ceramic capital, Jingdezhen, we learned that, following the closure of eight large government-run factories in the early 1990s, most of the ceramic ware is now made in small workshops (Design Ecologies 2015). The various elements of the process are undertaken by individual enterprises that collaborate and form a virtual ecosystem – one makes the pattern, another the moulds, another does the slip casting, and the pieces are decorated by master ceramic painters. The work ranges from expensive ceramic panel paintings for company boardrooms to decorative vases and figures of revered sages and holy personages. More contemporary pieces are also produced. Some are humorous comments on recent history, such

as the award-winning 'Selfie' ceramic sculpture of a young woman in a Red Army uniform taking her picture on a smartphone (see Figure 6).

<Insert Figure 6>

Elsewhere, makers produce a host of products, in a variety of materials, that are nominally functional but primarily decorative. These include expertly made and sometimes rather ostentatious furniture pieces that serve more as vehicles for exhibiting the talents of the maker than being overly concerned with utility or contemporary design sensibilities (see Figure 7).

<Insert Figure 7>

There are also examples of traditional making practices that result in *objets d'art*. These have no utilitarian purpose, and might be made of glass, ceramics, metalwork, wood or mixed materials (see Figure 8).

<Insert Figure 8>

In these latter cases, there is an attempt to raise making practices above the traditional, rather modest role of creating products for everyday use or items that adhere to or emerge from established traditions. Instead, they aspire to art and thrive in a gallery culture and, in doing so, are often able to command high prices. This is certainly one route by which makers can obtain a reasonable return for their efforts, thereby making it possible to earn a decent living. Such pieces, however, are often rather self-consciously 'artful', bordering on or even crossing lines of moderation and restraint that are so characteristic of traditional practices. In doing so,

they can become rather showy and disconnected from their roots. From a sustainability perspective, they would seem to contribute little. In fact, these kinds of objects can be understood as aspirational or ‘positional’ goods that serve to foster material aspirations and conspicuous consumption (Lansley 1994: 17–18). They therefore have a negative relationship to both social and environmental aspects of sustainability (Crompton 2010).

There are, of course, many examples of decorative crafts that adhere to tradition and are pursued either as individual pastimes or as part of social gatherings that help build a sense of common purpose and community and therefore contribute to the *social meaning* element of the QBL. Textile crafts, traditionally pursued in the domestic environment, are good examples of such practices. They include embroidery and cross-stitch fabric pictures – often created as gifts to celebrate a new birth or other special occasion, and quilting bees, where people gather on a regular basis to create co-created pieces, perhaps as a wall hanging for an exhibition, or banners for a religious occasion. These practices are usually pursued on a non-commercial basis and, often, they make good use of scrap materials that would otherwise be discarded. Indeed, this kind of prudence is typical of many traditional practices, where people would have made use of what they had available. While such practices are clearly not *objets d’art*, they are decorative in nature and therefore do not necessarily have a utilitarian purpose; their function is aesthetic, communal and/or symbolic.

Discussion

Having examined various manifestations of traditional making practices and artefacts that fall approximately into the overlapping areas of utilitarian, symbolic and aesthetic, we will now draw these threads together to consider their interrelationships with respect to practical, social and personal meaning, and economic means, i.e. the four elements of the QBL. The QBL

focuses on the first three factors as primary ends while positioning economic considerations as a *means* (Walker 2011: 187–92, 2014: 42). The aim is to identify the extent to which traditional making practices are compatible with modern notions of sustainability that affirm the importance of place, localization, social equity, environmental stewardship and, in some cases, individual fulfilment.

Practical meaning: Utilitarian needs in combination with environmental care

Many of the locally produced products we have considered are geared towards practical functions – oak swill baskets, ceramic tableware and woven goods (Living Design 2019). Usually, these products will be more expensive than mass-produced equivalents, and sometimes the price differential will be significant. However, we should not only consider the utility and cost of such products. There are wider factors to take into account that relate to individual, societal and environmental welfare, as recognized in alternatives to Gross Domestic Product, such as the Genuine Progress Indicator (Kubiszewski 2014).-The environmental repercussions of producing the goods reviewed in this study are typically relatively minor – these include swill baskets made from sustainably sourced, coppiced oaks, woven products from local wools, and fine art paints made from local minerals and natural oils. Hence, they are predominantly handmade from natural, renewable materials. Frequently, there are no or few machine tools involved that could cause pollution and noise. In the case of ceramics, the need for firing is a more energy intensive process and this can have deleterious environmental affects, depending on the energy source used. The kilns we saw in Jingdezhen were wood fired and, while this is a renewable fuel it is also a source of air pollution. However, if local clays are used, as they were in this case, and the products are made primarily for local markets, shipping and packaging can be kept to a minimum (Design Ecologies 2015).

Many traditional making practices tend to be compatible with contemporary understandings of design for sustainability (Walker 2014). Because such practices are concerned with localization, a number of important considerations come to the fore. First, local people become directly aware of the use of local resources and their denudation. As such, traditional practices are often thought of in intergenerational terms, there is long-term thinking and ensuring that resources will be available for future generations, for example by planting trees. This speaks directly to Brundtland's definition of sustainable development, 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED 1987: 43). Second, there is vested interest in ensuring that the local environment is looked after because it is where the community live, work and play. Third, the creation of products for local use from local materials and human resources contributes to a sense of self-determination. Part of this involves ongoing maintenance where products made locally will also be able to be repaired and refurbished locally. This contributes to product longevity and reduces waste and resource use.

While we can recognize all these positive traits of goods made by traditional means, it is unrealistic to think that everything we need today can be produced at a local level. Therefore, we must consider what kinds of products might best be produced locally, are culturally relevant and distinctive to a particular locale, and are worthy of our support as potential consumers, even though the items might be considerably more expensive than mass-produced alternatives.

Social meaning: Social justice, equity, community, charity

The practices we explored were distinctive expressions of local culture, which contribute to a sense of identity and belonging. Our research revealed that goods created by such practices can be more meaningful and enduring than short-lived mass-manufactured alternatives. The goods and the practices are frequently passed down from generation to generation. Indeed, there is often a strong sense of responsibility to continue such traditions, which adds to their cultural resonance.

When artefacts such as those examined in this study, which employ natural, frequently renewable materials and handmade processes, are no longer made or used within the community, the stories that might once have been triggered by their presence become ‘less visible’, less told and therefore less relevant. This may have a detrimental effect on the distinctive cultural vibrancy of the community and its relationship to place and heritage, especially if such locally produced, culturally distinctive artefacts are replaced by mass produced, generally available alternatives. Artefacts produced to generate income within a consumption-based system can result in traditional practices becoming a means to another, rather disconnected end that is largely independent of particular culture, place and tradition. In becoming geared to the market, there are both pros and cons. On the one hand, they become known and appreciated by a wider audience and this raises broader consciousness about the traditional arts and crafts of a region. On the other hand, the products may cease to be authentic cultural expressions and may even become caricatures of that culture, because their purpose and meaning changes, along with their cultural depth and significance. In the American Southwest, for example, with the coming of the railroad in the nineteenth century, the indigenous peoples had to participate in the cash economy of the Euro-American population. As a consequence, their traditional crafts such as baketry, pottery and textiles were transformed from primarily utilitarian household objects to souvenirs and home décor

for tourists and Euro-American settlers. The materials and making practices remained the same but the shapes and styles of the objects evolved. Some objects became smaller and more portable, and simplified, while others such as wastebaskets and teapots were made for the first time (Howard and Pardue 1996: 4, 7).

Many traditional artefacts are an indivisible amalgam of materials, form, decoration and functional, social-cultural and spiritual meanings. We have seen that decorative features and patterns can be distinctive to the maker or, more commonly, the community. These can contribute to a sense of collective identity, purpose and belonging. An example of this encountered during our research was pueblo pottery in Santa Fe, where distinctive patterns were associated with different communities. Decorative features can also have a more explicit function in which artefacts are also mnemonic devices, where patterning aids traditional storytelling, as in the Aboriginal coolaman in Australia.

We have encountered many accomplished craftspeople who pursue traditional practices as part-time activities *for their own sake* and exchange their goods with other makers or sell them at markets to supplement their income. This enables makers to be free from commercial agendas, to be true to their traditions, and to maintain the rich meanings of their culture. If these pursuits are then valued by others outside the community, and the artefacts can be sold to generate income, all the better. In this case, the priorities would seem to be in the right order, in contrast to making practices geared to market forces and attempting to compete with mass-manufacture, when the tail can begin to wag the dog, as it were. If this occurs, there is a danger that those things people value most about their traditions become lost.

Personal meaning: Spirituality, inner values, conscience

There are various making practices that traditionally, and in many cases today, have not been pursued for primarily financial reasons, as we have seen with practices such as oak swill basket making and religious crafts in Santa Fe. In such cases, the motivations and inner values of makers differ from those where commercial priorities govern the process. For example, when engaging in craft pursuits to contribute to the community or to create a gift for a loved one, the emphasis may be on doing a job well for its own sake and gaining the intrinsic rewards of striving for excellence. In some cases, a sense of tradition and continuity of practices that are dying out is also an important motivator.

Traditional making processes provide makers with a close connection to the materials used and artefacts created and, as a result, leads to personal satisfaction that cannot be replicated if they are not directly involved in production. There is little incentive to exchange hand tools for machine tools or traditional making practices for automation to speed up production as this distances the makers from the making and reduces their personal fulfilment. This point has been discussed at length by Sennett; the place and role of machine tools in such practices must be carefully considered to ensure that which is most valued is not diluted or lost (2008: 81–82).

Many of the artefacts examined are imbued with spiritual significance, both through the process of making and for the purchasers of such goods. Creating objects by hand can be spiritually rewarding; a basket maker told us that she found her process to be meditative and ‘deeply spiritually satisfying’. Symbolic artefacts can also be important to a place and the traditions practised there. They can hold personal meaning for community members and purchasers who identify with the place, religion or aesthetics of the artefacts. This was evident among Hispanic communities in New Mexico and surrounding regions. There are many holy

sites in the region that are important venues for visitors. El Santuario de Chimayo in the town of Chimayo, for example, is a National Historic Landmark and one of the most important religious sites in the United States. Such associations add to the significance of the artefacts of the region.

Economic means: Financial viability to provide the above meanings

While economic considerations are important, we found that such issues are not necessarily the primary motivators for many makers. Frequently, more significant drivers are related to lifestyle, the pursuit of creative endeavours, and a sense of responsibility to continue the tradition. Within the array of artefacts we examined, we found that symbolic and/or religious artefacts may not only be culturally and spiritually significant but may also command relatively high prices.

When the primary purpose of traditional practices becomes commercial gain, it is not a huge step to start producing *objets d'art* aimed at a higher-end market. From an economic perspective, this makes sense as prices can far exceed those that can be asked for utilitarian goods. However, compared to the rich meanings found in many traditional artefacts, modern *objets d'art* can seem disconnected from these values and thus superficial.

Our research also highlighted a difference between how making practices are categorized in the United Kingdom and China, as *creative industries* and part of the *cultural sector* respectively. This difference affects the ways in which traditional practices are viewed, supported and appreciated as well as their perceived economic value. If these traditions have to be economically viable, they frequently fall into decline. If they are seen as important

elements of cultural heritage, they may be supported by regional or national funding, or continued within their communities for non-commercial reasons.

Conclusion

Our research has spanned a wide range of traditional making practices that fall into three areas, primarily utilitarian, symbolic and aesthetic. We found that many of these practices are consistent with broad understandings of design for sustainability (Walker 2014). However, it is often not easy to reconcile them with modern consumer culture. The commodification of traditional artefacts, and in some cases the redirecting of traditional making practices to produce *objets d'art* can lead to a disconnection from traditional cultural meanings. A useful way forward, which is compatible with many of these traditions, is to pursue traditional practices as part-time pursuits within the community *for their own sake*. This facilitates the pursuit of excellence and the continuation of cultural traditions independent of commercial agendas.

Traditional making practices can be personally rewarding, adding to a person's sense of inner growth and fulfilment, and socially significant in terms of their cultural contribution and their role in supporting a sense of community identity. Furthermore, even when the artefacts are made to be sold, such as the ceramics in Jingdezhen, purchasers will often value the items because they are made using traditional processes. Such artefacts often touch people more deeply than machine-made goods because the mark of the human hand can create a connection through form. We understand it, relate to it and are inclined to value it. Quite simply, it matters to us.

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List of figures

Figure 1: A traditional Southern Lake District oak swill basket made by Owen Jones, Cumbria, UK.

Figure 2: Spinning classroom, Daopo Huang Memorial and Museum, Shanghai, China.

Figure 3: Traditional parasol making from bamboo and silk, Arts and Crafts Museum, Hangzhou, China.

Figure 4: Air drying of pottery, with finished work in the background, Ceramics History Museum, Jingdezhen, China.

Figure 5: Collection of retablos in the home of a Hispanic craftsperson, Santa Fe, New Mexico, USA.

Figure 6: Selfie of young woman in Red Army uniform, Mr Sun's studio, Jingdezhen, China.

Figure 7: Decorative, finely crafted tabletop in wood, Australia.

Figure 8: Finely crafted *objet d'art* in beech wood, Australia.