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Dario Novellino

FROM MUSEUM COLLECTIONS TO FIELD RESEARCH^{*} An ethnographic account of Batak basket-weaving knowledge, Palawan island, Philippines

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A thorough understanding of an ethnographic museum collection often requires long-term field research amongst the communities from which the artefacts have originated. Recently, one such research project has been carried out with the primary objective of assessing and interpreting a collection of baskets found at the Museum of Paleobotany and Ethnobotany of Naples (Italy). Initially, the collection placed emphasis on the botanical aspects of knowledge of basket weaving among the Batak of Palawan island, as well as its aesthetic features (shape, design and motifs). During subsequent field visits in the Philippines, more in-depth field research had revealed that basketry knowledge amongst the Batak of Palawan has significant socio-ecological ramifications and cannot be dealt with only by appealing to simplistic notions of technological determinism nor be confined to the identification of plantbased material and botanical species. The underpinnings of Batak knowledge of basket weaving are discussed here in the context of socio-environmental change, placing emphasis on both knowledge decline and continuity. Batak exegeses on the circumstances underlying both acquisition and transmission of such knowledge are reported. Evidence shows that selected features of basketry knowledge are well transmitted while others are not. Nevertheless, 'incomplete' transmission can give rise to new forms of interaction between idiosyncratic 'know-how' and customary knowledge, leading to innovation and improvisation. The data acquired in the course of this research suggests that the complexity of Batak knowledge of basket weaving cannot be easily communicated in the context of a museum exhibition. In turn this poses a challenge to the criteria adopted by the Paleo-Ethnobotanical Museum for setting up its ethnographic collection. More importantly, it suggests that Batak

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^{*} This article is based on fieldwork when I was a Visiting Research Associate of the Institute of Philippine Culture (IPC), Ateneo de Manila University. A special debt is owed to my Batak friends for their warm hospitality. I acknowledge invaluable funding (grant no. 7136) from the Wenner-Gren Foundation, the Urgent Anthropology grant 2007/08 of the Royal Anthropological Institute (RAI) and the Christensen Fund (grant 2007-03068).



perspectives of their own practices and concerns on how they are being portrayed to the outside should be fully taken into account.

⁵⁰ History of the collection

The Museum of Paleobotany and Ethnobotany (henceforth Museum) is hosted in a wing of the 'castle', a recently refurbished 17th-century building, located within the Botanical Garden of Naples. It is the first museum in Italy to have contiguous paleobotany and ethnobotany sections, with a rich collection of artefacts from both Latin America and Southeast Asia (Borneo, Sumatra, Vietnam and the Philippines). Preliminary work for the Museum started in the late 1980s. Most of the artefacts come from internationally recognised sites of agricultural, biological and cultural diversity, and have been collected by the author between 1991 and 2005. The relation between artefacts, plant families and single plant species represents a key feature of the museum collection (Novellino et al. 2000). This article only focuses on one typology of artefacts (Batak baskets from Palawan island, Philippines) which have been the subject of an in-depth anthropological investigation 14 years after the first basketry specimens were collected.

Batak distinguish at least 12 kinds of basketry objects, but only the carrying basket known as *begias* is associated with more than 22 key motifs. Twenty samples of Batak baskets were first collected in 1993, during my ethnographic expedition. These baskets, received as gifts, were subsequently divided and one set deposited in the Museum while the second set remained part of the author's private collection. A
small number of additional Batak baskets were collected and further data acquired on subsequent field visits – in 1994, and from 1998 to 2001. However, information on basket weaving knowledge obtained during these field trips was fragmented and incomplete.

In 2004 all basketry specimens were re-catalogued using previous field notes and it was established that the baskets in the collection only represented 10 of the 22 named motifs recorded over the years. Each basket was photographed and the digital image transferred to a computer database, measured, and associated with the corresponding motif. In total 40 *begias* baskets belonging to both collections (author and the Museum's) were examined.

It was only in 2004 that I was able to initiate a specific research project to study the social and symbolic underpinnings of Batak basketry. One of the research aims was to understand how Batak transmit their traditional knowledge of basket weaving in the face of depopulation, demographic decline, and inter-ethnic marriages, and how much of that knowledge is actually being passed on to the next generation. The research was divided in two phases of four months in 2004 and two months in 2005. The meth-odology used combined participant observation, semi-structured interviews and visually mediated interviews. The basket makers were filmed during the actual making of baskets, as well as in their forest-based activities. Informants/collaborators of both gender and various ages were asked to view short videos and/or a series of still photos on basketry, and to discuss these with each other and with the researcher. The study involved the entire Batak female population, 120 women distributed in 8 different settlements. In two specific communities (Tanabag and Mauyon) 38 women

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of various age and skill, were asked to produce all the types of basket weaves and design patterns that they knew. All participants were given a financial incentive to carry out the task in their own location. At the end of the project, each woman had produced between 12 to 24 baskets, from a total number of 385 items collected, and later shipped to Italy. Initial findings indicated that since the first baskets were collected (over a period of 11 years), there had been no permanent loss of any basket design. On the other hand, interviews with Batak women suggest an overall decline in the production of baskets and a progressive loss of other woven items (e.g. rattan betel chewing wallets and boxes). All these observations gave rise to various questions such as to what extent can 'incomplete' transmission ensure the persistence of local knowledge associated with basket weaving? What 'chunks' or bits of this knowledge are known to whom and why? And what is the basis of sharing and differentiation in the knowledge of basket weaving? While these questions cannot be exhausted in the context of a single article, an attempt will be made to provide provisional answers, placing emphasis on Batak local commentaries and exegeses.

The Batak of Palawan

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The Batak are found scattered in the central part of Palawan. They have a heterogeneous mode of food procurement, mainly centred on swidden cultivation integrated with hunting, gathering and commercial collection of non-timber forest products. A provisional census in 2005 indicates that there are only 155 individuals with two Batak parents, a decline in the Batak 'core' population of almost 57% within a period of 33 years (Novellino 2007a). In contrast to the neighbouring indigenous people (Pälawan and Tagbanua), the Batak do not originate from those Austronesian-speaking populations which reached the island around 5,000 BP. Rather, they are believed to be descended from the first wave of Australoid people generically labelled as Negritos who crossed the land bridges connecting the Philippine Archipelago to the mainland of Asia.

During the early 1960s, due to the increasing immigrant pressure in the coastal areas, the Batak were forced to abandon their lowland settlements and retreat into the interior. Their local groups became geographically closer to the new migrant settle-125 ments and thus more isolated from each other. As a result, the people began to deal more frequently with newcomers rather than with the Batak of other river valleys. The fragmentation of Batak population has been one of the major elements causing the progressive decline of social networks and exchange between local groups. Today, because of the lack of suitable partners, Batak inter-marry with non-Batak. Mixed mar-130 riages and Batak assimilation into Tagbanua and Filipino settlements have all contributed to the severance of social ties, with evident repercussions on individual ability to organise collective actions and transmit traditional knowledge (Novellino 2007a). During recent years, communication with representatives of national society (government officials, environmentalists, missionaries, tourists, etc.) has greatly increased. Today, Batak 135 are the victims of debt bondage, patronage, land encroachment, government measures for environmental protection, culturally unsound NGO projects, and various forms of exploitation.

Making baskets

Amongst the Batak of Palawan, basketry is largely the work of women, and twilling is the predominant type of weave.¹ The first basket woven by a novice is an indicator that
the girl has achieved a status within the group of women as well as a new sense of identity. Thus the capacity to produce fine baskets is not only a sign of competence but a significant step towards adulthood. Baskets are made for carrying rice and fish (*bankat*). Men's containers for betel and tobacco (*pitaká*), women headbands (*tudung*), sleeping mats (*ikamen*), as well as those for drying rice (*arisaw*), fish traps (*bubu*), and back-packs (*balulá*) are also woven.

All bichromatic twilled plaiting uses two species of bamboo, *lawas* (*Schizostachyum lumampao*), and *sabsaban* (*Dinochloa palawanensis*), and one rattan species, *lipi* (*Daemonor-ops margaritae* var. *palawanensis*). Sabsaban strips are strong and more durable than *lawas* (Novellino 2007b, 2007c). The latter, because of the wider spacing between nodes, provides longer strips that are ideal for both the weaving of large baskets and flat winnowing

tray. Bamboo to be used for baskets must be kept green and pliant and prevented from breaking and splitting. Thus, if bamboo is not to be prepared immediately after cutting, it is stored inside bamboos tubes filled with water.

¹⁵⁵ Two species of wild *Pandanus (barasan* and *bankuang)* are used by the Batak of Palawan to weave sleeping mats and multi-purposes boxes. Often a woven item can be composed of different materials. For instance, Batak bamboo baskets have a rattan component framing the basket's mouth.

Knowing the working steps is certainly an important aspect of basket weaving (Novellino 2003). The sequences can be summarised as follows:

- (1) **Cutting** each stem of *sabsaban* cut into several pieces using a bush knife (*paida*).
- (2) Scraping A bush knife is used to scrape off the outer green layer from each piece of bamboo which will be blackened with the soot of burning resin. Before, the smoking process takes place a poultice of pounded leaves or bark is rubbed against some of the selected bamboo pieces. The following plants are used as a fixative for the smoke: balingasag (probably Barringtonia curranii bark); budakan (a vine bark); kamute (Ipomea batatas leaves); karampi (Abarema clypearia bark); kasuy (Anacardium occidentale bark); kulagbaw (a vine bark); mananang (a tree bark); tagungtung (a tree bark); ragaraga (Artocarpus sp. bark).
 - (3) **Blackening** (Figure 1) Bamboo tubes are blackened with the soot of burning *bagtik* (*Agathis philippinensis*) or *saleng* (*Canarium asperum*) resins. The process of rubbing and blackening is repeated three times to ensure that soot adheres firmly to the bamboo surface.
 - (4) **Breaking by splitting** each bamboo piece is split into several strips which are pulled from the node (*buku*).

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¹The most common types of weaves, with their variants, are represented in Southeast Asia: (1) checkerworkchequerwork; (2) wickerwork; (3) crossed weft; (4) diagonal or twilled plaiting. Diagonal or twilled weaving plaiting occurs when two or more weft strands pass over two or more warp elements, but not the same in adjoining rows; also, and the warp and wefts both run diagonally to the edge (see Cole 1956: 58).



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FIGURE 1

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- (5) **Making the strips** 'the inner part' (*balauba*) of each strip is taken away and discarded. Then the strips are subject to an additional thinning on both sides. These are bent and are cleaned off the residual inner fibres. The strips are now ready to be woven and are called *bauk*.
- (6) Weaving the bottom the strips are woven to make the 'bottom' (*buli*) of the basket.
 - (7) **'Making the breasts'** the four corners of the basket are referred as breasts (*dudu*), and these are the first parts to be woven around the bottom (*buli*) of the basket.

Occasionally, Batak baskets are made with uncoloured fibres (Figure 2) and on completion they can be dyed with turmeric (*Curcuma sp.*), which produces an orange yellow colour. Turmeric chunks are dipped into shell lime (*apug*) and smeared on the woven pattern (Novellino 2007b).

The rectangular bottom of the basket being woven (referred as *the child*) is tied on top of the model basket (*the mother*). Before doing so, the weaver verifies that the piece woven is of the right size. Then, four small sticks are tied around the mother basket and the lower extremities are inserted in the four corners (*dudu*) of the 'child basket' (Figure 3). These sticks (*parukad*) serve as a frame, to ensure that the new basket will respond to the required form. After this, 'the making of the basket' (*masansan*) can continue. The

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FIGURE 2

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final design is obtained by lapping together white and black strips according to specific alternations in order to produce the desired pattern. Decorative patterns are decided in advance. However, these are not isolated elements to be applied to the surface, but are woven in the process of making. After completing the weaving of the four sides of 'the child', the construction of the 'mouth' (*baba*) begins. Crucial at this stage is the weaving of a distinctive horizontal pattern (*patang*) and the insertion of a 'circular rattan frame' (*lu'dan*). The white strips (*liampung*) outside the circular frame are shortened, and the remaining length is carefully sewn around the rattan fibre to keep the edges and the frame in place.

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A distinguished basket maker is recognised for her ability to alternate different types of weaves and decorative patterns on the same basket to the extent that each side will be different from the others (*linibang limbang*). However, the presence of more woven patterns on the same basket may also be the result of an error in the weaving. According to some weavers, when a mistake is discovered the maker is generally faced with two options: (1) undoing the whole basket to identify and 'fix the error' (*dakdaken*) or (2) if this is too time consuming, continuing with a different type of weaving. In the latter case, the outcome is a basket with two or more types of weavings distinctively separated from one another (Figure 4), rather than nicely merged into each other



FIGURE 3







(*ruknu*) as when multi-patterning is done intentionally. The final effect may still be pleasant to the eye (*matilnu' a leganan*) but despite this the master basket weaver will regard it as an 'insufficient' (*mararang*) or bad work (*ra'raet ubra*). Those variations and improvisations originating from a mistake in the weaving process are never reproduced or replicated by other weavers.

Naming baskets

³²⁵ Twenty-two different basket motifs have been identified. However, each pattern can present individual variations. Some of the most common patterns are the less elaborate and thus the easiest to weave, and are generally used as models by novices during the learning process. The most elaborate patterns require the twilling of more fibres such as three-fibre weave (*tilnu*) rather than two-fibre weave (*tiagadua*).

Basket designs that are carefully reproduced and well executed are believed to please the 'life-force' of rice² and such baskets may be used during planting and harvesting. However, baskets with simple decorations can also be used for the same purpose.

One particular motif is said to have been received in dreams (Figure 5). This is how Lalay, a woman in her late twenties, recalls the dream-related story:

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The name of this basket is *natagainpun*, because the pattern was received by my auntie in a *tagainpun* [dream]. Yes, it was given to her by a *Diwata* [benevolent super-human being]. She told me that, during the dream, she lost her way home and she ended up in the house of a very old woman. The woman asked her to choose the basket she liked most, and then she taught her how to weave that pattern. When she woke up, she remembered the teaching of the old woman, and she made the basket.

One particular motif is believed to have the potential for activating powerful forces causing sickness and even death (Novellino 2007b). Thus, special norms must be followed before introducing novices to the weaving of this 'prohibited' pattern³ (Figure 6). According to Marila, a woman in her early twenties:

Agda it uyaw [literally, the stairways of the *uyaw*] is the forbidden basket. If you have no *ukur* [endorsement/authorisation] you cannot make it, and if you do, you will

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²There is an ample literature in Southeast Asia about the sacredness of rice. Sather (1977), writing on Iban rites of harvest rites, discusses about aggregate 'souls of rice' (*semengat padi*) and of 'its animating spiritual personality'. He claims that rice is treated by the Iban with the same reverential respect for human beings. Other authors have also suggested that rice is perceived as having a life of its own, and a soul (Blagden 1897; Endicott 1991; Hill 1951; Iskandar and Ellen 1999; Shaw 1911; Skeat 1900; Winstedt 1982.25).

³The notion of 'dangerous' designs and motifs received in dreams is known in other parts of Southeast Asia. For instance, in Borneo, the design of warfare clothing included motifs intended to increase the

³⁶⁰ warriors' success and Iban males offered trophy heads to senior women using a textile, known as *puà*. Iban warriors slept beneath *puà* to receive guidance from deities (Freeman 1979). Similarly, experienced weavers received new *puà* designs in dreams and regarded the weaving of the latter as a dangerous practice. Through such activity, the weaver established a direct contact with the spirit world and protective talismans were used to counter potentially dangerous effects.



FIGURE 5

either become *uyaw* or you will die. *Uyaw* is your life-force (your soul) when it becomes sexually attracted to different people, and other people will become attracted to you. The *uyaw* will force you to do the wrong things, you may become unfaithful to your husband or you will commit *sumbang* [incest].

Other motifs are characterised by naturalistic abstractions such as the scales of the *pian-gapaulan* fish after which this pattern is named (Figure 7). Research evidence indicates





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FIGURE 7

that the degree of proficiency in weaving this particular pattern is not always matched by
 the knowledge of animal morphology from which the design (or naturalistic abstraction)
 has originated. In fact, most young Batak do not have the knowledge of sea-based animal
 species as their parents did. Indeed, starting from the mid 1960s and due to migrant
 encroachment, the Batak have abandoned their coastal settlements. As a result,
 younger generations have a poor knowledge of sea resources and thus of the species
 to which the *piangapaulan* motif is associated. This is clearly expressed in the words
 of Titaon, a woman in her early thirties:

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My mother told me that *piangapaulan* is the name of a beautiful sea fish. Its scales look like the pattern of this basket. I have never seen this fish, but I can weave the pattern. Before the arrival of the Filipino migrants my relatives were living near the seashore. They were collecting shells in the mangroves and trapping fish on the coral reefs. My mother still remembers the names of all fish and shells found in the sea, but I don't - I was born in the mountains.

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The knowledge of and the skill required for making the different patterns also depend on the frequency of interactions between the novices and other basket weavers. When transmission occurs in a socially degraded context, few decorations are learned.

According to the elders, traditionally, prestige and social recognition were factors of importance in the maintenance of knowledge of basket weaving. But today, there has been a deterioration of both social and motivational contexts surrounding basket weaving (e.g. master-weavers do not assess the work of novices as frequently as in the past, and there is little competition amongst novices). Overall, this often results in lower standards of weaving. This is clearly reflected in the words of Katalina, a woman in her late thirties.

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When I was young, it was so much fun. All the girls would gather together and go to the forest to harvest *lawas* and *sabsaban*. Then we would gather together to chat

and weave baskets of different designs. How do you make this? When did you learn that? Can you interweave this pattern with another one? Today, when we gather together it is always in relation to trainings and meetings organised by the Government or the NGOs. They are not interested in what we know, the NGOs want to teach us new things, like silk worm production and silk weaving.

Knowledge of basket weaving marked the growth of an individual from the time she was born. For instance, it was a common practice to tie the placenta of newly-born girls to *sabsaban* bamboos, as this was believed to enhance their ability to become skilful basket makers.

Basketry knowledge also features in Batak worldviews (Novellino 2007b). In their description of the after-death journey, Batak narrate the encounter between the 'lifeforce' of dead persons and Angogro. The latter is described as a sort of giant standing at a gate. When 'life-forces' of deceased persons reach the gate, Angogro asks them to 465 construct anything representative of their culture and of their gender. Generally, a 'life-force' of a deceased female may be asked to weave a basket, while a male 'lifeforce' may be requested to carve a bamboo container or to make bow and arrows. Angogro provides fibres and wood for construction, and the 'life-force' of the deceased should use its own skill to transform the raw material into an object. 'Life-forces' that 470 fail to do so, will be thrown by Angogro against a tree, and no trace of the person will be left. The Batak myth of Angogro supports the view that technical skills, such as basketry, provides the conceptual basis for ethical ideas about the person and, at the same time, are indicators of both social and intellectual mastery. The inability to conform with Angogro's requests, is a sign that the person has not led a life in accordance with his or her 475 customs, and thus has not fulfilled the basic condition of sociality.

Today, certain aspects of knowledge of basket weaving are no longer essential to present circumstances, and an incomplete version of such knowledge is being transmitted. In several communities women attribute no value to the legend of *Angogro*, and many are unaware of its existence. By and large, evidence indicates that the transmission of certain bits of knowledge, such as the local folk-biological vocabulary and the use of rattan and bamboo (the plants from which baskets are made) has proven more resilient than traditional narratives and lexical competence of basket terminology (e.g. motifs).

The transmission and acquisition of knowledge of basket weaving

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Before involving themselves in the actual making of baskets, novices assist the experienced master weavers in the performance of other related tasks: collection of the raw material and plant substances used as colour fixative, blackening of the fibres, etc. There is a hierarchy in weaving complexity, and novices will learn from the easiest types of twilling. The so-called *giangangan* (Figure 8) is said to be the 'mother of all baskets' (*ina' it tanan begias*). Only after learning this pattern can the novice move ahead by attempting to produce more elaborate types of designs.

Most of the novices interviewed (Figure 9), claim that they have learned weaving skills 'only by looking' (*paglegan gwa*) and replicating what they have observed from

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FIGURE 8



others. Thus, a common way of learning is through experience and specifically by 'trying' and 'testing' (sukdan or subukan). Often novices borrow baskets from the master weavers. Then, after a careful assessment of the vertical fibres (adirian) and of the general weaving pattern, they attempt to reproduce the same. After having copied the desired pattern, they bring a sample of the basket, or a portion of it (the base), to the master basket weaver asking for practical advice. Thus, their own 'know-how' is constantly integrated with that of expert basket weavers who may be specialised in particular designs. Such exchanges allow the constant interaction and negotiation between idiosyncratic 'know-how' and customary knowledge, leading to innovation and improvisation (cf. Ellen 1993). Those novices who have difficulty in learning are said to have a 'hard head' (matigasna ulu), and thus require direct teaching. In that case, at the earliest stage of learning, the master weaver will hold the hands of the novice to show her the correct way of intertwining the fibres.

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We should bear in mind that in oral cultures such as that of the Batak, the transmission of certain knowledge may require a rather higher degree of convention than simple interaction between novices and specialists (Connerton 1989). In fact, there are stylistic rules governing the production of the various patterns such as the number and order of black strips (paggegieng) and the way they meet each other. A basket that fails to conform to these expected conventions is said to be aesthetically 560 unpleasant (da'gwa saiud a leganan). On the other hand, as long as certain conventions are respected, the weaver can draw on her own intuition, imagination, and even dreams, to produce individual variations.

As I have attempted to suggest, one important precondition for learning fine weaving is physical proximity to the master weavers' own huts (Figure 10). Overall, 565 direct exposure to the basket weaving network plays a more important role than transmission from mothers to daughters.



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The disposition of houses in the permanent settlement as well as that of temporary huts during summer camps (da'us) or in the swidden field (uma), is often dictated by kinship relationships. By and large, this entails that those novices who are closely related to the master basket weavers will have better opportunities to interact with them, and thus to learn the most intricate weaving patterns.

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However, when social networks are poor, the mother-to-daughter transmission line may be the only one available. It was observed that isolation from other households is an important factor influencing transmission. When the only available 'teacher' is the mother, and if the latter is a master-weaver, the daughter may be introduced directly to the weaving of the most complex designs. This situation provides an exception to the general rule according to which learning should be 'gradual' from the simplest to the most complex design.

The statement of Turista (Figure 11), a 17 year old girl adds support to this argument: 600

> We lived isolated from everyone else, because my father has wounds in his feet and hands [leprosy]. My mother is my only teacher. I have no knowledge of simple designs like giangangan, lebu lebu, liele'. When I first learned how to weave, I

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started with the *madibuatna begias* [the highest forms] like *pianpu'*, *pianuputupu'*, *agda it uyaw* and others. These are the patterns I know. This is what my daughter will learn one day.

The transmission of the most elaborate designs generally take place through middle aged women who had the opportunity to acquire the skill directly from past master weavers. Master weavers are said to be *taraman*. The term indicates one's innate talent and ability to produce fine objects. It also stresses personal talent, one's ability to conform to the best stylistic patterns, as well as the ability to produce new stylistic variations by intuition – with spontaneity and creativity. However, the presence of old master weavers in one community does not always ensure the transmission of basket weaving skills. Often, old master weavers cannot reproduce the most elaborate patterns because of poor eyesight and damaged fingernails.

In inter-ethnic villages with a mixed population of Batak and non-Batak (e.g. Kayasan and Langogan), the Batak language is not the dominant one. In such communities, those possessing knowledge related to basket weaving also include non-indigenous members, and some of them play an important role in the transmission of this knowledge. However, the specialised language of basket weavers is often replaced with more generic terminology. Some non-indigenous women who have married into the community have become skilful basket makers. However, they are not expected to know, remember or reproduce non-material items (e.g. songs, myths, etc.) associated with particular items. This is clearly expressed in the words of Milia (Figure 12), a nonindigenous woman in her early sixties:

I am a Filipina from Cagayan and my husband was a Batak. I have lived here for 20 years and have learned different designs. My daughters speak to me in Cuyonin; this is the language I use when I teach them how to weave. They have no knowledge of the master weavers' [*taraman*] language, of the deep words used in weaving. Often, they don't even remember the name of the different patterns, but they can weave them.



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Multi-ethnic communities are those displaying the most diverse patterns of knowledge transmission and acquisition. In mixed couples (Batak husband – non-Batak wife) a common line of transmission is mother-in-law to daughter-in-law. When such marriages take place, Batak husbands are not obliged to conform to customary matrilocal residence. This entails that wives can immediately transfer to their husbands' communities, which is practically the opposite of what would happen if matrilocality rules were enforced.

As this ethnography shows, the reproduction and transmission of knowledge of basket weaving tend to occur spontaneously and, only on rare occasions, is it socially orchestrated e.g. during community rituals. In the majority of cases, it takes place unpredictably, and in the absence of exchanges between master weavers and novices. This is neatly expressed in the words of Dingen, a woman in her late thirties:

One day my son visited the village of Tanabag where my young brother lives. He was given a puppy inside a basket, as a present. He paid no attention to the basket, he was only interested in the little dog. When he came back home, he dropped the basket in one corner of the house. It was a beautiful one. So I told him: have you asked the name for that decoration? I didn't, he said. So I counted the combination of strands, and tried to replicate the kind of weave and I made a basket looking exactly like that one. Since then, I know how to weave this pattern, and yet I have no name for it.

Transformation and innovation

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Batak culture is undergoing radical changes and the whole community's social support system is beginning to break down. For the younger generation particularly, modern technology has an aesthetic force and a socialising dimension which largely overrides that of traditional culture. As a result, young women have little interest in basket weaving and master weavers have no enthusiasm in teaching. Time is perceived as one of the key factors limiting the transmission of basketry knowledge. For instance, girls attending formal education have little time to devote to weaving.

Under particular circumstances, monetary compensation can represent an incentive for learning different types of weaving. This was observed in a single community where a small-scale government project for basket production was implemented. As a result, the prospect of commercialisation reactivated basket-weaving processes amongst young women who began to seek advice from master weavers. However, in this particular instance, the engagement of young women in basket weaving did not entail the 're-appropriation' of a vanishing practice, nor was it perceived by them as a form of 'cultural revival'. On the contrary, the production of such items was exclusively for commercial purposes and, thus, the overall process of basket weaving was devoid of the original social and functional values.

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In another community, the use of artificial dyes purchased from the market has allowed the production of baskets whose decorative patterns are both internal and external. According to weavers, this makes their baskets more attractive to tourists and Filipino buyers.

I found no evidence of introduced designs being integrated with traditional ones, or of borrowed elements that had undergone changes of form and significance. Instead,

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diversions in shapes and manufacture of Batak *begias* baskets have been noted in one particular community where inter-marriages are frequent. The most striking variation observed was the application of an external rigid base to a Batak basket (Figure 13). The basket-weaver provided the following explanation:

My mother was a Tagbanua from Buenavista. There, all baskets have a *lampi* [rigid base]. When I got married I learned several decorations from my mother-in-law. She is a Batak. Now I make baskets with *lampi*, but the decorations are Batak.

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However, a distinction has to be made between the innovative behaviour of individuals and the acceptance of an innovation by a collectivity (Bock 1974). It is only through the latter that new patterns of behaviour and practices spread within a social group, setting in motion a number of events that may affect every aspect of culture. What we are dealing with here is 'secondary innovation' (Haviland 1996) involving the deliberate application of known principles and leading to minor degrees of 'cultural hybridization' (Werbner and Modood 1997).

Another important finding of the research concerned technological replacement and its relations to other features of Batak culture and worldview. For instance, in the most acculturated communities, the majority of woven items have been replaced by plastic ones. At this stage, it may be useful to point out what Martin Heidegger (1961) argued in respect of the disappearance of a particular technology. He claimed that tools form systems so that any given tool is defined with respect to the remaining tools in a systematic totality: *Zeugganzes* – a totality of tools. Such an inter-referential system comes into being as a totality, and it also vanishes as such. However, in this particular instance, research findings seem to challenge Heidegger's assumption. In



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fact, although in some communities *maramakan* (tobacco/betel woven box) and bamboo containers (*ranku*) have disappeared, the magic charms (e.g. those used for identifying honey combs) formerly attached to the baskets are now applied to plastic containers. This shows that erosion of material culture in this case the disappearance of woven and wooden containers, did not entail the overall loss of other features of local knowledge.

775 Discussion and conclusion

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Nowadays, there seems to be general consensus among anthropologists that cultural models are not simply transmitted through apprenticeship but come into being within the context of people's mutual engagement in practical activities. Roy Ellen (2002: 780 239) for instance, has pointed out: 'people also acquire knowledge tacitly, unobtrusively and unreflectively as part of the process of socialisation and growing up'. Much of this knowledge, he claims, is substantive (Ellen 1999) such as the technique of harvesting rice using the Javanese finger knife. From a different angle, Tim Ingold has challenged the standard view according to which form pre-exists in the maker's mind, and it is 785 simply impressed upon the material. Instead, he insists that whatever practitioners do to things is grounded in an attentive, perceptual involvement with them or, in other words, that they watch and feel as they work (Ingold 2000: 353). This further entails that a desired form (e.g. the shape and pattern of a basket) does not issue from a pre-existing idea stored in the maker's mind but 'comes into being through the 790 gradual unfolding of that field of forces set up through the active and sensuous engagement of practitioner and material' (Ingold 2000: 342). Ingold's considerations are theoretically provocative, but they seem to undermine the importance of those stages preceding the action of weaving (e.g. the selection, preparation and counting of fibres, which entails that the maker must have a clear idea of the decoration and size 795 of the basket she intends to weave). Remarkably, Batak ethnography shows that the final basket is both the outcome of an imagined plan, future expectations and of all practical modifications required in order to adjust such a plan to different contingencies. Improvisation and creativity often unfold from not being able to conform to the observed pattern. In fact, weavers select the form of a basket in advance and variations 800 on standard design may occur while she is engaged in the actual action of making. Thus, the final design grows out of the action of making as well as in relation to an imagined design. As earlier indicated, the actual weaving is accomplished by using a 'mother' basket as a model, on top of which the 'child' basket is woven. Basket partonomy and the metaphorical use of 'mother' and 'child' (referring to the model basket and 805 the newly woven) suggests that making is actually perceived by Batak as a process of growth - and yet always with reference to an existing model.

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More importantly - on the part of the weaver - the making of a basket requires a thorough understanding of ideas, tools, and materials that enable actions, what Keller and Keller (1996: 23) define as 'constellation'. The latter derives from the practitioners' stock of knowledge, i.e.

- (1) visual knowledge acquired through previous observation of weaving;
- (2) knowledge of basket functions;

- (3) knowledge of designs, which may embody an understanding of their meanings;
- (4) knowledge of the fibre-providing plants, their morphology, location and availability in the surrounding environment;
- (5) knowledge of fibre preparation (splitting, cleaning, darkening, bending etc.);
- (6) awareness of the social context surrounding basket weaving (e.g. the expectation of the persons assessing the work of the novice) and of the motivational context (e.g. feelings of competitiveness among novice weavers).

These points do not aim at exhausting the complex knowledge underlying basket weaving but undoubtedly call for a broader understanding of the tension between previous ideas, imagined tasks, and the unfolding of work, and thus of the overall process of knowledge acquisition and transmission.

To conclude, the data collected in seven Batak communities indicates that:

- (1) Basketry knowledge cannot be understood as a self-contained autonomous set of practices but as phenomenon imbedded in and contingent upon several others overlapping cultural domains (cf. Ellen 2005). It follows that this knowledge is valuable not only for its own sake but also for the ideas upheld by the people on ethnicity, identity, and conception of the self.
 - (2) Incomplete transmission and selective acquisition of basket weaving skills is not an exception to the rule. Degrees of loss and retention are, in fact, amongst the essential factors shaping the acquisition of knowledge.
 - (3) The more traditional knowledge is eroded, the more diversified the pattern of transmission becomes.

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What leads to 'incomplete' and 'fragmented' transmission of Batak basketry knowledge is the cumulative impact of factors such as the breaking of social norms, demographic decline, mixed marriages, subsistence and mobility changes, exposure to formal education and the growing involvement in the cash economy.

The highly heterogeneous forms in which Batak basket making is transmitted further suggest that we should move away from simple vertical versus horizontal kinds of typologies (i.e. vertical or parent-to-child; horizontal or contagious; one-tomany; concerted or many-to-one, etc.) as those proposed by Cavalli-Sforza and Feldman (1981). Rather, Batak knowledge of basket weaving, as well as much practical knowledge, is fundamentally self-learned through experience, reinforced in degrees of correction and affirmation, and what may make the differences between one practice and another is the 'degrees' (Roy Ellen's personal communication 2004).

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The research further shows that basketry knowledge is acquired by individuals through a multitude of indirect and somehow unpredictable forms. Thus, while the overall complexity of basketry knowledge curriculum is being reduced, the process of knowledge transmission is becoming more diversified. The general trend is one where the transmission of specific sub-skills is becoming highly unstructured and fragmented, hence escaping the customary circuits of cultural reproduction.

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Clearly as it appears, the communication and representation of this highly articulated body of knowledge in the context of a permanent museum exhibition is far from being an easy task. Roy Ellen (2005), for instance, has pointed out: 'museum curators tend to see baskets as a temporal objects and describe their features accordingly, whereas basket makers see the basket as the outcome of a process'. In such a fashion

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'temporal distancing' (Fabian 1983) is sharpened and baskets, as well as other artefacts, are 'detemporalised' and thus 'anonymised'. Interestingly enough, interviews with visitors of the Museum indicate that they perceive the artefacts on display as relics of the past, although all of them have been produced in recent times. Furthermore, the present arrangement of showcases according to subsistence practices fosters a distorted understanding of indigenous knowledge among visitors. It is often misunderstood as a monolithic unit divided into compartments (e.g. hunting, planting, gathering, etc.) rather than as a holistic system where technology, livelihood and worldviews are totally merged together. Not surprisingly, the Museum collection is largely focused on utilitarian descriptions of items while, in comparison, indigenous people's modes of representation are poorly represented.

Undoubtedly, the research findings presented here call for a revision and improvement of the expositional criteria used for setting up the Southeast Asia section of the Museum and, more importantly, its basket collection. Ironically, as of now, given its 870 distinctive natural sciences biases, the Museum does not feature as a suitable institution for developing anthropologically oriented approaches to museology and, thus, cannot do justice to indigenous perspectives. Recent theoretical trends have placed a new emphasis on the interpretation of collection in the search for more appropriate ways of communicating the knowledge of other cultures. It has been argued that museums 875 are the places where social identities are constructed (Bean 1994), and in which moral and cultural systems are produced, legitimated and contested (Karp and Kreamer 1992). To the extent that this is so, democratisation in museum participation (Ames 1992) should necessarily include a conversation with those non-western societies, so as to include their cosmologies and culturally specific perspectives of 880 how they wish to be represented in the global arena. The legal framework under which these objectives could be achieved is already in place. In 1998, Unesco passed an international standard entitled the Proclamation of the Masterpieces of the Oral and Intangible Heritage of Humanity. The notion of intangible heritage encompasses 885 'a wide range of expressions, including oral traditions, languages, the performing arts, music, festivities, rituals and social practices, knowledge and practices about nature and the universe and traditional craftsmanship' (Unesco 2006). Indeed ethnographic museums, through their collections, could play a leading role in raising public awareness of the value of this vulnerable and often ephemeral heritage while pro-890 moting the participation of local bearers of traditional knowledge in the revitalisation of their material and spiritual culture. This approach calls for a reformulation of the relationship between museums and ethnology (Karp and Kreamer 1992). Museums that are successfully moving towards these goals should be provided with the means for spreading their positive experiences to other institutions. This should result in con-895 structive forms of collaboration between museums across regions and, ultimately, into culturally appropriate ways of representing the work of traditional craftsmen, indigenous artists and producers. To move in this direction, the Museum of Paleobotany and Ethnobotany of Naples needs to undergo a major methodological shift. This should entail a periodical update of its ethnographic collection with new information from 900 the field, to ensure that the exhibition reflects both cultural continuity and change. Audio-visual documentation showing the processes of knowledge transmission, acquisition and adaptation, as well as indigenous peoples' commentaries, should become an integral part of the exhibit. This would also contribute to the dissemination of

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information on the threats and challenges facing by indigenous peoples throughout Southeast Asia, and provide visitors with a more comprehensive and dynamic picture of the interactions between people and their environment.

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