The Tibetanisation of European Steel Stoves in Ladakh

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This paper examines the phenomenon of the hybridisation which has occurred between the iron stoves introduced into Ladakh by Western missionaries and the traditional mud built stoves of Ladakh. The Ladakhi patrons in this case are the main determinants of 'style' and 'artistic taste' which can both be demonstrated to have their roots firmly in the traditional culture.

The making of decorated stoves constitutes what is arguably a new art form in the Tibetan world. Although stove making may have begun in the 1930s or 40s, all the most splendid and elaborate examples have been produced since about 1965. The production of contemporary steel stoves may be seen as the result of the accidental confluence of a number of enabling circumstances, both economic and historical. The two most important of these, both intrusive, are the presence of tourists, acting as an economic stimulus, and the availability of sheet steel. Steel is re-cycled from steel oil drums brought in by the Indian army, present since 1948 when Ladakh was first disputed by Pakistan, and in even larger numbers since 1962, the date of a border war with China. The area was first opened to Western tourists in 1974 and though only a handful visited it in that year, by 1984 the number had risen to 15,000 a year. That tourists constitute the greatest source of new wealth responsible for stove production is underlined by the distribution of stoves (1988) almost wholly in and around Leh the capital and the place where most tourist guesthouses are concentrated.2 Mud or stone stoves continue in use in the majority of village kitchens. In travel literature on Ladakh up until the 1940s one finds only the mud built stoves being

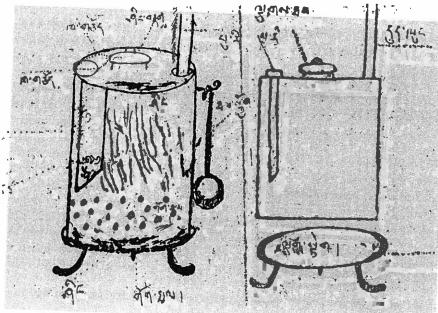


Fig. 1. Diagram of stove proposed by Walter Asboe in Keylang Agbar, no. 41, 1931.

mentioned as in general use.³ In fact, not uncommonly, elaborate stoves are found in the kitchens of tourist guesthouses themselves and some pride is taken in showing off these examples of local skills. But it is important to remember that this is a craft which is overwhelmingly carried out by and for the local people rather than by the local people for a tourist audience. This contrasts with areas (such as Nepal) where the economic power of tourism has resulted in the production of 'Tibetan' style objects modified to suit Western taste. A highly decorated stove is both a reflection of increased wealth and a status symbol in itself. Stoves, being in kitchens, are located in a house's most important room in relation to the social life of the family and constantly seen by both family and visitors.

Though, like Tibet, Ladakh was never colonised by a European power, the introduction of Western technology formed part of an agenda of social and moral reform of the type seen in many colonised countries in the 19th century. The attempted introduction of a type of European stove by Mora-

^{1.} Norberg-Hodge 1992: 93.

The total cost of a stove in 1987 was Rs. 4000 including Rs. 1000 labour costs, a huge sum in an area only now switching to being a money based economy.

^{3.} Heber & Heber 1926: 113-14; Gompertz 1928: 150; Danielli 1933: 260.

vian missionaries,⁴ who first made Leh a mission headquarters in 1885, must be seen in this context. In 1904 Jane Duncan described a service held in the missionary chapel in Leh with such an iron stove at its centre.⁵ The history of stove production can be seen as a three stage process. In the first stage European stoves were introduced but seem not to have found favour. Kaplanian notes⁶ that the stoves which were first introduced were smaller than the Ladakhi stoves but were hardly used and were located in kitchens occupied only in the summer. Local people who tried these introductions found that they cooled off too quickly and required too much fuel to keep at a high temperature.7 As one of the primary functions of the mud stove was and remains that of heating the kitchen, where the family sleep, this feature was a major disadvantage of the metal stoves. According to Wolfgang Friedl, the iron stoves in Zangla (Zangskar) were copied from stoves used in the Kashmir valley. Although his sources stated that these had been adopted by the British there, it appears more likely that the British themselves introduced them to the Srinagar area where they are still much in evidence on houseboats. He says that in 1983 they were still being traded from the valley into Zangskar. An introduction from the Kashmir valley is quite possible considering the strong traditional trading links between the two areas. Nevertheless, evidence points to the Moravian missionaries as the group most motivated to have introduced, or at least actively promoted, such new technology. In 1931 Walter Asboe, the Moravian missionary sucessor to A.H. Francke, wrote an article in the Keylang News entitled 'An illustrated article on the introduction of a combustion stove calculated to effect considerable economy'.8 This shows that the introduction of such stoves was something the missionaries actively persued both in Ladakh and nearby Lahaul, the newspaper circulating in both areas. 9 Asboe's 'new' stove, which evidently was not taken up to any extent by locals, was round with a chimney and the revolutionary feature of being loaded and cleaned out from

- 5. Duncan 1906: 126.
- 6. Kaplanian 1981: 151.
- 7. Information from Gertrude Wright, missionary teacher in Leh, 1987.
- 8. Asboe 1931: 1.
- 9. As few Ladakhis could read, this newsheet had to be read aloud to interested groups of people.

the top (*Fig.* 1). The advantage of this was that such stoves could not cause domestic fires or accidents as there was no easily opened lower ash door. Asboe also interestingly noted that there were two indigenous iron stove types in Lahaul. 11

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In the second stage of the hybridisation process features from the European stoves (particularly the smokestack and oven) were added to the overall form of the Ladakhi mud stove which was itself translated into iron, though usually retaining a clay packed interior. According to Major H.P.S. Ahluwalia¹² it was one of the first two Ladakhi ministers, Joseb Gergan, ordained in 1920,¹³ who actually 're-designed' the Ladakhi stove to include European features. If this is true it has a certain logic as a 'material' hybridisation might be expected to arise from an agent who was himself a 'human hybrid', someone with feet in both the Tibetan Buddhist and the European Christian worlds. Gergan prepared a Tibetan language edition of the entire bible in 1945, though he died in 1946 before its publication.¹⁴

If Ahluwalia is correct, between about 1920 and 1945 the more technologically advanced features of the new stoves (ovens and smoke-stacks), had begun to be added to the existing Ladakhi mud stoves or *thabs* by the local population. In any case, this process must have occurred somewhere between 1885 when the first missionary, Friedrich A. Redslob arrived, and the 1930s by which time the new skill of baking, relying on such ovens, had been established. Baking was one of a number of previously unknown European skills introduced by the missionaries, others included knitting and the cultivation of new types of vegetables together with their storage in underground chambers for later use. ¹⁵ Considering the extreme shortage of iron in Ladakh at the beginning of the twentieth century together with the lack of spare capital in a non-money economy it is unlikely that more than a very few iron or steel stoves would have been commissioned at that time. In 1904 Jane Duncan found the horses in Ladakh lacking shoes due to this shortage. ¹⁶ One may doubt therefore whether the hybridisation which we are describing

^{4.} The Moravian church is one of the smallest but oldest Protestant denominations and was founded on the ideas taught by John Hus, executed in 1415 as a heretic. The church was established by followers in 1457 and became strongest in Bohemia, Moravia and Poland (Bray 1985: 27).

^{10.} Asboe 1931: 1.

^{11.} Ibid.

^{12.} Ahluwalia 1980: 161.

^{13.} Bray 1985: 39.

^{14.} Ibid.

^{15.} Rizvi 1983: 68; Bray 1985: 52.

^{16.} Duncan 1906: 147.

happened on any appreciable scale before the arrival of the Indian army (with its oil drums) in 1948.

In the third stage of the history of this craft, stoves became larger and the decoration much more ambitious and elaborate. It is with this stage, beginning in 1965-70 that one can talk of a new 'art form'. The increasing sophistication of decorative effect resulted from a desire to reflect the social standing of the family. At the same time the stoves basic shape and the decorative motifs used to adorn it remained rooted in the mud stove tradition and also related to popular religion.

The hybridisation examined here relates to two relatively congruent technologies in terms of both sophistication and time period. We are not dealing with the difference between electric and coal burning appliances but are comparing two different versions of solid fuel stoves. While the making of the hybridised stoves described probably only started occurring in numbers after 1948, when the Indian army arrived with its supplies of oil drums, the Western technology in question is firmly 19th century in nature. Though the Western wood burning stoves were more technologically advanced with their chimneys and ovens, and it is these features which formed the principle additions to the Ladakhi stoves, the central bodies of the simple clay built stoves of Ladakh operated in the same basic manner and had been part of the traditional culture for centuries. In fact it is difficult to decide whether we are discussing the Europeanisation of Ladakhi mud stoves or the Tibetanisation of European steel stoves.

The typical Ladakhi thabs or steel stove (Fig. 2) is composed of an oblong or 'L' shaped steel unit of between four and ten feet long and about three feet high, punctuated on its top surface by three or four circular holes made to receive cooking pots. The stove, following Ladakhi tradition, is usually situated against a kitchen wall with its decorated side facing outward and the main fuel hole at right angles to the wall. The usually female operator, feeds animal dung and/or wood into the fuel hole. Opposite to the fuel door is a door for the raking out of ash, and beneath this door is an external metal lined wooden box to collect the ashes (Fig. 2). A mechanical bellows has replaced the goatskin bellows since about the late 1960s. This sits on its bellows rest at the opposite end of the range from the ash door and on the same side as the fuel door. From one corner of the stove rises a tubular chimney roughly nine inches in diameter. The traditional mud or stone stove has a similar square or rectangular shape with holes in the top to take cooking pots, though in overall height it is lower. Branching tunnels spreading from the main fire chamber conduct heat to the surface holes on

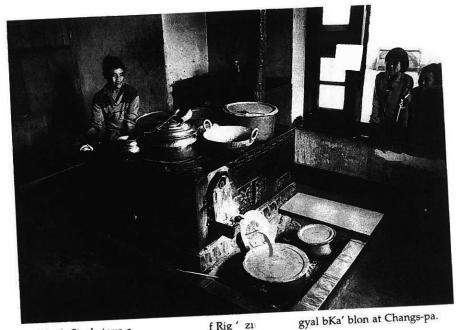


Fig. 2. Steel stove c. 1965, kitchen o d'n rNam r

which the pots rest. It does not have a chimney or oven though the attendant ash trough is present and socially important as the eldest male member of the family sits nearest it in the seat of honour.

Though the mud *thabs* was transformed by the addition of a chimney and oven space its overall form was retained, now translated into steel. Moreover, the decoration of the exterior, though now in steel, continued to follow traditional idioms, both in the choice of motif and in their manner of execution. Steel stoves copied the traditional moulded decorations which have always been found on the front faces of more elaborate village mud stoves. The typical layout consists of a central *yid 'dzin nor bu* or 'Wish Granting Jewel' flanked by two 'Endless Knot' designs or *dpal gyi be'u* with, top and bottom, bands of meander or 'Chinese Wall' (*rgya nag lcags ri*) design and sometimes a band of lotuses and scrollwork at the base (*Fig. 3 and 4*). These motifs all relate to auspiciousness, abundance or purity. 'The Endless Knot', for example, refers to the continuity and interrelatedness existing between all living things and (on a higher level) to the endless interaction

between wisdom and compassion in Buddhist theory.¹⁷ The 'Wish Granting Jewel' is a magical emblem which leads to the fulfilment of all desires, both material and spiritual,¹⁸ while the lotus is an ancient South Asian symbol of spiritual purity.¹⁹

Patrick Kaplanian notes²⁰ that these designs are placed on stoves to honour the residence of a lha or God in the stove, the thabs lha, a household deity who is offered butter on each New Year's day. They therefore have an important ritual dimension, both marking the home of, and honouring a deity, and are not simply a question of show. Corneille Jest also noted the existence of the thab lha in the stoves of Dolpo in NW Nepal.²¹ Since the 1970s an increasing desire for elaboration has led to the addition of other decorative motifs such as dragons chasing a jewel, the monster mask and interlace (Fig. 3 and 4). Figures 3 and 4 show one of the most elaborate stoves in Ladakh, in the kitchen of the Tsog Chung pa family below Spituk (dPe thub) monastery made in the early 1980s. In addition to the jewel and knot design one finds dragons facing a jewel and the tsi pa or monster mask. Almost all these 'new' motifs used to decorate stoves are, in fact, highly traditional and ancient, and are drawn from the usual range of motifs known to all metalworkers in the Tibetan world. Therefore, although the elaborate decoration of stoves is a new phenomenon, the emblems used are those which may readily be found on the religious monuments and vessels²² and the secular metalwork of Ladakh. 23 Stoves made after the first influx of tourists in 1974 do, however, sometimes carry the date of making in arabic numerals, together with other appropriate borrowed words such as welcome in English. In other cases the date is placed in a prominent place, immediately below the 'Wish Granting Jewel', the owner seemingly glorying in this touch of Western modernity.²⁴ The elaboration of modern stoves is itself paralleled by what craftsmen saw as a trend towards more highly decorated and sophisticated personal adornments, particularly in women's jewellery.²⁵

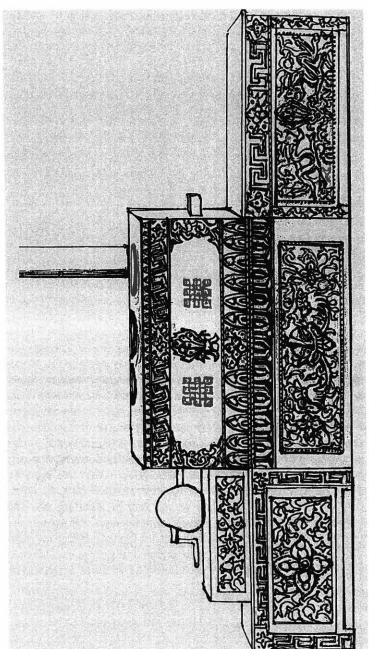


Fig. 3. Line drawing of stove in dPe thub village, c. 1983.

^{17.} Heller & Reynolds 1983: 71.

^{18.} Ibid.: 72.

^{19.} Ibid.: 68.

^{20.} Kaplanian 1981: 151.

^{21.} Jest 1975: 78.

^{22.} Clarke 1989: 135, 140.

^{23.} Ibid.: 132, 141.

^{24.} Rizvi 1983: plate 3.

^{25.} Clarke 1995: 223.

In contrast to areas such as Nepal where the presence of tourists has led to a rise in the production of Buddhist art (in this case scroll paintings or thangkas, simplified and altered deliberately to appeal to that market²⁶ the 'art form' considered here, though stimulated by tourist money, has been brought into existence purely to satisfy an indigenous, or as Bentor puts it an 'internal audience'.27 She contrasts this to the 'external' audience of tourists who do not properly understand the religion and whose presence has led to the growth of a market in iconographically and artistically debased thangkas. Something of the same division may also be applied to the decorative arts of the region. The mutation of iconography on tourist thangkas in Nepal has been paralleled by the production of loosely based copies of 'Tibetan' rugs for tourists in Nepal and elsewhere in northern India by Tibetan refugee populations.²⁸ The art/craft being discussed here, by contrast, reverses the situation with an indigenous 'audience' retaining its own cultural form though borrowing from intrusive Western presences both technology and a few decorative elements.

Though the decoration of stoves is also mostly traditional some use of modern materials is made. One of the main effect is obtained by the overlaying openwork designs combining different coloured metals. This technique is typical of Tibetan metalworking as seen on smaller objects such as teapots and saddles²⁹ and much larger ones like stupas, mchod rten.³⁰ In figure 4 the brass openwork 'Endless Knot', 'Wish Granting Jewel' and scrollwork design stands out against a red background of cleverly re-cycled linoleum on a kitchen stove in Spituk village. This reproduces an effect used on the bases of 17th and 18th century mchod rten in the assembly hall or tshog khang at Hemis (He-mi) monastery where red paint has been used to set off silver gilt scrollwork which overlays it. Another common decorative device used on stoves is the overlaying of openwork, or cut out designs, usually clipped from brass, either placed directly against steel or laid first on pieces of aluminium to further highten the contrasting effect when laid against the darker steel. One may compare this effect on a stove (Fig. 4) with the overlaid scrollwork on the base of a mchod rten at Ridzong (Ri rdzong) monastery made in about 1940 (Fig. 5).

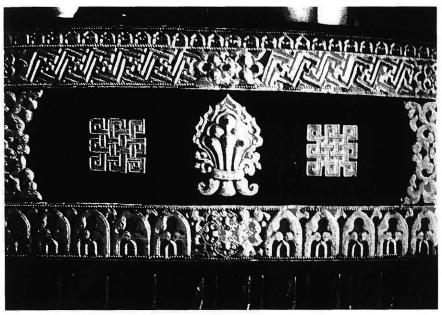


Fig. 4. Detail of dPe thub village stove (from fig. 3) showing 'Endless Knot' and 'Wish Granting Jewel' in brass against blackened steel.

In many cases cut out motifs are laid over artificially darkened steel (*Fig. 4*) though sometimes darkened metal motifs are superimposed on a lighter steel surface. It is also surely not accidental that where darkened steel has been employed it so closely resembles the black burnished surfaces universally found on the mud stoves of Ladakh.³¹

Both the decorative effects and the motifs found on stoves are used not only by blacksmiths, *mgar pa*, who make the metal stoves but also by goldsmiths, *gser gar*. Both groups make religious objects such as *mchod rten*, prayer-wheels, ritual water vessels and a range of domestic items but the higher goldsmith 'caste' seldom makes stoves or tools. These are two of the most important sources of income for the blacksmiths, tools being made and repaired in the spring before the start of planting.³²

However the same techniques are used by both groups on the entire range

^{26.} Bentor 1993: 109-16.

^{27.} Ibid.: 113.

^{28.} Cole 1992: 52-56.

^{29.} Clarke 1989: 131, figs.5, 6; 132, figs.7-11.

^{30.} Ibid.: 135, figs.15, 16.

^{31.} Gompertz 1928: 150; Kaplanian 1981: 151.

^{32.} Clarke 1995: 9-11.

of the more decorated objects which they produce. The stove featured in Figures 3 and 4 was made in the early 1980s by Shes rab gtsang po and his brother bSod nams Thub rten and reveals a high standard of craftsmanship. This pair of craftsmen also work for Spituk (dPe thub) and Matho (Ma spro) monasteries and it is evident from a comparison of commissions there and in the domestic context that the same level of skill is being brought to the household sphere as is shown in their religious commissions. They regularly (1990) make in copper or brass, long trumpets (dung chen), oboes or rgya ling, roof ornaments and mchod rten for those monasteries. Steel from oil drums is also used in the production of other large semi-architectural objects such as extra large prayerwheels of up to five feet in length.

The contemporary re-use of oil drums as a source of steel must be seen as the extension of a traditional re-cycling practice in use for a number of previous centuries. In Tibetan (and Ladakhi) society it remains usual for the patron to bring the raw material to the craftsman and in the case of oil drums this also happens today in Ladakh. It was a traditional practice for broken metal objects to be brought to metalworkers in Tibetan areas for remelting and re-use.³³ This particularly applied to gold and silver objects though brass and copper were also re-cycled. Entire pieces of old jewellery were re-used to decorate precious images or mchod rten.34 Well into this century the Indian rupee was also used as a source of silver in Tibet and Ladakh.³⁵ In some areas of the Tibetan world, including Ladakh, iron was also very scarce. Although small deposits exist in Ladakh and were locally mined, the area relied mostly on imported supplies from northern India. 36 At a village level iron was rare enough to encourage re-cycling such as that carried out by the villagers at Khaltse (Kha la tse) at the beginning of the 20th century. At that time local people searched in the ruins of the local castle for iron arrowheads which were then re-melted and used to make tools.³⁷

Buddhists associating iron and steel with the taking of life (being the materials used to make weapons) has led to blacksmiths, and indeed any metalworkers, being relegated to the lowest of the quasi-castes within the Tibetan world.³⁸ Blacksmiths are traditionally endogamous and any fraternising with this group, such as sharing food with them, is considered 'polluting'. Whereas for those of high caste in India there is still a stigma associated with re-cycled materials (and consequently a disincentive to buy objects made of such materials),39 in Ladakh the products of blacksmiths are not tainted by the status of their producers. Indeed, though at least theoretically debarred from entering the monkhood, blacksmiths are regularly patronised by monasteries in present day Ladakh.40

The methods employed in the making of a stove and the tools used are basically the same as those used for the blacksmith's other work. Tools are also mostly identical to those used by goldsmiths, though there are fewer fine punches and chisels. Stoves are built up from beaten sections of sheet steel which are cut up into sections and rivetted together. As steel does not work harden it can be cold beaten though heat may be applied to a particularly difficult to work section. Initial beating is done over a boulder but from that point on the usual upright anvil or portable anvil resting on an 'A' frame (lcag ber) is used. Shears are used to cut sheets of metal and punches to raise the designs, which are then rivetted to the surface of the stove on its outside. A large stove such as the example in figure 4 takes about three months to make though a small one (Fig. 2) takes only twenty days continuous labour. Most of the work is carried out at the craftsman's home though a final fitting of the main elements is made at the patron's house. Blacksmith informants⁴¹ said that they made an average of three small sized stoves a year. Many mgar pa are also farmers and fit metal-working around the demands of the agricultural year.

^{33.} Ibid.: 266.

^{34.} Singer 1996: 24-27; Yuthok 1990: 187-88.

^{35.} Clarke 1995: 266.

^{36.} Cunningham 1854: 211; Aitchison 1874: 152; Drew 1877: 313.

^{37.} Francke 1905: 204.

^{38.} Friedl 1983: 160; Schweizer 1976: 65-75; Ronge 1978: 70-81, 116. The low social status of the blacksmith in Ladakh continues to persist. Though goldsmiths partake of almost the same opprobrium as blacksmiths in Tibet, in Ladakh they enjoy membership of the higher mang rigs caste. For this reason some mgar pa who are associated with the production of objects for monasteries, such as Shes rab gTsang po and his brother, have begun to call themselves goldsmiths to try to escape the shadow of their caste. The logic behind this stems from the fact that work for monasteries is more often carried out by goldsmiths and is considered of a higher importance due to its religious nature.

^{39.} Korom 1996: 7-8.

^{40.} Clarke 1995: 207-8, 215.

^{41.} Gur-phug-pa Don-grup rNam-rgyal from Stog, Shes-rab gTsang-po from dPe-thub.

To close I would say that it is surely unusual to find a Tibetan 'art form' which has evolved from an interaction of traditional idioms with Wester technology but which is not dictate by Western taste or determined by tourist market but part of the livin fabric of the society itself. In this cas intrusion into the area, firstly by the Indian armed forces and secondly by Western tourists has actually enabled the art form to flourish. At present the introduction of subsidised bottled gas does not appear to have checked the flowering of this modern craft, and stoves continue to be made (1995). However only time will tell whether this craft is a final elegant flourish of traditional metalworking in Ladakh, made possible only at an intermediate stage of economic 'development', or that economics and strength of tradition enable it to persist into the long term future.



monastery, c. 1940, showing brass plaques against silver.

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