## The Silk Industry In Trás-Os-Montes During The Ancient Regime

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#### Abstract

The silk industry was historically the most important industrial sector from Trás-os-Montes, with no competition until the 19<sup>th</sup> century. For centuries, it was the economic activity most open to the outside and the first to yield to the new capitalist mentality. It was, undoubtedly, the productive activity that contributed most to the national and international acknowledgment of the region and its identity. The explanation for the localization of this industry in northeastern Trás-os-Montes lies in its multi-secular tradition, nourished by silkworm creation, that is, by the existence of raw materials in that region, a virtuous cycle that is difficult to perceive. In this paper, which serves as a brief history of the silk industry in Trás-os-Montes during the Ancient Regime, we study the available sources that, although scarce, allow us to verify the irregular evolution of this industry, and the factors leading to its periods of depression and prosperity.

#### Keywords

Trás-os-Montes, Bragança, Chacim, silk industry, Arnauds, Piedmont

#### Introduction

The region of Trás-os-Montes is located in Portugal's northeastern interior, bordering Spain; more specifically, it shares a frontier with the provinces of Castilla-León and Galicia. For several centuries, the northeastern portion of Trás-os-Montes retained an important silk industry, which remained an important local activity until the 19th century.

The Trás-os-Montes silk industry started in the 15th century, but the rearing of the silkworm was an even older activity, dating back to the 13th century. Although the center of the silk industry was always situated in Bragança, the truth is that this economic activity also extended into other villages and towns in northeastern Trás-os-Montes.

As far as we are aware, the sources relating to the Trás-os-Montes silk industry during the Portuguese Ancient Regime are quite rare, and therefore do not allow us to gain a sufficiently broad perspective of its general evolution. Nonetheless, it is possible to see that this evolution was very irregular, with periods of prosperity alternating with even longer periods of depression, due to several factors that will be explained later on.

## 1. The Silk Industry in Trás-os-Montes during the Ancient Regime (15th-18th centuries)

The existing sources referring to the Trás-os-Montes silk industry before the 16th century are quite scarce. Nevertheless, we know that during the second half of the 15th century, silk production taking place in Bragança was already monopolized by its *donatário*, the Duke of Guimarães.

The Trás-os-Montes silk industry continued to flourish throughout the 16th century, with the velvets produced in Bragança gaining a national reputation. The city even asked the king for permission to sell its silks free of any customs duties, a request that was also repeated later on.

By the end of the 16th century, Bragança was an "opulent" city, filled with numerous silk merchants. Other villages in northeastern Trás-os-Montes, such as Vinhais and Freixo de Espada à Cinta, also developed this industry.

In the late 17th century, during the regency and reign of Dom Pedro II (1667-1705), when the first Portuguese industrial boom (1670-1690) took place, a fresh impetus was given to sericulture and the silk industry in Trás-os-Montes. The local governors and territorial ministers ("corregedores" and "provedores") were given instructions to develop plantations of mulberry trees. The Bragança silk factory, by then in a state of decline, was given a new lease of life, with the king summoning experts and technicians from Toledo, who settled in the city, teaching silk producers the appropriate techniques and methods. This represented the first attempt to modernize the silk industry in the region.

Carvalho da Costa tells us about the great silkworm farms existing in northeastern Trás-os-Montes in the early 18th century, as well as the production of many kinds of silk fabrics in Bragança, Chacim and Freixo de Espada à Cinta.

The discovery of gold in Brazil (1697), followed by a treaty with England (1703), which allowed the free entry of English woolen fabrics, brought an end to the industrialization process that had begun in the reign of Dom Pedro II. Nevertheless, records show that in 1721-1724, Bragança had 30 registered spinning-wheels and 350 looms, while Freixo de Espada à Cinta had more than 100 looms.

The Bragança silk factory continued in operation, but by 1750-1755 it had, once again, fallen into a state of decay, due to the poor quality of the silk produced, counterfeiting, and also because its main line of production, the so-called "mantos", had been discontinued. This decline appears to have lasted until 1770-1773.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See the sources and information about the silk industry in Trás-os-Montes from the 16th to the 18th century: A.N.T.T., *Memórias paroquiais* (Parish Memoirs) from Bragança Chacim, Freixo de Espada à Cinta, Mirandela and Moncorvo; José Cardoso Borges, *Descrição topographica da cidade de Bragança*, ms. 248 from the *Colecção Pombalina*, at B.N.L.; *Descripção da villa de Freixo de Espada Sinta e couzas mais notaveis della e seu districto*, 1721, ms. 222 at B.N.L.; A.N.T.T., ms. 470, da Livraria; Rodrigo da Cunha, *História eclesiástica dos arcebispos de Braga*, vol. II, Braga, 1989, p. 112 (facsimile copy of the 1635 edition); Gama Barros, *Historia da administração publica em Portugal*, t. IV, Lisbon, 1922, pp. 128-129; Luís Augusto Rebelo da Silva, *Memória sobre a população e a agricultura de Portugal*, Lisbon, 1868; Albino Lopo, *Bragança e Benquerença*, Lisbon, 1900; Francisco Manuel Alves, *Memórias arqueológico-históricas do distrito de Bragança*, t. I, pp. 100 and 286, t. II, pp. 252-253 and 452-453; t. IV, pp. 125-126 and 533; t. VII, pp. 51-53, 499, 621 and 793; t. VIII, pp. 46 and 176; t. IX, p. 448; t. XI, pp. 39 and 119-120; *Corografia Portugueza*, t. I,

In order to better understand and explain these cycles of prosperity, depression and even decay in the Trás-os-Montes silk industry between the 16th century and the last quarter of the 18th century, in addition to the evolution of the Portuguese economy, of which this industry was a part, as well as the customary oscillations in national and international markets, three factors must be taken into account:

- 1. The lack of any real policies for industrial protection and development
- 2. The wars and conflicts that directly affected Trás-os-Montes
- 3. The actions of the Inquisition

1. First, in a time when the economy was limited to agriculture, it is worth underlining the scanty or non-existent support afforded by the State, not only to the Trás-os-Montes silk industry, but to industry in general.

The first industrial boom occurred only in 1670-1690, thanks to the policies of the Count of Ericeira. This period corresponded precisely to the development of the silk industry in Bragança and Freixo de Espada à Cinta. According to José António de Sá, the Bragança factory, which lasted until the end of the 18th century, was founded around that time.

The second industrial boom (1720-1740), during the reign of Dom João V, did not seem to have any positive impact on the revival of the Trás-os-Montes silk industry. On the contrary, the establishment of the Rato silk factory in Lisbon led to a fall in the demand for silk fabrics from Trás-os-Montes.

Only the actions taken by the Marquis of Pombal, particularly between 1770 and 1777, were to have any really positive consequences for the silk industry in northeastern Trás-os-Montes.<sup>2</sup>

So, it is not surprising that, during the Ancient Regime, more precisely until 1770, the Trás-os-Montes silk industry had its ups and downs, frequently passing through "periods of decay" between 1670 and 1770.

Lisbon, 1706, pp. 418 and 429 to 496; Instrucção sobre a cultura das amoreiras..., in Prosas Portuguezas, second part, Lisbon, 1728, pp. 331-335; Additamentos ao opusculo intitulado Instrucção, in Prosas Portuguezas, second part, Lisbon, 1728, pp. 369-371; Eugénio dos Santos, O Oratório do Norte de Portugal, Porto, 1982, p. 72; J. Acúrcio das Neves, Noções historicas, economicas e administrativas sobre a producção, e manufactura das sedas em Portugal, e particularmente sobre a Real Fabrica do Suburbio do Rato, e suas annexas, Lisbon, 1827, pp. 24-28; Luís Cardoso, Diccionario geographico ou noticia historica de todas as cidades, villas, lugares e aldeas, rios, ribeiras e serras dos Reynos de Portugal e Algarve, com todas as cousas raras, que nelle se encontrão, assim antigas, como modernas, t. II, Lisbon, 1751, entry for "Bragança"; José António de Sá, Compendio de observaçoens, que fórmão o plano da viagem politica, e filosofica, que se deve fazer dentro da Patria, Lisbon, 1783, pp. 219-223; José António de Sá, Dissertações philosophico-politicas sobre o trato das sedas na comarca de Moncorvo, Lisbon, 1787, p. 24; D. Rodrigo de Souza Coutinho. Textos políticos, económicos e financeiros (1783-1811), t. I, Lisbon, 1993, p. 134; Boletim do Arquivo Histórico Militar, volume 12, Vila Nova de Famalicão, 1942; Jacome Ratton, Recordações sobre occurrencias do seu tempo em Portugal, London, 1813; Manuel Ferreira Rodrigues and José Amado Mendes, História da indústria portuguesa, Lisbon, 1999.

<sup>&</sup>lt;sup>2</sup> On the history of Portuguese industry and the industrial booms occurring during the Portuguese Ancient Regime, see the works of Jorge Borges de Macedo, *Problemas de história da indústria portuguesa no século XVIII*, Lisbon, 1963; Vitorino Magalhães Godinho, *Prix et monnaies au Portugal*, Paris, 1955 ; Jorge Pedreira, *Estrutura industrial e mercado colonial. Portugal e o Brasil (1780-1830)*, Lisbon, 1994; and Nuno Madureira, *Mercados e privilégios. A indústria portuguesa entre 1750 e 1834*, Lisbon, 1997.

2. Second, it is important to mention that, between 1640 and 1763, northeastern Trás-os-Montes was invaded by Spanish armies on several occasions, which obviously had a negative impact on the economy and demography of that region.

The Wars of Restoration (1640-1648) gave rise to numerous skirmishes and invasions from both sides, leading to the siege and ransacking of towns such as Outeiro and Vinhais, the flight of many people and the closing of the borders with Spain.

At the beginning of the 18th century, the War of Succession (1703-1713) brought the Spanish armies back once more to Trás-os-Montes. In 1710-1711, Miranda do Douro was besieged and captured, and the region of Bragança was devastated and looted.

Finally, with the Seven Years War (1756-1763), most of northeastern Trás-os-Montes was occupied by Spanish armies. The fortifications at Miranda do Douro were completely destroyed, following a violent explosion, and Bragança, Outeiro and Moncorvo also surrendered to the enemy.

It is therefore evident that the conflicts with Spain between 1640 and 1763 contributed immensely to a pronounced process of depopulation and even desertification in northeastern Trásos-Montes, a process that had begun with the activities of the Inquisition and was accelerated by the Wars of Restoration. For instance, whereas Bragança had 1500 inhabitants in 1700, 10 years later it had only 500.<sup>3</sup>

On the other hand, it is important to underline the negative consequences that such wars had for the economy, particularly the silk industry. They reduced the size of markets, causing a separation between silk production and the traditional commercial outlets, and closed the border with Spain, to where a sizeable part of the manufactured products was exported and from where a significant amount of threaded silk was imported.

3. Lastly, and undoubtedly the most important factor, was the role played by the Inquisition between 1580 and 1755, i.e. at the beginning of the reign of Dom Filipe I and at the beginning of the Marquis of Pombal's government. The sinister actions of the Holy Office were, by themselves, more than enough to explain the apathy and even the temporary shutdown experienced by the silk industry during that period.

In his book, *Os judeus no distrito de Bragança* (Jews in the Bragança district), in which he studied both the printed and hand-written lists of the individuals tried for Judaism by the Inquisition, Francisco Manuel Alves counted 1709 people, between 1551 and 1755, in the Bragança district alone.

The number of individuals actually brought to trial was, however, even greater. The analysis of the *Inventário dos Processos da Inquisição de Coimbra (1541-1820)*, an inventory published by Luís de Bívar Guerra about the trials conducted by the Holy Office of Coimbra, enables us to see that 3820 individuals were prosecuted in the period between 1541 and 1755. Of these, 3467 (91%) belonged to municipalities from northeastern Trás-os-Montes, i.e. twice the number of people found by Francisco Manuel Alves. Bragança alone registered 1451 individuals (38%) brought to trial.

If we add to the Coimbra figures the 15 men prosecuted by the Holy Office of Évora and the 253 prosecuted by the Holy Office of Lisbon, as reported by Francisco Manuel Alves, we have a total of 4047 individuals prosecuted for Judaism in Trás-os-Montes, of which 3708 (91%) belonged to the north-eastern region of the province, Bragança alone contributing 1601 individuals.

If we further include the waves of persecution against the so-called c*ristãos-novos* (Jews converted to Catholicism), we achieve truly devastating results, helping to explain the periods of decline or even decadence that the silk industry passed through.

<sup>&</sup>lt;sup>3</sup> Francisco Manuel Alves, op. cit., t. III, doc. no. 104, pp. 240-241, and t. I, p. 286.

As far as northeastern Trás-os-Montes is concerned, it can be seen that the periods of 1580-1605 (882 people prosecuted), 1660-1686 (1140 people prosecuted) and 1704-1730 (863 people prosecuted) were the periods when the activity of the Holy Office was at its most baleful.

The reigns of Dom Filipe I and Dom Filipe II (1580-1621) as well as the reigns of Dom Afonso VI and Dom Pedro II (1656-1706) were particularly deadly for north-eastern Trás-os-Montes. The cruelest years were 1599, with 222 individuals prosecuted, and 1662, with 206.

Each village or city had its own darkest periods. Considering only those places where the silk industry was of a significant size, Chacim was ravaged from 1699 to 1771;

Freixo de Espada à Cinta from 1669 to 1685 and from 1725 to 1729; Vila Flor from 1578 to 1590 and especially from 1660 to 1686; and, finally, Vinhais from 1580 to 1591, 1660 to 1665 and 1706 to 1720.

As far as Bragança is concerned, over a period of only 25 years (1580-1605), 560 people were prosecuted by the Holy Office of Coimbra. Between 1660 and 1686, 337 individuals suffered a similar fate. And from 1704 to 1730, a further 457 citizens of Bragança were thrown into Coimbra's jails.

These persecutions fundamentally affected the *cristãos-novos*, who, during the 17th century, were regarded as a synonym for businessmen or merchants. Under the pretext that these new Christians were still Jews, the Inquisition exacted a bloody, ruthless toll on the financial, industrial and mercantile bourgeoisie. Indeed, so merciless was the action of the Inquisition that, even after these people had been killed, their wealth was also confiscated.

In northeastern Trás-os-Montes, as well as throughout the kingdom, most of the people brought to trial were artisans, craftsmen, producers and merchants, i.e., according to that sinister court, "Jews" linked to the activities of trade and industry, in this case, the silk and tanning industries.

According to Francisco Manuel Alves, of the 942 individuals accused of Judaism in northeastern Trás-os-Montes, 241 (26%) were silk throwers, weavers or businessmen, and, if we also consider their families, we reach a total of more than 500 people. There were 243 people (26%) involved in commercial activities and 110 (11%) who were tanners and curriers. Farmers and tillers amounted to no more than 40 in total (4.2%). In short, no other economic activity was so heavily represented at this level as was the silk industry, thus revealing the exceptional importance that this industry had for Trás-os-Montes.

On the other hand, we know that Bragança was always the main center of the silk industry, followed by Chacim, Freixo de Espada à Cinta and Vinhais. Between 1580 and 1755, Bragança registered 1595 victims of the Inquisition, Chacim 206, Vinhais 306 and Freixo de Espada à Cinta only 65, which helps to explain the relative normality of Freixo's silk production in comparison with the other traditional centers.

We cannot, however, take into account only the individuals who were brought to trial, but also those who fled in terror, before being arrested by the Inquisition. How would the population of a village react when faced with the incarceration of scores of its inhabitants within a short period of time? How could the silk industry exist and prosper when producers, weavers, throwers, spinners and dyers, as well as merchants and businessmen, were systematically persecuted?

On the occasion of an *auto-da-fé* carried out in Coimbra on 25 November 1584, a manuscript even mentioned that Bragança had been completely ruined as a result of that *auto* and the previous two. Actually, these three *autos* occurred during the most violent wave of persecutions experienced by Bragança throughout its history (1580-1605). But if the 1580-1584 *autos* ruined Bragança, what was the state of the city in the first half of the 17th century?

In a document dating from 1636, the nefarious consequences of the Holy Office's actions were already reported, even if metaphorically. In effect, a representative from Bragança's town hall mentioned that during the reign of Dom Sebastião (1557-1578) the district's inhabitants numbered more than 20,000, 1600 of them living in Bragança, including "countless businessmen", and that there were more than 50 velvet looms of different kinds, while in 1636 there were no more than 8000 people living in the district. Moreover, there was a great deal of misery and poverty in that region, with many villages being deserted when their inhabitants fled to Castile, Andalusia and other places.<sup>4</sup>

The problem was not caused by any war or plague, and the prices of wheat and rye did not seem to point to any unfavorable agricultural situation. But we know that the actions of the Holy Office inevitably led, both directly and indirectly, to tax increases. The Inquisition diminished the region's wealth and demand for manufactured products directly, by arresting hundreds of people and driving away many more, especially those linked to trade and industry. Additionally, the Inquisition had a negative indirect impact, because of the decrease in population it effected - since many taxes had a long-term fixed value, the lower the population of Bragança, the higher were the taxes paid by those remaining, which deepened their misery and encouraged even more people to flee the district.

In 1734, Ribeiro Sanches reported on the desolation experienced by Trás-os-Montes: due to the Inquisition, many silk factories, among several other local industries, had disappeared. In 1748, Luís da Cunha dramatically corroborated the accusations made by Ribeiro Sanches, accusing the Inquisition of causing the desertification of many cities, such as Bragança, and of destroying its industries, by arresting and persecuting Jews. And Acúrcio das Neves, in 1817, reminded us that the silk industry was led by Jews, and considered that the major loss was not the number of individuals fleeing Portugal, but the decline of the industry in which they had been involved.<sup>5</sup>

# 2. The restructuring of the Trás-os-Montes Silk Industry and the role of the Arnauds (1770-1834)

Although several attempts were made to modernize the silk industry during the 17th and 18th centuries, the series of crises and events already mentioned hindered those efforts and prevented the industry from progressing, particularly with regard to the quality of its spinning and weaving. As has been pointed out, events such as wars and conflicts, protectionist policies and, above all, the Inquisition's baleful actions from the late 16th century until the mid-18th century, were more than enough reason to explain the successive crises affecting this economic sector, and to prevent a cumulative and continuous process of experimentation, modernization and improved quality. Indeed, even in the absence of other causes, the action of the Holy Office alone would have been more than sufficient to account for the decline of the Trás-os-Montes silk industry and the complete impossibility of its consolidation, renovation and modernization.

However, the most surprising aspect of all was the capacity, tenacity and persistence revealed by both artisans and the local population, who, even when confronted with persecutions

<sup>&</sup>lt;sup>4</sup> Francisco Manuel Alves, op. cit., t. XI, pp. 119-120; and Luís de Bivar Guerra, *Inventário dos processos da Inquisição de Coimbra (1541-1820)*, 2 vols., Paris, 1972.

<sup>&</sup>lt;sup>5</sup> Ribeiro Sanches, Origem da denominação de christão-velho e christão-novo em Portugal, Lisbon, 1956 (edited with an introduction by Raul Rêgo); Testamento político ou carta escrita pelo grande D. Luiz da Cunha ao senhor rei D. José I, antes do seu governo, Lisbon, 1820; and José Acúrcio das Neves, Variedades sobre objectos relativos às artes, commercio, e manufacturas, considerados segundo os princípios da economia política, t. II, Lisbon, 1817, p. 311.

and the complete absence of coordination between production centers, markets and economic circuits, continued to rear silkworms and keep the silk industry alive.

By the end of the 18th century, the Trás-os-Montes silk industry had dragged itself out of the crisis that had begun in 1750-1755, coinciding with the last incursion of the Inquisition into Bragança, and embarked upon a period of great development, accompanying the industrial expansion that was then taking place, not only in that particular region, but throughout the Portuguese kingdom.

After the Inquisition's systematic persecution of businessmen, weavers and throwers had finally come to an end, the continuity and expansion of the silk industry seemed to be a viable prospect.

In the last two decades of the 18th century, a remarkable process of modernization took place thanks to the efforts of the businessmen involved in this economic activity, such as António José Lopes Fernandes, who installed 200 silk looms in Bragança, magistrates such as José António de Sá and Pereira de Barros, and politicians such as Martinho de Melo e Castro and Rodrigo de Sousa Coutinho, the latter being the Portuguese ambassador to Piedmont, Italy. These efforts included the adoption of Piedmontese methods and techniques (namely the organzine mill and the spinning-jenny), the most advanced ones at that time in Europe, in an operation led by experts coming to Portugal from that Italian region – particularly the Arnaud family, who ended up settling in Chacim. This was the second and most important modernization effort undertaken in the Trásos-Montes silk industry in all its history.<sup>6</sup>

If the Arnauds traveled all the way to Trás-os-Montes, it is because this was the most important region in Portugal as far as sericulture and the silk industry were concerned. And the Arnauds only built the Silk Factory in Chacim, in the Moncorvo district, for the reason that, after

<sup>&</sup>lt;sup>6</sup> On the subject of Rodrigo da Sousa Coutinho and his texts about the Arnauds and the modernization of the silk industry in Trás-os-Montes, see the work of Andrée Mansuy Diniz Silva, Rodrigo de Sousa Coutinho, Textos políticos, económicos e financeiros (1783-1811), II vols., Lisbon, 1993; see also: ANTT, Ministério do Reino, mç. 468 (box 184); José António de Sá, Memoria sobre o novo estabelecimento de fiar a piamonteza, da villa de Chacim. Plano da correição, ANTT, Reino, mç. 326; José António de Sá, Mappa das fabricas da commarca de Moncorvo. Plano da correição. Mappas, ANTT, Reino, mç. 326; Arquivo Histórico Ultramarino (Historical Records), Reino, a set of documents referring to the Trás-os-Montes silk industry (1784-1798), namely the report by the Arnauds written in Italian; Acúrsio das Neves, Noções historicas, economicas e administrativas sobre a producção, e manufactura das sedas em Portugal, e particularmente sobre a Real Fabrica do Suburbio do Rato, e suas annexas, Lisbon, 1827; Luís Fernando Carvalho Dias, A relação das fábricas de 1788, Coimbra, 1955; Almanach para o anno de 1789, Lisbon, 1789; José António de Sá, Compendio de observaçoens que formão o plano da viagem politica, e filosofica, que se deve fazer dentro da Patria, Lisbon, 1783, pp. 213-248; José António de Sá, Dissertações philosophico-politicas sobre o trato das sedas na comarca de Moncorvo, Lisbon, 1787; Fernando de Sousa, Trás-os-Montes, Subsídios para a sua história em fins do século XVIII, princípios do século XIX, 2 volumes, Porto, 1973 (degree thesis); Fernando de Sousa, A Memória dos abusos praticados na comarca de Moncorvo de José António de Sá (1790), in Revista de História da Faculdade de Letras do Porto, Volume IV, Porto, 1974; Fernando de Sousa, A indústria das sedas em Trás-os-Montes (1780-1812), in Revista de História Económica e Social, volume II, Lisbon, 1978; Fernando de Sousa, Uma descrição de Trás-os-Montes por José António de Sá, in Revista População e Sociedade, No. 3, Porto, 1998; Fernando de Sousa, Uma descrição de Trás-os-Montes nos finais do século XVIII, in Revista População e Sociedade, No. 4, 1999; Fernando de Sousa, Para a história da indústria das sedas em Trás-os-Montes (1819-1923), in Revista População e Sociedade, No. 5, Porto, 1999; Fernando de Sousa, A reestruturação da indústria das sedas em Trás-os-Montes nos finais de Setecentos, in Revista População e Sociedade, No. 5, Porto, 1999; Nuno Luís Madureira, Mercado e privilégios. A indústria portuguesa entre 1750 e 1834, Lisbon, 1997; José Acúrcio das Neves, Noções historicas, economicas e administrativas sobre a producção, e manufactura das sedas em Portugal, Lisbon, 1827, pp. 360, 392 and 404.

becoming acquainted with that region, they understood that to be the place with the best conditions for its installation and management.

Of course, the Piedmontese family could have developed its business in Bragança, as some had intended. Nonetheless, overlooking the influences and pressures being exerted as to the location of the factory, a process in which José António de Sá himself participated, since he was the magistrate of the Moncorvo district and thus responsible for Chacim, the fact remains that the Bragança factory, besides being dominated by Lopes Fernandes, did not have the same conditions as the Arnauds considered Chacim to have.

Once the spinning school and silk-twisting mill had been established in Chacim, the Arnauds did everything they could to set up a filature there, since, in view of the already mentioned reasons, their intention was to install a new factory from scratch, one that they could fully control. Such an intention could be more easily achieved in Chacim than in Bragança, where Lopes Fernandes and the numerous silk producers who had already settled there would strongly resist any attempt by the Arnauds to establish a monopoly or any form of exclusivity.

The construction of the Royal Filature of Chacim, including the spinning school and the silk-twisting mill, bore testimony to the exceptional importance that the Trás-os-Montes silk industry had at the national level. In the city of Bragança alone, in 1794, there were 950 men and women working in the silk industry, i.e. 18% of its total population.

The statutes of the Bragança factory (1785), the silk-spinning schools and the Trás-os-Montes spinning-jenny (1788) reflected a series of measures introduced in order to regulate silk operations, thus improving the quality of manufactured products and undoubtedly sewing the seeds for the most important innovation that the Trás-os-Montes silk industry had ever experienced.

The Piedmontese method, resisted both by weavers and producers, who were opposed to novelties and remained tied to their traditional and outdated techniques, was scarcely adopted in the region. However, they were unable to prevent the use of Italian hair and weft by the Bragança and Chacim factories, since the Portuguese thread, namely the Trás-os-Montes thread, remained coarse and could not be used in the warp of fine fabrics.

Protectionist legislation contributed to the prosperity of this industry, guaranteeing it privileged access to the national and colonial markets, particularly the Brazilian one, to such an extent that the number of looms in Bragança reached a total of 232 in 1794. In that same year, throughout the whole of the Trás-os-Montes province, there were 360 looms working, operated by 1732 men and women, mostly in Bragança, Chacim and Vinhais. However, the industry was not able to stop the counterfeit activity that continued to grow from the late 18th century onwards, both on the Portuguese mainland and in the colonies. Besides, competition from foreign fabrics also increased, due to the previous lack of competition in Portugal, as did the quality, diversity and prices of fabrics.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> ANTT, Reino, Mç. 88, 242 and 242; Arquivo Histórico Ultramarino, *Reino*, Letter from Caetano Arnaud, 19.9.1800; *Descripção de Tras-os-Montes*, by Columbano Pinto Ribeiro de Castro, published by Armando Mendes in the work *Trás-os-Montes nos fins do século XVIII, segundo um manuscrito de 1796*, Coimbra, 1981; Manuel Alves da Veiga, *Escola mercantil...*, Lisbon, 1803, pp. 501-503; Jorge Borges de Macedo, op. cit., pp. 241-246.

Fabrics	No. of looms	Producti on ( <i>côvados</i> * )	Silk used ( <i>arráteis</i> * *)	Workers	No. of spinning -wheels	Twisted silk ( <i>arráteis</i> * *)	Workers
Caban	8	8 000	800				
Satin	42	50 400	6 560				
Plush	2	1 200	80	380 Men			27 Men
Serge	2	2 400	180	400	9	4 500	108
Silk for	12	14 400	1 920	Women			Women
mantles	160	192 000	11 500				
Taffeta	6	1 200	200				
Velvet							
TOTAL	232	269 600	21 240	780 MW	9	4 500	135 MW

#### Chart No. 1 Bragança silk factories (1793-1794)

\* Ancient measure of length (0.66 meters)

\*\* A pound weight of 16 ounces (16 oz.)

Note: one-year production values (from the middle of 1793 to the middle of 1794)

(Source: Arquivo Histórico Ultramarino, Reino, Fundo relativo às sedas de Trás-os-Montes)

And a violent form of competition it was too, since silk fabrics, unlike other cloths, could not count solely on the local market, which was poor and instead favored coarse woolen and linen fabrics to luxury fabrics. These were important limitations, emphasized by several economists at that time, who, seeing things from a broader perspective, questioned the viability and usefulness of luxury factories in Portugal.

In order to survive, the Trás-os-Montes silk industry needed not only guaranteed markets, which were to disappear in the first decade of the 19th century, but also continuous improvements, which were never made.

Nevertheless, the most dramatic blow suffered by the silk industry occurred with the French invasions (1807-1810), on account of the mobilization of Portuguese resources for war purposes, the paralysis of the economy, and the flight of many industrial experts in order to avoid military recruitment. Additional factors were the opening up of Brazil to international trade (1808-1810), which gave rise to an uneven competition between English products, especially cotton products resulting from the first Industrial Revolution, and Portugal's outdated small-scale production, as well as the widespread and permanent smuggling trade. All these reasons led to the rapid decline that the Trás-os-Montes silk industry was to suffer from then on. Between 1812 and 1817, Bragança never had more than 40 silk looms at any one time.

Now freed of Piedmontese regulations and the control and authority of the Arnaud family, this industry experienced no further technological advances, no capital investment and no entrepreneurial initiatives, a situation that impeded its transition to a modern industry, with new

equipment, a trained workforce and updated techniques, adapting its silk products to liberal tastes and views.

The Chacim Factory retained its archaic spinning-wheels (*carrilhos*), which continued to be used in the manufacture of  ${}^{9}/{}_{10}$  of the silk produced, and never again did it experience any improvements in its weaving and spinning operations.

The attempts made to reinstate Piedmontese spinning schools in Trás-os-Montes in the 19th century under the direction of the Arnauds – although now respecting the newly-established "industrial freedom" – never met with any success, due to the government's hesitations. When the liberal revolution of 1820 took place, the panorama for sericulture and the silk industry in Trás-os-Montes was already one of abandonment and disinterest.

Because of all these factors, the silk industry in Trás-os-Montes never again recovered the quality and levels of production that it had enjoyed until 1808, and the liberal regime did not create new or more favorable conditions for this industry.<sup>8</sup>

First, Portuguese silk exports to Brazil, which were of great importance until 1808-1810 and remained at a high level until 1821, decreased significantly between 1822-1830, as soon as Brazilian independence was declared.

Indeed, with the crisis affecting Rio de Janeiro, the main Brazilian market, the only Portuguese silk product that was able to resist foreign competition was Porto's twisted sewing silk.<sup>9</sup>

In the second place, as mentioned by Bragança businessmen and local and national magistrates in 1821-1822, Portuguese silk fabrics were not able to compete with Chinese and English products, which were of a higher quality and also cheaper, and were therefore preferred in the Portuguese and Spanish markets. English printed cotton and Chinese cloths frequently arrived in Bragança to be re-exported to Spain.

Several English export companies were established in Bragança, in order to re-export English goods, both legally produced and smuggled, over the Spanish border. Businessmen such as Hoile and Askwart, in 1826, had their warehouses ransacked by absolutist troops led by the Marquis of Chaves, suffering "terrible losses" and, for that reason, demanding 10,000 pounds in compensation from the Portuguese Government.<sup>10</sup>

Unable to compete with its foreign counterparts and as a result of the sudden influx of cheap English cotton and silk products, Trás-os-Montes silk fabrics were almost impossible to sell.

In the third place, and also related to the Brazilian market, it must be borne in mind that, after the French invasions, Porto benefited from the difficulties experienced by the Rato Silk Factory and the Royal Silk Company, both in Lisbon, as well as the decline of the industry in northeastern Trás-os-Montes. This allowed Porto to strengthen its position in this sector.

<sup>&</sup>lt;sup>8</sup> Diário das Cortes, No. 96, from 5.6.1821; Valentim Alexandre, Os Sentidos do Império, Porto, 1992, p. 784; Maria Teresa Salgado, Um documento inédito sobre o comércio luso-francês de 1817, in Arquivos do Centro Cultural Português, vol. I, Paris, 1969; Memória dos trabalhos da Comissão..., Lisbon, 1822; Resultados dos Trabalhos da Comissão do Porto..., Porto, 1823; José Luís Cardoso, Pensar a economia em Portugal. Digressões históricas, Lisbon, 1997, pp. 143-146; António Maximino Dulac, Vozes dos leaes portuguezes, vol. I, Lisbon, 1820, pp. 194–195; José Estevão Lefranc, Memoria sobre a cultura da seda em Portugal, in Annaes da Sociedade Promotora da Indústria nacional, t. I, Lisbon, 1822, p. 273; Jorge Borges de Macedo, Problemas de história da indústria portuguesa no século XVIII, Lisbon, 1963, p. 241; Gerardo Pery, Estudos económicos, in Revista das Alfândegas, Nos. 12 to 21, Lisbon, 1893.

<sup>&</sup>lt;sup>9</sup> See the work by Valentim Alexandre, Os Sentidos do Império, Porto, 1993.

<sup>&</sup>lt;sup>10</sup> Clemente José dos Santos, *Documentos para a História das Cortes Geraes da Nação Portugueza*, t. II, Lisbon 1884, pp. 587 and 597

In 1826, Acúrcio das Neves referred to the existence of hundreds of silk factories and looms in Porto, stressing the city's great tradition of silk production. As a matter of fact, between 1824 and 1826, Porto's exports even surpassed the average exports of 1799-1804, which had been years of great prosperity for the Portuguese silk industry.

The production from the Trás-os-Montes silk factories could not compete with the production in Porto, which was becoming progressively better equipped at the technical level, and which belonged to capitalists who efficiently dominated the distribution circuits, both nationally and internationally.

In the fourth place, the silk industry was experiencing both a shortage of capital and a lack of entrepreneurs capable of stimulating private enterprise, in view of the indifference shown by the State. Having little capital, local silk producers could only produce new clothes after selling the already manufactured ones. In Bragança, after Lopes Fernandes had abandoned the city in the late 18th century, no other great capitalist ever appeared to lead the silk industry. And in Chacim, without the support of the capitalist João de Vasconcelos, the Arnauds, short of funds, were never able to revive the Factory, which belonged to the State, nor were they even able to overcome the inevitable aging process of its structures.

Furthermore, the dearth of capital in Bragança was the main hindrance to the renewal of techniques, the hiring of silk experts, the purchase of new spinning and weaving machines (like the Jacquard machines that were used in Lisbon from 1825 onwards) and the training of a specialized workforce, all of which were needed to move from a small-scale, rural and dispersed industry to a modern and concentrated one.

More than just capital, however, what was missing was a capitalist mentality. This was a negative structural characteristic of the Portuguese, if not Iberian, bourgeoisie, which instead of developing industries by reinvesting their profits, used this money to acquire personal possessions. The great desire of this new class, always seeking to imitate the nobility, was to ennoble themselves by purchasing land and honorific titles.

The fifth limitation, this time of a structural nature, had to do with the irregular and terrible spinning techniques that proliferated throughout the region after 1807-1808, being subjected to no inspection or regulation, and drastically limiting the use of local silk, despite the complaints and protests presented to the Government in an attempt to ensure discipline and regulation and the adoption/imposition of Piedmontese methods. In any case, the fact remained that such operations could only be performed at the Chacim Factory or at the schools directed by the Arnauds.

The problem was never the quality of the raw materials used, as confirmed by the pieces and fabrics produced in Trás-os-Montes throughout the 16th, 17th and 18th centuries. Instead, it was the grossly inadequate spinning processes, which were performed by rural people who did not see quality and regularity being suitably rewarded in the market prices. In 1823, Lefranc even suggested that parish-priests should be invited to participate in the distribution of silkworms, teaching breeders how to rear them.

Finally, one must not forget the social and political struggles that started with the 1820 liberal revolution and hindered the resolution of the serious economic problems against which Portugal was fighting, namely at the industrial level. This led to the institutionalization of an environment of latent or effective civil war, which persisted until the middle of the 19th century.

During this period, several military coups and civil wars occurred – the counter-revolution of 1823, initiated precisely in Trás-os-Montes by the Marquis of Chaves, followed in the same year by the *Vilafrancada*, and then the *Abrilada* (1824), the civil war of 1826-1827 (with the ransacking of Bragança), the military insurrection in Porto (1828), and finally the civil war that eliminated

*miguelismo* (the Absolutist side) of 1832-1834. Since many of these conflicts had Trás-os-Montes as their main arena, it is easy to understand the grave impact that these wars had on that region's silk industry, wreaking havoc among the production and distribution mechanisms, mobilizing both civilians and the military to join one of the warring factions, expatriating people, persecuting, arresting and killing many - in short, bringing the silk factories to a halt for quite a long time.

## Chart No. 2 The silk industry in Bragança (1787-1830)

Year	No. of	Fabric production			
rear	looms	Côvados*	Pieces		
1787	219	190 052	1		
1790	195	118 630	1 793		
1792	215	210 400	3 084		
1794	232	269 600	1		
1798	200	233 020	3 716		
1804	235	_	1		
1812	34	35 363	1 422		
1815	-	70 000	-		
1817	37	46 960	_		
1820	72	84 000	-		
1821	40	_	_		
1826	60 to 80	-			
1829	30 to 40	6 900	-		

• Ancient measure of length (0.66 meters)

(Source: this chart was assembled on the basis of documents from the *Historical Records of the Portuguese Department of Public Works* and the *Arquivo Histórico Ultramarino* [Overseas Historical Records])

The Arnauds, self-confessed absolutists, were unable to revive Chacim in the wake of the liberal victory and definitively abandoned the region, taking with them the dream of the sericultural regeneration and modernization of Trás-os-Montes, a dream they had nurtured for 30 years.

Despite their innovative contribution to the silk industry and the introduction into Portugal of so-called *seda frouxa* (slack silk) preparation – which in the 19th century was to become the basis for Porto's twisted silk and sewing silk industry – the fact remains that the Arnauds and the Chacim Factory never produced the "creative tension" that was necessary to introduce the technical and structural changes capable of transforming Trás-os-Montes in the long term.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> Fernando de Sousa, A Indústria das sedas em Trás-os-Montes, sob a égide dos Arnauds (1790-1820), in Brigantia, Revista de Cultura, No. 1/2, January-June 2004.

### Conclusion

We should not end this paper without focusing on two important questions that perhaps have not been entirely answered, although they were raised, even if indirectly, throughout this work. The first question one may pose is why this industry was located preferentially in northeastern Trásos-Montes, with Bragança as its main manufacturing center?

Although the oldest reference to the silk industry relates to Ervededo, in northwestern Trásos-Montes, the planting of mulberry trees and the rearing of silkworms always took place in the northeast, i.e. the region that, after 1835, formed the district of Bragança. Bragança served consistently as the main spinning and manufacturing center, Chacim had a silk factory and Freixo de Espada à Cinta maintained its silk industry up to the 19th century.

So why northeastern Trás-os-Montes? The traditional explanation for the existence and permanence of this industry in that area, namely that it represented a defensive strategy in relation to possible competition, and that it benefited from the difficult access to and isolation of that region, is only acceptable in the case of the linen or woolen industries, but not in the case of silk. Of all the silk products from Bragança, Chacim and Freixo de Espada à Cinta, only a small part was destined for the regional market. On the contrary, most of the production was sold throughout the kingdom and exported, above all, to Brazil.

At the same time as silk products began to leave the region, rival products began to arrive in the province. From the end of the 17th century onwards, perhaps even earlier, velvet, taffeta and mantles were sent from Bragança to Porto and Lisbon in order to be sold. The Royal Silk Factory in Lisbon ordered raw materials to be dyed in Bragança. Foreign silk and dye experts were rapidly installed in Chacim and Bragança. We are not ignoring the difficulties of transporting both raw materials, which were imported and had to be brought to Trás-os-Montes from the Portuguese coast, and finished fabrics, which traveled in an opposite direction, from Bragança along the river Douro all the way to the coast. Such hindrances, however, had only a minor impact on silk production, since we are dealing with products that had a low overall volume but that could be sold at high prices.

The real explanation for the location of this industry in northeastern Trás-os-Montes is to be found in its longstanding tradition, extending over several centuries and nurtured by the rearing of silkworms, i.e. by the existence of the raw materials in that region, a virtuous cycle that it is difficult to understand.

The rearing of silkworms dates back to the Middle Ages, the same thing happening with the industrial production of silk fabrics. Most probably, the extinction of the kingdom of Granada (1492), one of the most advanced regions in terms of silk production during the 14th and 15th centuries, as well as the expulsion of the Moors from Granada during the reign of Dom Filipe II (1556-1598), ended up contributing to the development of this industry in northeastern Trás-os-Montes, for the simple reason that in both cases many Spaniards sought refuge in the region. The period of prosperity enjoyed by silk production in Trás-os-Montes at the end of the 16th century was certainly related to the migration of weavers and producers from Spain to this Portuguese province. We must not forget the privileged economic relations that the eastern half of Trás-os-Montes enjoyed with Spain, particularly Castilla-León, until the 17th century.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> España y Portugal en las rutas de la seda. Diez siglos de producción y comercio entre Oriente y Occidente, Comisión Española de la ruta de la seda, Barcelona, 1996.

The second question concerns the homology between the evolution of the Trás-os-Montes silk industry and the evolution of Portuguese industry as a whole. First of all, the history of the Portuguese textile industry has yet to be written, making this question even harder to answer. Nevertheless, we may conclude that the evolution of the Trás-os-Montes silk industry matched the evolution of broader Portuguese industry. In other words, until the 19th century, the silk industry's periods of prosperity and decline coincided with those of Portuguese industry as a whole.

Thus, the silk industry experienced a period of expansion and renewal on the occasion of the first Portuguese industrial boom (1670-1690), preserving some of its activity during the second boom (1720-1740) and experiencing its golden period during the manufacturing boom of 1770-1807, with the introduction and adoption of Piedmontese methods and techniques for the growing of mulberry trees, the rearing of silkworms and the weaving and spinning of silk – on this occasion, just as had been the case so many times before, the leap forward in terms of quality was only possible thanks to the involvement of foreign experts.

The gradual decline of the Portuguese silk industry, starting with the French invasions and steadily worsening until 1834, did not follow the evolution of Portuguese industry as a whole – which was slowly beginning to pass through its own somewhat limited Industrial Revolution. Instead, it reflected the fact that the Portuguese silk industry was unable to compete with its foreign counterparts. In Trás-os-Montes, as in the rest of Portugal and Spain, the silk industry was not able to adapt itself either to the new times or the new technologies, with the result that its previous importance was lost.

At least until 1755, the homology between the Trás-os-Montes silk industry and the other Portuguese industries during the Ancient Regime could not erase the irreparable damage caused by the Inquisition, with the systematic persecution of silk weavers and businessmen affecting the consolidation and expansion of the industry. The actions of the Inquisition are the key to explaining the economic fluctuations in the silk industry in Bragança, Chacim, Vinhais and Freixo de Espada à Cinta.

One final thought: We are not really aware of the importance of the silk industry in relation to Portuguese industry considered as a whole, and, in particular, we are not aware of the full extent of the textile industry. Most probably, from the 19th century onwards, wool and linen, and almost certainly cotton, were more important than silk, from an economic point of view. However, there have been no global studies made of the Portuguese textile industries, to verify the relative significance of each of those industries.

Nevertheless, we do know that the Trás-os-Montes silk industry was historically the most important industrial sector in this region, dominating other activities without any competition until the 19th century. For centuries, it was the economic activity that was most open to the outside world and the first to yield to the new capitalist mentality. It was, undoubtedly, the productive activity that contributed most to the national and international recognition of the region and its identity.

For all these reasons, the Trás-os-Montes silk industry has proved a unique legacy, although one that is currently and regrettably being abandoned and wasted!

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