

STONE CARVING IN THE LOCALITY OF ESKIŞEHİR WITH ITS NATURAL AND CULTURAL PROPERTIES: MEERSCHAUM

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ABSTRACT

Also known as sepiolite, meerschaum is a rock with magnesium and silicium base. This stone is whitish in color, with a very thin texture. Although known to be mostly used for making pipes, the archeological researches about this stone revealed that it had been known for about 5000 years and had been used for various purposes. Today it is seen to be used as a filtering and insulation material thanks to its absorbent property, whereas it has another use in knickknack making with its easily carved texture.

Meerschaum is found in countries such as Somali, Czech Republic, United States of America, Greece, Spain, and France in the world, and around the city of Eskişehir in our country. Almost all of the free-milling deposits of this stone is in Turkey, quarrying of which is rather hard.

Meerschaum carving, as a craft identified with Eskişehir, is a challenging artisanship that requires mastery, experience, skill, and patience. Although the sizes and durability are not very attractive for the artists, it is possible to see examples of sculpture made of meerschaum.

Keywords: Eskişehir, meerschaum, art, sculpture

1. Introduction

The purpose of this study is to search for and introduce particularly the sculptures made of meerschaum and the structure of the material, as a stone with varying fields of use. Although it is quarried and carved in a number of places, it is a known fact that meerschaum is mostly present in the locality of Eskişehir in the world, where the most abundant and high quality deposits are located in.

Meerschaum work is a process that requires an utmost care in terms of the way of quarrying, methods and phases of carving, and employed tools and instruments. Its easy-to-carve tissue does not indicate that every phase is that easy, on the contrary, it calls for rather difficult phases. This is another important fact that makes this rarely found stone precious. Along with a number of varying purposes and fields of use, meerschaum is mostly used for making knickknacks.

In this study, the aim is to introduce meerschaum and to review its usage as a material of sculpture. It is our target to search for and introduce the structure of the meerschaum, which has become a local product of Eskişehir and has been identified with Eskişehir, and its reflections into art. The researches, articles, books, brochures, catalogues, and the data obtained from the internet, concerning with the subject, were referred to. The structure of meerschaum was overviewed; its physical structure, places where it is found, fields of use, etc. were mentioned, and its process of turning into a work of art and the result were focused on. The masters of Eskişehir, who work with this material, were interviewed with, general information was received, and their techniques of work were observed. Personal trials were made using meerschaum, and experiences were tried to be shared.

2. The structure and characteristics of meerschaum:

It is generally known with the name sepiolite, as it is a magnesium silicate with water composition (Akıncı, p: 90, ?).

Sepiolite is found in nature in two different polyphormic structures. The first is amorphous, compact and massive lumps. As its external appearance reminds sea foams, this type is known as “Meerschaum” in German, “sea foam” in Ottoman Turkish, and “meerschaum” in our day. The second one is in the shape of small, flat, and round particles, or amorphous. These two types vary in terms of their composition, formation, characteristics, and fields of use. Particularly originated in the locality of Eskişehir, but also found around Konya-Yunak in our country, meerschaum is a premium stone which is practical to carve for commercial purposes (Sabah, Çelik, p: 5, 1998). “It is formed with ultrabasic rocks being affected by hydrothermal solutions and substitution of the magnesite mineral. It is generally found in lumps in nature. The ones found in layers are called industrial meerschaum” (İşcan, p: 11-12, 1999). (Picture1).



Picture1: Meerschaum in crude form

“Named in the world of science as ‘sepiolite’ for being identified with the cuttlefish’s bone called “sepio”, meerschaum is an alkaline clay mineral in the composition of magnesium hydro silicate. It is found in single lumps in the locality of Eskişehir, within the layers of metamorphic rocks in various depths about 380 meters. Its irregularly bound crystals form a microscopic spongy tissue. Thanks to the formation water (zeolitic water) in this structuring, meerschaum is wet and soft when extracted, and it can be carved easily and finely. The parts that dry after losing their natural moisture become very lightweight but resistant and highly absorbable to liquids and gases. Drying without any change in its size, meerschaum recovers its natural softness soon, when placed in water” (Eskişehir Governor’s Office’s brochure on meerschaum, 2010).

Archaeological studies demonstrate that this stone has been known for about five thousand years and has been used for various purposes. Also called the white gold, Eskişehir stone, and Patal, meerschaum has a soft texture with very fine pores, is white or whitish in color, soft, and less sticky. Found wet underground, meerschaum is dried directly or after being carved. It becomes lighter in the rate of the moisture lost and gains an important resistance. It is found within the layers of metamorphic rocks in scattered lumps at the sites located on the west, northeast, and southeast of Eskişehir. The stone is searched by digging wells that vertically go down from the surface, and through the horizontal tunnels when the layer is found. For extracting the meerschaum, human power and personal experiences over years and personal intuitions are mostly made use of (İşcan, 1999). (Picture2).



Picture2: Sketch of the well and extraction of the meerschaum

3. Extracted from and types:

Meerschaum and similar minerals with microscopic size crystals bound in an irregular way are encountered in some islands in Greece, Moravia in Czech Republic, France, Spain, Morocco, and USA (Wikipedia website, 05.11.2012). Meerschaum is also produced in other places such as Pennsylvania, South Carolina, Utah, Mexico, Madrid, and Nairobi; but these are insignificant and with a low quality. The highest quality meerschaum is found in Eskişehir in Turkey. Extracted in Eskişehir from: Sarisu, Yenişehir, Türkmentokat, Gökçeoğlu, Karaçay, Söğütçük, Sepetçi, Margi, Nemli, Kümbet, Yeniköy, Kepertepe, Karahöyük, and Başören. (Picture3).

Geologically, meerschaum is found in three layers:

First order: Ore in 10-14 m depth between sandy earth and clay earth.

Second order: Forms between 40 and 60 m. Ore at the level of clay earth.

Third order: The highest quality series of meerschaum in the Conglomerate series, which is between 80 and 130 m.

Other types of meerschaum are cotton parts, grained cast, uniform, and low-grade (Eskişehir Metropolitan Municipality's Official Web Site, 05.11.2012).

In Turkey, meerschaum is also encountered in Çanakkale, Kütahya, and Bursa, apart from Eskişehir, but these are not of economic value. Somali is the second in the world as to its deposits of meerschaum (Taşlıgil, Şahin, p.: 438, 2011).



Picture 3: Quarries of meerschaum in Eskişehir

4. Fields of use:

- In making pipe,
- In making cigarette holder,
- As a filter in cigarette holders in dust form,
- In electrical and automotive industry,
- In removing stains in dust form,
- In making knickknacks out of compacted dusts,
- In making accessories such as necklace, jewelry, belt, etc. (Eskişehir 2nd International Meerschaum "The White Gold" Festival's catalogue p: 5, 1989).

"Small lumps are collected by digging wells opened deep and the tunnels connected to these wells. Some of these wells are dry, and some are wet. The stones taken out of the wet wells are better. With its feature of keeping the residues in the moisture and gas while drying, it is a very good pipe material, whereas it is a good absorbent, filter, insulation, and filling material used in a number of industrial fields. For years, it has become an essential substance in industry. It is used in making cigarette holders, pipes, knickknacks, and in automobile paint industry. It is added into porcelain dough, pesticides, powders, and stain removers" (Eskişehir Metropolitan Municipality's Official Web Site, 05.11.2012).

5. Processing of the Meerschaum:

Meerschaum is turned into an article for use after passing through many phases after taken out of the quarry. These phases are briefly as follows:

Whipping: The process of separating the stone extracted from the quarry from the soil in order to appraise its economic value.

Smoothing: Clearing the meerschaum from any foreign substances.

Rough-hew: Cleaning the stone at the smoothing phase according to the item to be made.

Warp: The process made with the warp knife

Finishing: The process of removing thinner sawdust with knife

Heating: The process of drying at racks or under sunlight

Wet wadmäl: Smoothing the heated stones by rubbing them with a wed wadmäl

Rubbing: The process of rubbing with a soft cloth after the wed wadmäl

Greasy wadmäl: The process of rubbing by applying beeswax on the fabric used for rubbing. This is also called dry wadmäl

Glazing: The process of glazing with a wool cloth after the greasy wadmäl

Finally, classification and packing processes are carried out (İşcan, p: 14, 1999). (Picture4).



Picture4: Various items made of meerschaum and phases of process

6. Meerschaum carving and its reflections on the art

Meerschaum carving is a challenging but pleasurable handcraft that requires skill, experience, and patience. The carving process is generally made with the hand tools prepared by the masters themselves, and it is essential to select the model most suitable to the natural shape of the stone. Therefore, it is possible to make use of the

stone with least loss. Each master develops his/her own tools and technique with specially shaped knives, various cutters, carvers, peelers, and sculpting tools, etc. As to the model, observation and imagination are the most important sources of the masters. Meerschaum is dried for a long time with indirect heat after designation and carving, and then heated as necessary after sanding, and glazed by dipping into whitened beeswax. Then comes the polishing by rubbing phase (Meerschaum Museum's catalogue 1989).

It is easy to carve a stone taken out of the quarry in wet state, and for this reason it brings out risks such as spoiling quickly and carving unwanted parts with moves of knife. If the process will last long, the stone should be wrapped in nylon to protect it from losing its wetness. The stones classified in terms of cleanliness, quality, and size become ready to use (Kuşoğlu, p: 153, 1994).

In recent years, meerschaum masters, who have had troubles for various reasons, had to close their workshops or move their business to house. But despite the decrease and problems in production, certain cultural activities have been organized, and popularity of this handcraft is tried to be recovered (Taşlıgil, Şahin, p. 441, 2011).

For instance; in order for this valuable material is appraised and to create a national image of meerschaum, Eskişehir Governor's Office organized the '1st International Meerschaum Sculpture Contest' in 1989. Meerschaum was introduced to artists coming from our country and from abroad, and they were given the possibility to carve it here for the first time. Again Eskişehir Governor's Office established and opened the Meerschaum Museum in 1989 through Special Provincial Administration, which accommodates about 500 items (Global media services, p: 72, 1996).

In the museum, there are sculptures that have participated national and international contests, along with jewelry, souvenirs, and knickknacks (Eskişehir Governor's Office's Official Web Site, 06.11.2012).

The Meerschaum Museum was opened by the Municipality of Odunpazarı for the visit of local and international guests in Kurşunlu Social Complex in 2008 (Official Web Site of the Municipality of Odunpazarı 06.11.2012).

Creative hands of Eskişehir work on and appraise this stone with labor and craft, and turn it into a unique work of art. Thus, meerschaum has become the symbol of Eskişehir not only because it is extracted from this city, but also it is turned into a work of art here. Besides, it contributes to country's economy with foreign exchange income, as well as it supports employment in the city (Web Site of Eskişehir Art Foundation, 06.11.2012).

Although it does not attract artists in terms of size and durability, meerschaum is a good material of art thanks to its characteristics. Observed to be mostly used for making knickknacks and pipes today, meerschaum is shaped into various forms by the hands of a master, after it is extracted from the quarry and given a workable form. If no prior design was made, the size and shape of the stone is indicative of the sculpture that will come out. The model is primarily selected in accordance with the natural structure of the stone. Thus the stone is handled in an efficient manner. The experience of the masters, the shapes they have made beforehand, and habits show their personal style. The most important sources are imaginative power and observation. Although each master has his own technique and tools, any techniques and shapes learned out of the mentor-protégé system also go on to be reflected on the works. Within this context, the stones carved by the artisans for decorative purposes are different than the ones made by the artists. Sculptors generally create meerschaum forms on which they reflect their personal styles.

Meerschaum is carved most easily when it is wet. Any stone which has lost its wetness during the process should be plunged into water. Because it gets harder when it is dried, it becomes more difficult to carve and there might be unwanted breaks or ruptures. Any completed items or sculptures are dried by indirect heat for a long time, and then last touches are made with a very thin emery, if necessary. When the process is over, the stone is dipped into beeswax heated as necessary, and it is ensured to absorb this. After it is taken out, it is rubbed with a soft cloth, and polished. Therefore, beeswax both protects the stone from external factors and provides an ivory-like appearance, giving a glaze. (Picture5).



Picture5: Examples of pipes made of meerschaum

The first examples of meerschaum sculptures with the artist and sculpting date known are the works in a size of 17 cm made by French sculptor Pierre Paul Puget for the Castle of Vaux-le-Vicomte. (Taşlıgil, Şahin, p.: 440, 2011).

With a rather pleasure-giving and quick building phase, meerschaum restricts the artists in terms of size. Although it is not compulsory for every sculpture to be big in size, it is a problem for this stone, which can be carved easily, not to exceed certain limits. However, obtaining a yield easily and quickly is a rather attractive reason for “carving meerschaum”. As a result, it brings out extremely beautiful and high-grade results. (Picture6).



Picture6: Examples of sculptures made of meerschaum

5. Conclusion

Meerschaum and meerschaum carving that is identified with Eskişehir, which is an irreplaceable location with its history that dates back to thousands of years, natural wealth, and cultural background, has been taught and learned within a mentor-protégé system, for there is not enough source, there is not a school to be trained on this, and perhaps it is not promoted as necessary. Complaining about the loss of interest by youth towards this art, the masters are right to worry about this handcraft to lose popularity and diminish in the future. Even though the lack of education makes it harder to find a solution for the sector, masters continue their art with patience, and there is no doubt that they will leave good examples to next generations.

Meerschaum drives the attention of many artists, as it is shaped into different forms in the hands of sculptors. This stone has turned and continues to turn into very beautiful sculptures.

BIBLIOGRAPHY

- Akıncı, Ö, Eskişehir 124-C1 paftasının jeolojisi ve tabakalı lületaşu zuhurları, Maden Tetkik ve Arama Enstitüsü, Ankara PDF source http://mta.gov.tr/v2.0/daire-baskanliklari/bdt/kutuphane/mtadergi/68_6.pdf, date accessed: 12.01.2013.
- Beyaz Altın, 1989. 2. Uluslararası Lületaşu “ Beyaz Altın” festivali haberleri katalogu, Eskişehir: Eskişehir Yunusemre Kültür, Sanat ve Turizm Vakfı Yayını.
- Eskişehir Büyükşehir Belediyesi Resmi Sitesi, “Lületaşu-Beyaz Altın” maddesi, http://www.eskisehirbld.gov.tr/eskisehir_eko.php#luletasi, date accessed: 05.11.2012.
- Eskişehir Sanat Derneđi Sitesi, “Lületaşu” maddesi, <http://www.eskisehirsanatdernegi.org/2012/02/eskisehir-sanat-dernegi-ve-luletas.html>, date accessed: 06.11.2012.
- Eskişehir Valiliđi İl Kültür ve Turizm Müdürlüğü’nce hazırlanmış, İl Özel İdaresi’nin katkılarıyla bastırılmış broşür, “Lületaşu”, Eskişehir: Kayıhan Ajans Baskıları Yayın No: 14 Temmuz 2010.
- Eskişehir Valiliđi Resmi Sitesi, “Müzeler” maddesi, http://www.eskisehir.gov.tr/index.php?option=com_content&view=article&id=89&Itemid=107, date accessed: 06.11.2012
- Global Medya Hizmetleri ve Halkla İlişkiler Tic. Ltd. Şti, 1996. Eskişehir: Etam A.Ş. Matbaa Tesisleri.
- İşcan, N., 1999. Beyaz Altın “Lületaşu”, ss. 9-10-11-12-13-14-15-16, Eskişehir: İşcan Yayınları-25.
- Kuşođlu, M. Z., 1994. Dünkü Sanatımız Kültürümüz, İstanbul: Ötüken Neşriyat A.Ş.
- Lületaşu Müzesi katalogu, 1989. T.C. Eskişehir: Eskişehir Valiliđi Yayınları.
- Odunpazarı Belediyesi Resmi Sitesi “Lületaşu Müzesi” maddesi, <http://www.odunpazarı.bel.tr/Projeler.aspx?ID=61>, date accessed: 06.11.2012.
- Sabah, E. ve Çelik, M. S., Endüstriyel Hammaddeler Sempozyumu/14-J 5 Ekim 1999, İzmir, Türkiye, http://www.maden.org.tr/resimler/ekler/a02387b02ce7de2_ek.pdf, date accessed: 19.01.2013.
- Sabah, E. ve Çelik, M. S., 1998. Sepiyolit: oluşumu, özellikleri, kullanım alanları, Afyon:?
- Taşlıgil, N. ve Şahin, G., Uluslararası Sosyal Araştırmalar Dergisi, Cilt: 4 Sayı: 16 Kış 2011. PDF dosya http://www.sosyalarastirmalar.com/cilt4/sayi16_pdf/tasligil_nuran_guvenahin.pdf, date accessed: 18.01.2013.

Wikipedia Sitesi "Lületaşı" maddesi, <http://tr.wikipedia.org/wiki/L%C3%BCleta%C5%9F%C4%B1>, date accessed: 05.11.2012.

Note 1: *The pictures used in the study were taken from the sources shown in the bibliography and the concerning web sites. And also concerning web sites*

http://www.edebiyadvesanatakademisi.com/sanat/255eskisehirde__lule_tasi_isleme_sanati.html

<http://yenicemustafa.blogspot.com/2011/01/kulturel-bir-kopru-luletasi.html>

<http://www.ticaretduyasi.net/icerik/sayfa/ticaret-duyasi/luletasi-hakkinda/luletasi-nasil-islenir-/luletasi-nasil-islenir--57.aspx>

Note 2: *This study about the meerscham was presented as a Poster Declaration at the "1st Local Products Symposium and Culture and Art Activities" organized in Antalya on date 15th -18th November 2012, and was reviewed and extended into an article.*