



## Production and use of soapstone vessels in the Swiss Alps

Soapstone is a popular raw material, found practically world-wide, highly esteemed in Alaska, Yemen as well as the Alps. It is mainly composed of talcum, chlorite and magnetite (Rütimeyer 1924:94–143, *La pietra ollare dalla preistoria all'età moderna* 1987, Boscardin 2001:158).

In archaeology, the term *steatite* predominates; normally this is a bright, very hard stone used mainly for sculpting. *Soapstone* denotes the grey raw material used for making pans and lamps. It is well-known for its workability with saw, file or knife, because it is very soft and elastic. Besides this, soapstone has other valuable features such as good heat storage, insulation properties, and fire resistance. This material was also used for sculptured construction units, stove plates, fountain troughs, casting forms and lamps, but above all for cooking and cooling vessels, because soapstone is, despite its softness, tenacious and therefore breaks less often (Heyer-Boscardin 2002:177–180).

In the Middle Ages, vessels made of soapstone often replaced pottery, and in central Europe it is considered an Alpine speciality. In Switzerland, soapstone is found in the cantons of Ticino, the Grisons, Valais, and Uri; also in the Aosta valley and the Veltlin in Italy. In the region of what is now Switzerland, soapstone was used for making cooking vessels until the beginning of the twentieth century (Boscardin 2001:158–159).

The different regional and geological occurrence of the deposits leads to two mining methods by which soapstone is extracted: large blocks of debris are worked from all sides and gradually made smaller. The raw material is then brought to the workshops. Firmly embedded deposits, on the other hand, can only be mined from one side, which leads to galleries and pits similar to those in coal mines. The raw material is then again brought to the workshops in the valley, involving a strenuous and laborious task (Lurati 1970:1-10).

In pre-Roman times, vessels were hewn out of blocks of soapstone with pick and chisel. The raw form was then further modified with special tools like files and rasps.



**Figure 1.** A large block of soapstone is worked from all sides and reduced piece by piece. Alpe di Magnello, Ticino.  
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**Figure 2.** The artisan is working on a water-powered turning lathe.  
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The consequence of this technique was a great waste of material, because one piece of stone could only be used for one vessel (Boscardin 2001:158).

In the Roman period, a new method was introduced. The vessels were now made on a water-powered turning lathe. From one single large block of soapstone, several vessels could be produced with special iron tools until only the core was left. In the Alpine region, this technique of turning had been developed to perfection by the Middle Ages, and had ousted the traditional method of hewing. The technique remained unchanged until the twentieth century (*ibid.*).

The workshops for the production of turned soapstone vessels were often situated in the vicinity of settlements. To this day local names like *turn*, *turnill*, *torno*, or *turnitt*, referring to a lathe, have been preserved (Heyer-Boscardin 2002:181). The workshops were located in simple huts, established with a lathe and a water wheel with a drive shaft. The soapstone lathes had to be near a rivulet, because they were exclusively water-powered. For this purpose, a small canal was diverted from a brook and thus powered the lathe.

The turning of the vessels proceeded from outside to inside, like peeling an onion. Out of a soapstone cylinder it was not only possible to turn one new vessel, but out of its core, a new smaller vessel could be turned. Thus, it was possible to produce up to eight vessels from one large raw piece. The cores, by the way, were not thrown away, but used as cobble stones or weaver's weights (Lurati 1970:15 - 24, Heyer-Boscardin 2002:181).



**Figure 3.** Several (in this case five) vessels are worked out of one single raw piece of soapstone. © Rätisches Museum Chur.

The most difficult part of the process was probably the loosening of the finished vessel. With different iron hooks, the turner worked the middle of the vessel until only a thin spindle (ca 3 centimetres in diameter) was left. This spindle had to be removed with light pressure. The problem during all the different steps was that the iron hook could get displaced or that flaws turned up in the stone which led to a spoiled product (*ibid.*:181–183).



**Figure 4.** Some spoiled conical cups from the castle of Norantola, Grisons, 14th or 15th century.  
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As in the continual technology of soapstone production, almost nothing changed until the early twentieth century, and as soapstone vessels – unlike pottery – were not subject to changing fashions, the traditional types and profiles remained the same (Boscardin 1975:11–13). In other words; it is very difficult to suggest a reliable typology and dating for soapstone vessels based on their shape. As they were expensive items already in the Middle Ages, they were used with care and fixed again and again with pitch and wire (Lurati 1970:28, Mantovani 1992:61–63, Boscardin 2001:159).

Fortunately, some stratigraphically documented excavation results from fortifications and settlement sites in the Grisons and the Ticino can help to date soapstone vessels more accurately (Heyer-Boscardin 2002:183, note 20). Such vessels were widely used in the Grisons, the Valais, and Ticino. The Zurich region and northern Italy were important export markets. Soapstone vessels were popular not only as a result of the features mentioned, but also because they were believed to be a cure against poisoned food (Rütimeyer 1924:98, Heyer-Boscardin 2002:179–180).

When soapstone vessels were used for cooking in open hearths, the finished vessels were fitted with a handle and iron rings (Lurati 1970:25–28, Mantovani 1992:61). Traces of such iron bands are found in archaeological contexts from as early as the fourteenth century in the fortification of Schiedberg, Grisons (Meyer 1977:97–99). As already mentioned, soapstone vessels replaced pottery in many parts of the Alpine region. Thus, it is not surprising that the excavations of fortifications and churches (in the Grisons and the Ticino) above all uncovered cooking vessels of soapstone and practically no pieces of pottery.

Without handle and iron bands, they served as storage vessels for fat and butter, and furthermore as ‘Gebesen’, vessels for keeping milk for the production of cheese. Lids, which were turned flat and with knobs, kept the contents from all kinds of

contaminations. Cold food was often served in flat dishes and vessels (Mantovani 1992:66–67, Boscardin 2001:159).

A vessel with a lid was found in the south apsis of the collegiata di San Vittore in Muralto, Ticino. It contained the remains of grain seeds, and had been placed there as a sacrifice during a famine between the years 1520 and 1530 (2000 anni di pietra ollare 1986:139, nr. 4, Boscardin 2001:159).

Besides vessels and dishes, the table was often adorned with drinking vessels made out of soapstone. Water and wine were drunk out of cups and chalices. Two slightly conical cups from the twelfth/thirteenth century were found in the ruins of Niederrealta, Grisons (Heyer-Boscardin 2002:183). A delicate small chalice from the same age was found in a cleric's grave in San Vittore in Muralto (2000 anni di pietra ollare 1986:139, nr. 3).

At an emergency excavation in the church of San Murezi in Tomils, Grisons, a small soapstone chalice and a soapstone vessel from the ninth/tenth century were discovered (Jahresberichte 1996:131–132). Such finds show how highly soapstone was valued.



**Figure 5.** Soap stone vessel and chalice, 9th/10th century, San Murezi church in Tomils, Grisons. © Archäologischer Dienst Graubünden.

The chalice and the oblate vessel were used for Holy Communion, a beautiful and rather rare example of sacramental vessels, probably made especially for this purpose. These two vessels were replaced not later than the eleventh century by different objects which probably fitted the current fashion better, or they were donated; and then piously buried in the church. This should make a profane use of these vessels impossible (Boscardin 2001:158).

As already mentioned, soapstone vessels were already expensive in the Middle Ages, and therefore repaired again and again when damaged. In late medieval and early modern households, and heritage inventories, it is not only the intact pots, but also the broken ones which are listed. Often, vessels were in use during several generations, so that the iron bands had to be repeatedly replaced (*ibid.*:159).





**Figure 6.** Large cooking vessel from the workshop in San Carlo, Val Peccia Ticino, about 1800. The iron bands have been replaced once. © Martin Bühler, Basel.

In the Middle Ages, an important production centre was established in the small town of Plurs (Piuro) near Chiavenna, Italy. In the summer of 1618, a mountain slide destroyed the locality, whose wealth was built on the production and marketing of soapstone vessels (*ibid.*:158). In the 1960s, The Swiss National Museum in Zurich organised an excavation in Plurs (Piuro). The results suggest that workshops had been in use since the thirteenth century. Unfortunately, the results have not been published and consequently scientific descriptions as well as many objects are lost forever. Fortunately, the small local museum of Piuro has saved some important objects (Scaramellini 1988:30–48).

Various workshops in the Maggia valley (Ticino) produced and exported soapstone vessels for many centuries. Vessels were sold in the market of Locarno, and also transported to Milan and the Piedmont by boat. High water destroyed the last lathe workshop in the summer of 1990, in San Carlo in the Val di Peccia (Boscardin 2001:159).

In the Val Malenco, a tributary valley of the Veltlin, Domenico Giordani, called Migola, worked in his water-powered workshop until his death in 1975 (Lurati 1970). In Piuro and in the Val Malenco, Italy, two young workmen now produce traditional soapstone vessels, although on an electrically powered lathe (Boscardin 2001:159). They get their raw material from quarries in Plurs and the Val Malenco – as in old times. Modern people have thus re-discovered the qualities of soapstone.

## Summary

Soapstone (steatite, Fedstein) has been mined for many centuries (not exclusively in the Swiss Alpine region) and worked into useful objects (cooking vessels, pots, etc.). Because soapstone is soft, easily worked and heat resistant, it was often used in the Middle Ages to make cooking vessels and pots, as well as other objects.

The method of mining soapstone depends on the different regional-geological deposits of this raw material. Large blocks of debris are worked from all sides and reduced piece by piece. The deposits within the rock stratum can only be mined from one side. This leads to the formation of quarries (galleries and pits). Swiss mining centres are found in Ticino, Valais, Uri, The Grisons and Plurs/Chiavenna (Italy).

In pre-Roman time, vessels were hewn from blocks of soapstone with pick and chisel. The quantity of waste material was very high with this method. After the third and fourth centuries AD, the vessels were most often made on a water-powered turning lathe. In this way, not only one, but several vessels could be produced out of one single block of soapstone. This technology has survived in the Swiss Alpine regions to the present day, while in other regions only the 'antiquated' method was known.

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