

Murcia and Silk, a symbiosis with medieval origins

Sericulture came to Murcia along with the spread of Islam, a bridge between Asia and Europe that brought to this part of the world an ancient and secret technique that was until then unknown. By reading the Cordoba Calendar, we can verify that Al-Andalus was the first place in the West in which silkworm breeding took place, a practice that ended the mystery around silk fabrics production.

From then on, silk production became a fundamental economic activity, supplying fabrics to the Christian territories in the north and other Islamic enclaves as well. There were large specialized textile workshops in the main cities (such as the Tiraz de Córdoba) and in rural areas. Places for breeding worms and silk production multiplied across the territory.

In this context, Murcia began to forge its sericultural identity, to which it owes so much. The urban workshops of its capital, undoubtedly numerous, were complemented by many rural production centers. In the 10th century, the testimonies of al-Razi or al-Udri, in the 11th, confirm that their fabrics had enormous quality and achieved a certain prestige on the international Mediterranean markets. Ibn Said went so far as to affirm that Murcia shone through the excellence of the mantles and brocades of all kinds made here.

The Southeast territory stood out, especially in the Andalusian period, for the production of the raw material, which was extracted and spun in the domestic areas of small cities and farmhouses, which was later used to make beautiful fabrics workshops of other regions. The small spindles and the bone distaff towers that frequently appear in Andalusian archeological sites' archaeological excavations seem to confirm this theory.

After the Christian conquest of the 13th century, there was an extraordinary demographic and social transformation of the Murcian territory, which led to the implementation of new production strategies and caused a crisis in the production of Silk.

In Murcia, the sericulture activity was not interrupted, but it was channeled almost exclusively to raw silk production, often of low quality, which was in high demand. While in other parts of the Iberian Peninsula, the tradition was abandoned, here a small-scale domestic production was maintained, linked to the Mudejar peasant population, within the framework of an economy complementary to agriculture.

It would be necessary to wait for the XV century's last decades to see a marked increase of sericultural activity. When silk work ceased to be a handicraft, it became a true industry for exporting semi-finished product. Some milestones help to understand the dimension of the change: In 1486 Murcian silk spinners were regulated, in 1474 Murcia began paying to spinners for their working hours and not for the weight of their product; the planting of the first mulberry trees (*Morus alba*), from Italy, which came to replace the black mulberry (*Morus nigra*), occurred around 1480; finally, the silk weaving ordinances in 1506, the first corporative-based organization of the silk trade. The silk "fever" was beginning, which would transform the city in subsequent centuries. In 1495 it was said that most of the city's residents were supported by the Silk industry.

It was only the beginning. From the medieval foundations and following in the wake of Valencians and Italians, the silk industry would be renewed and promoted, covering all phases of the production process (spinning, twisting, texture, and dyeing), launching Murcia towards its Modern Age. The city would never lose that special symbiosis that it established with Silk, tracing a common destiny to this day.

Manqud

Manqud is an ongoing historical investigation of silk as a representative material of Murcia's culture and traditions.

The theoretical part of the project includes deep research into the development of silk in the context of the Medieval Ages. This section consisted of extensive archival research as well as the collecting of testimonies. Both of which are fundamental to obtaining a thorough understanding of our cultural heritage. That knowledge was fuel for the inspiration to develop the ensuing material investigation. That part opens a window to the past that helps us to imagine how silk shaped the city of Murcia. We can see how it changed our landscapes, how it interfered with the coexistence of the three cultures, and how legislation was adapted according to its production demands.

The material research resulted in the production of textile pieces that explore old techniques and translate them to contemporary uses. The investigation has its origin in 5 natural pigments that were used during the al-Ándalus period to color textiles: Saffron, índigo, kermes, madder and walnut. Through colour we connect the past to the present.

Yellow is obtained by using the dried stigma from the saffron flower. As Pio Font Quer says in its book *Plantas Medicinales*, saffron, "It is not a plant from our country but brought by the moorish from the Near East" (2016, p.955). Silk manufacturing in Spain began in the Middle Ages and continues to today, although it been significantly diminished. The saffron that I have used to dye these textiles comes from a small field situated in Campo de San Juan, Murcia.

Indigo has been used to dye fabrics blue for millennia. The tincture is achieved through the fermentation of the leaves from the plant *Indigofera tinctoria*. The Romans already used this pigment. It was a luxury dye that was imported from India to the Mediterranean by Arab merchants. Indigo is a powerful colorant. With a small amount of pigment, intense colors can be created. Depending on the time of submerging the textile in its dye, it is possible to obtain different shades of blue.

Kermes is an animal-based pigment. It is extracted from the dehydrated bodies of the females of the insect species *Kermes vermilio*. It gives a colour characterized by very luminous and persistent reds. Next to saffron, it became one of the most valuable pigments that were introduced into the Iberian peninsula by Arabs. After the discovery of America, the import of the carmine cochineal gradually replaced Kermes. Today cochineal is one of the most appreciated natural colorants in tincture. The color is obtained from the female of the *Dactylopius coccus* insect that feeds on carminic acid from the nopal. The latter is the one used in this project.

With madder root, a large number of vibrant shades that go from red to pink can be obtained. The tones obtained depend on the proportion of dye in relation to water and its acidity. Pigment is extracted from the roots of *Rubia tinctorum* and is one of the most investigated colours in textile history. This pigment makes its first appearance in Ancient Egypt and for centuries, it was the only red dye resistant to light.

The brown tones are obtained from the fruit of the walnut tree. Due to the simple and inexpensive process to obtain this pigment I assume that it was routinely used to dye textiles, but I have found few references to it. The coloring is obtained from the dried shell of the walnut and to obtain intense colors it is necessary to do several dye baths.

A large number of colors have been developed from these five pigments by modifying the original dye recipes and experimenting with different over-dyeing techniques.

Subsequently, textiles were made through two methods: the dyeing of skeins and the tincture of acquired fabrics.

In the first case, skeins of natural silk have been subjected to different dyeing processes. I then wove them with a low heddle loom, similar to those used in the Middle Ages. The result is a collection of five handwoven fabrics representing the main pigments used. In a smaller size, a collection of small woven pieces shows the possibilities of combining some of the colors with different weaving techniques.

I also experimented with tinctures on previously purchased raw silk fabrics. For this, different dyeing methods with color overlay have been used, exploring the infinite possibilities of this technique.

History, beyond its documentary value, has served as inspiration during the creative process. With this project, I seek to show how, by relying on our roots, it is possible to produce products that serve as a cultural conduct of millenary traditions and to show the importance of producing objects that provide social value beyond mere utilitarianism.