Katai: Coconut Scrapers

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Coconut is an essential and versatile ingredient in south and southeast Asian food. The fruit of the coconut palm *Cocos nucifera*, a nut, is used in various stages of growth for human consumption. Coconut water from the immature nut; the grated or shaved fresh mature flesh; coconut milk and cream extracted from the extracted fresh flesh; dried shredded desiccated coconut and coconut oil derived from copra, the dried nut flesh. All these have roles to play in local food in a diverse area that stretches from East Africa to Indonesia, into the Melanesian region and also around the tropical world. The coconut has been widely distributed by nature and exploited by man.

Extracting the flesh from a mature and fresh nut is not straightforward. The coconut shell is extremely strong and the coconut flesh inside is dense and conforms tightly to the inside face of the shell. There is a thin dark brown membrane that separates the flesh from the shell but the tight fit within the shell means that considerable physical effort is required to prise out sections of flesh once a nut has been opened. This is certainly the case with any fresh coconut worthy of human consumption.

Given the ubiquity of the coconut it is therefore no surprise that specialist tools have evolved to extract the flesh. These are generally based on the concept of extracting the flesh from the halved nut.

They can be simple pieces of serrated metal attached to a wooden handle to scrape out the flesh. In this form they are similar to tools for shredding other fruit and vegetables such as unripe papaya and green mango.

Mounting a scraper on a strong support that can be anchored allows two hands to be applied to the scraping process, significantly improving productivity. If the support is large enough to sit on then bodyweight will anchor the combined tool to the kitchen floor or ground, often the kitchen workplace in the tropics. This eminently practical solution is the focus of this paper.

In Thailand the resulting tool is called a *katai*, often translated as a rabbit. At its simplest it is merely a plank of wood with a metal scraper at one end and short foot near the scraper to provide clearance under the scraper for a receptacle to collect the shredded coconut. More stylish examples are often carved from wood with a cranked iron ‘tongue’ attached to scrape the coconut flesh from the shell. They can be highly decorated craft objects. These artisanal characteristics together with the search for convenience or the desire to have a new kitchen gadget have consigned many of them to be re-cycled for the tourist trade.
From personal experience, and without the benefit of a locally developed tools, the flesh can be loosened somewhat by repeatedly striking the whole nut with a blunt object (the back of a cleaver or hammer for instance) until the shell audibly cracks and can finally be broken open, frequently into randomly shaped pieces of solid flesh. This also has the effect of breaking the ‘surface tension’ of the membrane to the shell surface. These random fragments of shell flesh can be processed but do not lend themselves to a logical or efficient production process. The pieces of coconut flesh can be grated individually for preparing coconut milk or can be pared to make coconut crisps. This was my modus operandi to prepare coconut, for instance for pan toasted coconut shavings, a delicious way of enjoying the nut flesh.

Can we assume that cooks are always in search of efficiency? The process that is described above does succeed, but is not efficient. Despite owning traditional coconut scrapers, I did not appreciate their inherent efficiency until I carried out a practical experiment to marry a Thai katai to a coconut purchased on a London high street. (See Figure 1) With a little skill in directing the knife blows along the equator of the shell the nut was split into two hemispheres. Working a half nut backwards and forwards over the metal tongue of the katai produced a reasonably uniform pile of grated coconut. It was a short learning curve to assess the best angle to hold the coconut shell and to choose whether to scrape in both directions of motion. I could appreciate that in experienced hands these tools could quickly prepare the flesh for coconut milk preparation.

I came across references to these implements before visiting Thailand. On an early visit I had obtained a copy of ‘Modern Thai Cooking’, published in 1977. This had several line drawings of katai in animal forms and a photograph with two such examples. On these
holiday visits I never found a carved katai but did see the simple plank versions and hand tools in the food markets. When I went to work in Thailand I was determined to find a katai. I ended up with a collection of more than twenty! Travels in the region added examples from Malaysia and Indonesia. A subsequent return to work and travel in Asia extended my collection with examples from Zanzibar, India and Cambodia.

Markets in these areas usually have a vendor operating a commercial coconut scraper, to meet the demand for freshly grated coconut. This is typically a fearsome toothed spherical grinding head attached to an electric motor onto which the coconut halves can be forced to ream out the white meat. This usually takes place in a potentially hazardous manner with no safeguards whatsoever apart from the hard coconut shell itself. This commercial availability has contributed to the redundancy of the traditional tools and is now exacerbated by the ready availability of canned coconut milk.

I have seen machines of this type operated in a Thai and Cambodian markets and even in a small supermarket in Al Ain in the UAE. In the latter case the shredded coconut was on sale to satisfy the needs of the expatriate Indian community as the coconut milk is not generally used in traditional Arabian food.

There are few basic kitchen utensils that have become art objects in their own right. Function normally determines form and whilst a sieve finely crafted from basketwork may be a beautiful object to a Western ethnic taste, it is still essentially a sieve. Spoons may be carved with plant or animal motifs and a serving tray may have intricate decoration chased into its surface. However both these examples would naturally be part of the public display of a meal and not something that was essentially a tool confined to food processing in the relative privacy of the kitchen as is the case with the katai.

These simple tools have achieved a status well above their basic utility. An analogy can be drawn with the status of key ingredients in other cuisines. The olive has a similar function and importance in Mediterranean food and has iconic cultural status. It is produced, marketed, depicted and consumed with a high profile as a desirable and key ingredient. The katai inhabits a similar niche in Asian food cultures. Processed coconut flesh is a binding ingredient across a large number of dishes from savoury to sweet. The katai is the marker for start of the detailed process to produce coconut milk as the cooking medium. In turn this can be the start of the process to create a meal.

This range from utilitarian simplicity to highly decorated examples leads me to believe that they may also have reflected their owner’s status and aspirations, a utensil to use with pride. The carved wood, lacquer and paint are not essential to the function of these tools which do not appear in the final presentation of the meal.

There are several distinct morphologies of these tools that reflect the cultures in which they are used.
In Thailand the carving and decoration are most often in the form of a stylised animal. I have collected examples carved as a rabbit, a dog, a snake, a rat, a cat, a lion, a lizard or dragon, a turtle or in one case a cross between a pig and an elephant. Whatever form is chosen the head or mouth will support the metal scraping tool and the back will support the cook who is scraping the coconut. The animal is often carved out of a sawn piece of wood but in one case in my collection it is formed from a suitable array of forked branches that will achieve the required function. In these cases it can take some imagination to recognise their intended animal form and is a display of the carver’s ingenuity. (See Figure 2) One example has a creature swallowing the tail of the rather amorphous animal that supports the scraper. (See Figure 3)

![Figure 2: A small carved rat from Thailand with a skilfully formed tongue scraper and a small lidded box in the back for an unknown purpose! The rat tail is wrapped round the back in the photo.](image)

In Cambodia the animal form is also used. The scraper that I purchased also shows the modest decoration of the bare wood that is rare in my experience. (See Figure 4) I have seen one Thai katai that was painted in a rather garish temple decoration style.

Examples from Malaysia and Indonesia have more varied and complex forms and often work in local carving styles such as animism and also with specific depictions of gender. The Malay term for this tool is *kukur kelapa* and I believe that this is also used in Indonesia. An example collected in Malacca has a sturdy body which has side panels decorated with vegetal detail in low relief carving. (See Figure 5) When I found it, it had lost its tongue but there was the characteristic hole for installing the metalwork. I had no difficulty purchasing a replacement forged iron tongue from a Thai market. Their ready availability indicated that the traditional katai were still in use and there was a demand for replacement tongues.
**Figure 3:** A Thai katai formed from a naturally branched piece of timber with minimal carving. The back legs are fused together and despite its appearance it is quite stable in use. The form is a mix of dragon and lizard.

**Figure 4:** Cambodian scraper that is obviously a rabbit with whiskers, lop ears and a bob tail. The wood is treated with a matt varnish and highlighted in gold paint. The everted edge of the finely wrought tongue is furnished with very sharp teeth.

I do not have extensive experience of the Indonesian equivalent of the katai. The two examples in my collection do exhibit characteristics that I understand are in the Indonesian style but only one was collected in Indonesia. This one comprises a substantial slab of wood with a human figure extending at an angle from one end. The metal tongue projects from the top of this figure’s head. The second one is an example of a ‘boxed’ kukur kelapa. The carved box conceals a hinged scraper that lifts out of the box to be secured by the lid for operation as a scraper. The carved decoration on the box includes a scorpion.
Figure 5: The Malay coconut scraper is finished with a dark wood dye to highlight the carved side panels and also some carved detail around the base of the neck.

In contrast the scrapers that I found in Zanzibar are far more restrained as befits the coastal culture which had Islamic influences. Some are in the form of a folding stool that is very characteristic of the local carving tradition and is also the basic form of folding book stands used for instance for supporting a Koran. (See Figure 6) The Swahili name is *mbuzi*. These are carved from a single plank of wood and the hinge enables the height of the scraper to be adjusted.

Figure 6: Zanzibar folding scraper. This example is decorated with two incised ostriches. Another example has simple vegetal decoration.

I also found a larger and more stylish *mbuzi* in Zanzibar. The joints in the wood work are pegged and wedged in a competent manner to match the carved detail. The ferrule around
the tip of the neck to prevent the wood splitting is also a mark of quality construction. (See Figure 7)

Figure 7: A well-constructed mbuzi from Zanzibar. The carving is sophisticated in its restraint and the joinery of the wood is highly skilled. It is also the largest specimen that I have seen.

Indian examples have considerable variety, ranging from carved wood to brass and copper constructions. Sometimes animal depiction still dominates although again more restrained examples are also found. Two all metal graters that I purchased from an antique dealer in London are examples from the western coast of India. They have a stylised animal form with quite short legs and may have been used on a low table to provide working space for the grating process. They are quite intricate examples of metal work combining a number of techniques, casting, sheet metal work, punching and riveting. Both have an auxiliary grater formed in the brass sheeting which forms the top surface. On one this has two sizes of holes punched, the fine holes would be ideal for grating ginger. (See Figure 8) Both have hanging loops to store them out of the way and possibly also for display.
Figure 8: Indian coconut scraper, called a *peeta*. The frame is cast brass and the punched brass sheet of the auxiliary grater is secured with brass rivets.

Figure 9: A Keralan *peeta*, the wood carving is rather coarse, there are adze marks on the surface or they could be cleaver marks from the surface being used as a chopping surface, quite a common fate for these objects.

The next example comes from Kerala and shows yet another variety of this basically simple tool. In this form the carving includes an integral bowl to collect the grated coconut flesh.⁶ (See Figure 9) This one is again very restrained in shape, a simple rectangle on short feet with the iron tongue driven through the whole thickness of the scraper to ensure a robust tool. The only decoration is an ogee indentation on each long side.

A web search for coconut graters yields old specimens for sale to collectors and specimens in ethnographic collections. There are also modern hand and electrical scrapers to purchase. The modern tools are surprising uniform in appearance and whilst they may
be more efficient they do lack the charm and interest of the traditional scrapers with their wide range of forms and finish.

The requirement to shred coconut flesh to be processed for food has led to the development of tools for the process. In turn these have led to ethnic styles of scraper which can reflect local artistic traditions. The investment of effort and ingenuity perhaps reflects the importance of the key ingredient, coconut flesh and the need to process it into coconut milk as a key ingredient of traditional food. The availability of mechanical equipment to replace these simple artisanal tools of a food culture is part of an on-going transfer to modern technology. Their cultural significance is attested by web postings fondly remembering the presence of these stylish and efficient tools in the kitchens of previous eras.

Notes
1. One other similar floor mounted culinary tool from Bengal can be referenced. The bonti is a knife blade mounted vertically on a wooden board that is used for peeling, cutting and shredding food in Bengali cuisine. Like the katai the user sits on the board and thus has both hands free for working with the food.
2. All photos are by the author and are of katai in his collection.
3. The book Thai Style (page 120-121) has photographs of a collection of Thai katai that includes specimens with paint and lacquer finishes.
4. This is my smallest katai and made me wonder whether it was practical and had ever been used. However I have seen illustrations of children grating coconut and many Thai are slightly built.
5. The website of the Art Gallery of New south Wales illustrates a splendid grater from Nias, Indonesia. It is carved with male genitalia and breasts on the underside between the legs and also sports a male figure carved in high relief at the base of the neck with a large headdress.
6. I also have a Thai katai with an integral bowl and have seen references to examples from other countries.

Bibliography
Art Gallery of New South Wales: m.artgallery.nsw.gov.au
Kritikara, ML & M R Pimsai Amranand, Modern Thai Cooking, Editions Duang Kamol, Bangkok, Thailand, 1977
Tettoni, Lucca Invernizzi & William Warren, Thai Style, Asia Books, Bangkok, Thailand, 1988