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# Central American Indigo. Globalization and socioeconomic effects (16th-17th centuries)

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Central American Indigo. Globalization and socioeconomic effects (16<sup>th</sup>-17<sup>th</sup> centuries). In a world like that of the *Ancien Régime*, in which there was a continuous expansion and integration of markets, the indigo produced in Central America should be understood from a global and transnational point of view, due to the characteristics of its flow and to the upturn and effects it caused in products and societies from different continents. This article fits within the socioeconomic effects of globalization in the Early Modern Age, as well as within the analysis of the role played by the international commercial networks. The importance of Central American indigo production will be taken into consideration to demonstrate the connectedness of the world through commodity chains. KEYWORDS: indigo; globalization; trade; Central America.

O indigo da América central: globalização e efeitos socioeconómicos (séculos xVI e XVII). Num mundo como o do Antigo Regime, no qual se assistiu a uma contínua expansão e integração dos mercados, o indigo produzido na América central deve ser entendido de um ponto de vista global e transnacional, devido às características do seu fluxo e às mudanças e efeitos que provocou em produtos e sociedades de diferentes continentes. Este artigo enquadra-se na problemática dos efeitos socioeconómicos da globalização no início da época moderna, e aborda o papel desempenhado pelas redes internacionais de comércio. A importância da produção de indigo na América central será tida em consideração para demonstrar a conectividade das diferentes partes do mundo através das cadeias de mercadorias.

PALAVRAS-CHAVE: Indigo; globalização; comércio; América central.

### FRANCISCO ZAMORA RODRÍGUEZ

# Central American Indigo. Globalization and socioeconomic effects (16<sup>th</sup>-17<sup>th</sup> centuries)<sup>1</sup>

#### INTRODUCTION

During the Early Modern period, a large share of the indigo sent from Cuba, Santo Domingo, New Spain, and Tierra Firme was most likely produced in Audiencia of Guatemala (García Fuentes, 1980, p. 332; Smith, 1989). The journey that the Central American indigo dye had to make before reaching Europe therefore was quite a long one. The indigo was shipped from America to the Spanish Atlantic ports of Seville and Cadiz and, from there, it was re-exported to Italy, Eastern Mediterranean ports, and Northern Europe in a search for the highest selling prices.

The production of indigo was closely related to the African slave trade, and this fact allows analyzing a business that, within a global economy, had very significant social consequences. The Central American indigo was used in the textile industry as a complement of the Castilian wool. Finally, the commercial agents (many of them Portuguese) played a key role in the promotion and cohesion of this whole complex commercial circuit.

Given the interconnection of spaces, markets, products and labor, this article fits within the socioeconomic effects of globalization in the Early Modern Age (Middell and Naumann, 2010; Mazlish and Buultjens, 1993; Hopkins, 2006; De Vries, 2010), as well as within the analysis of the role played by the commercial networks in this process of integration of economic and social circuits.

In fact, transnational and multicultural global networks played an essential role in this first globalization, as pointed out in the most recent bibliography

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(Ramada Curto and Molho, 2002; Israel, 2002; Trivellato, 2009; Antunes, 2015; Polónia, 2015; Polónia and Antunes, 2014; Ribeiro, 2016; Mukherjee, 2011).

Global history is a recent research field of historical studies. Since the 1980s it has been an important subdiscipline, which encompasses methodological and thematic approaches, including not only trans-national approaches but trans-imperial history as well.

A first and progressive commercial globalization came during the Early Modern period (Mauro, 1975) thanks to the development of new innovative navigation and financial instrumental techniques (Fusaro, 2008; Böttcher, Hausberger and Ibarra, 2011), which in general terms laid the foundations of the economic-commercial operations and generated social-cultural effects.

The tools provided by the Global History theories have deepened many of these issues and, without any doubt, paved the way for the analysis of others (Middell and Naumann, 2010; Hopkins, 2006). Recently, Global History has been framed in different contexts and it has used several elements as key points. For example, the latest works related to Global History have been written on the basis of environmental history (Radkau, 2008), theory of History (Belich et al., 2016; Conrad, 2015), comparative History and new parallels (Pomeranz, 2000), consumption (Pérez García, 2013), and diasporas (Sousa, 2015). These research undertakings share, criticize, and rethink many ideas of other classic works on "commodity chains", such as those of Wallerstein and Hopkins (1986), among many others.

A comprehensive study regarding the production, circulation, and consumption of colors provided by American dyes can be a good point from which to begin an analysis of the operation and impact of this globalization process. The arrival of the Europeans in America, as a part of the expansionist process on a global level coming from the xvi century, had inmediate consequences in establishing contacts and permanent interactions between several geographical areas such as Africa, America, and Europe. For example, this global process is well documented and known in the case of obtaining American sugar in exchange for African slaves, and its arrival to Europe for final consumption (Curtin, 1990; Schwartz, 2005).

The Early Modern period is a very important moment in the development of Iberian colonial strategies, the consolidation of trans-imperial and trans-national commercial networks, the integration of international markets and connection between ports, and the changes in the use of color and creation of fashion.

The general research questions to be considered herein are the following: would it be possible to establish a relationship between the African slave trade and the production of Central American Indigo? In this sense, what were the immediate social effects on the American and African population? What was

the relationship of these dyes with European industries (textiles and other ones if any)? And, finally, through which channels did all these elements circulate?

## INDIGO, TEXTILES, AND NETWORKS

Within the framework of the continuous search for dyes and the perfect color in the American territories carried out by the colonial powers (Bruquetas, 2015; Heers, 1961) in the mid-16<sup>th</sup> century, the king of Spain ordered his agents to send samples and information related to the cultivation of indigo in Central America. In those years, the extraction of indigo, or *xiquilite* (Mociño, 1976 [1799]; López y Camuñas, 1890, pp. 40-56; Rubio Sánchez, 1973; Balfour-Paul, 2000), the method for achieving it and the benefits that could be obtained from it began to emerge as major interests of the Hispanic monarchy in the area (Patch, 1994; Jones, 1994). However, indigo was not a new product, and therefore lacked the exotic value of many other commodities obtained in America.

The information on the benefits that this dye plant could yield in the territory that was under the jurisdiction of Audiencia of Guatemala (roughly the area currently occupied by Honduras, El Salvador, and Guatemala) matched the information sent from other neighboring territories integrated into the newly-created Captaincy General of Yucatán (1565). There was a growing interest in the exploitation of natural resources that could be used in the textile and dyeing industries. In fact, in 1577, shortly after the consolidation of the Captaincy General of Yucatán, the royal officials and the treasurer of the Holy Cruzade of the provinces of Yucatán sent an instruction with information on the hec tree (logwood, or Campeche) and on the indigo plant2, indicating that indigo "has become more popular because the Spanish have been planting it for the last twelve years". Simultaneously, the importance that indigo was beginning to have in the area was acknowledged, "considering the fact that it seems to have been yielding the highest earnings for four [years, i.e. since 1573]"3. On the other hand, it was said that the extraction of indigo was expensive for the Spanish and that many of those who had invested in indigo obrajes were "poor and had to keep spending money year after year". The document mentions the existence of 48 indigo farms in Yucatán in 1577, a figure that, proportionally, was dramatically lower that the one reported for the Central American Pacific coast in 1600: 200 in El Salvador, 40 in Escuintepeque, 60 in Guazapán, and 60 in San Miguel, Tecpanatitlán, la Cholulteca, and Nicaragua (Pérez Herrero, 1992, p.117). These numbers are confirmed by a list sent from

<sup>2</sup> AGI, *Indiferente*, 1530, N.4. Information dated 26-05-1577.

<sup>3</sup> Ibidem, chapter on "De la Planta y grangería del Añir".

Mexico and found in a letter written in 1584 that provided an overview of the indigo plantations covered by the jurisdiction of Audiencia of Guatemala:

In addition to New Spain, we can find indigo in Guatemala, Honduras, Nicaragua and Peru, as well as in the western islands, with which it would be possible to supply foreign territories and, by selling this indigo, there would no longer be the need to deal in woad.<sup>4</sup>

That having been said, we can deduce that in Yucatán there were no immediate returns and that the warm Pacific coast provided better conditions for the cultivation and production of indigo, a plant that needed a high percentage of moisture and high temperatures. So, in the late 16<sup>th</sup> century there were already many documents related to the purchase of lands reserved exclusively for the production of indigo in Audiencia of Guatemala, which was also facing a process of appropriation of the communally-held indigenous lands<sup>5</sup>. Before the end of the 16<sup>th</sup> century there were many references to the names of individuals and farms from Audiencia of Guatemala that were, in some way, related to the production of indigo (such as "The Dyer" or "The Indigo").<sup>6</sup>

At the end of the 16<sup>th</sup> century there seemed to be a great demand for that product in Europe, and the response was an immediate increase in the area of land used for its cultivation in Central America, which coincided with a growing preference for blue fabrics (Nakamura, 1998). Gradually, blue (which was in direct competition with red) became the "color of the Western civilization" (Sánchez Ortiz, 1999, p. 324). The expansion of indigo in Audiencia of Guatemala was also influenced by the fact that it was highly profitable, since it could be easily transported and was a non-perishable product, two key advantages for travelling long distances.

The history of indigo was closely related to the search, in Central America, for a "dynamic product" (Mac Leod, 2007) that might be able to connect this region to international and interregional trade, following the downturn in the slave and precious metal trades witnessed at the end of the 16<sup>th</sup> century (Pérez Herrero, 1992, p. 113). Regarding the production of Central American indigo, we can also consider the theories about the internal market model (Sempat

- 4 AGI, *Diversos-Colecciones*, 26, N. 3. México: "Relacion sacada de una carta que Pedro de Ledesma escreve a Su Magestad de 20 de marzo 1584 sobre el beneficio del añil".
- 5 AGCA, A1.23, leg. 4588. This collection is filled with documents related to the purchase of lands with areas of two to three *caballerías*. The purchases date back to 1588 and 1589 and all of them specify, in some way, that they were to be used for indigo production.
- 6 By way of example, we mention Jiménez, a Spanish man from Ciudad Vieja known as "The Dyer" (El Tintorero), who requested four *caballerías* to build an indigo *obraje* in Escuintepeque: AGCA, A1.23, leg. 5932, exp. 51878, f. 44b.

Assadourian, 1982; Garavaglia, 1983). In this context, we should return to the idea of an exclusive bond between the Central American indigo market and Europe, because there was also a commercial relationship with Peru and Mexico as destinations of this dye (Wortman, 1985).

The high cost of the small amount of indigo that arrived from Asia, the failure of the promotion of cochineal due to the competitive price and quality of the one from Oaxaca (Pérez Herrero, 1992, p. 115; Suárez Bosa and Sánchez Silva, 2006), and the fact that there had been a failed attempt to cultivate woad in New Spain, drove the search for new dye plants. The *hec* tree stood out among these new plants, as mentioned above. This is revealed in a proposal made by the Italian Francisco de las Armas to the king of Spain, in which he highlighted the benefits that the Crown would have by dyeing fabrics with *hec* tree, also known as campeche:

Some of Your Majesty's lands in Peru have a type of wood known in Italy as "campeggio" that, after being boiled, produces a dye that can be used on fabrics and wools [...].<sup>7</sup>

Francisco de las Armas claimed to have discovered a use for that tree, which would provide a refined and permanent dye. By using this dye, he said, it would not be necessary to buy foreign indigo or woad, and with one *ducado* and a half of campeche it would be possible to dye more fabric than with 45 *ducados* spent on a thousand *libras* of other dyes.

The Guatemaltecan indigo, which was systematically and abundantly produced, flooded the European markets, despite coexisting with woad for a few years. Woad also provided blue shades and had met with success during most of the 16<sup>th</sup> century, when it was imported by the Spanish from Germany and France. Until then, woad had played a key role in the dyeing industry (Caster, 1962; Casado Alonso, 1998, pp. 65-70).

However, the Central American indigo should be understood in the context of a series of specific (competing) dyes, whose demand was promoted and encouraged over time, mainly according to the European trends, fashions, and consumption patterns that, to a great extent, had a crucial influence in the cyclical regulation of the dye market. Undoubtedly, the production and prices of this dye were largely dependent on other factors and on their interrelations (both competitive and complementary) with other commodities.

In 1650 indigo managed to definitely outpace cocoa as the main source of wealth in Central America, replacing years later the dyes from Languedoc, the Azores, Germany, and England (Mauro, 1975, p. 69). Within this context,

many traders who had obtained enormous profits with cocoa invested everything in indigo and cattle (Flores Macal, 1978).

Around 1650 the expansion of the colonial production of American indigo in the tropics led to the almost immediate disappearance of Asian imports of dye (Geggus, 2002, p.20). A document from April 1652 shows the vitality of the Central American indigo trade during those years. An enormous shipment of indigo (together with some grain and tobacco) was sent from the port of Cadiz to Flanders, specifically to Ostende, "in order to aid the military." In fact, the shipment had been paid for by the king of Spain and comprised almost 2500 crates of indigo, grain, and tobacco from the province of Honduras, in Audiencia of Guatemala. Most of the goods were kept in the customs of the city of Seville, while a smaller share was kept in the houses of traders who were paid 9 *reales* of fleece per *libra* of indigo. Most of these traders lived in the city of Seville, while others were from Cadiz and New Spain.

Indigo worked as a complement of other products like Castilian wool. Wool and the European textile industry had a certain degree of interconnection with the production of indigo (Riello and Parthasarath, 2009; Beckert, 2014) and cochineal (Pérez García, 2016). As Marichal Salinas noted, "the scarcity of studies on the transatlantic dye trade is rather surprising, given the critical input of natural dyes to the key sector of textiles in the European economy for over three centuries" (Marichal, 2006, pp. 76-77).

Within this context of manufacturing interdependence, we have found that in 1630 the prices of indigo dropped due to a decline in textile production, and that simultaeously there was an increase of the taxes on indigo (Pérez Herrero, 1992, p. 117). In the same period, the Spanish Indies also witnesssed a shortage of slave workers. Clearly, this information matches what we have previously mentioned with regard to the decline in the entry of slaves and in the export of Central American products.

As the 17<sup>th</sup> century ended and the 18<sup>th</sup> century began, the Portuguese *conversos* replaced the Castillian traders, taking center stage in the export of wool to France, the Netherlands, and other European territories. Another example of the complementary relationship between wool and indigo was the fact that these Portuguese *conversos* were the ones responsible for supplying this colonial product to the Castilian wool factories (Diago Hernando, 2010). The same process occurred in the case of the Florentine demand of dyes for the textile industry, which was still important in the early 17<sup>th</sup> century. That resulted in

<sup>8</sup> AGS, *Contaduría Mayor de Cuentas*, 1779, n.º 17. There were 2325 crates of indigo plus 127 barrels that totalled 2452 items weighing 21431 *arrobas*. The captain of the ship was the German Pedro Tamens, who lived in Hamburg.

the need to import, not only indigo, but also cochineal from Tlaxcala (Núñez Roldán, 1989). These types of dye products were also demanded by the Venetian textile industry in the mid-17<sup>th</sup> century. In this case, the indigo and the cochineal were channeled via Dutch traders (Van Gelder, 2009, p. 86).

Thanks to the documents that established the standards for the payment of taxes on products that arrived in the Portuguese ports to the *arrendador*, we can measure the importance of the trade of indigo and dyed wools from Castille. There are references to up to four types of indigo being shipped from Castille to Portugal. If we consider these standards as approximate measures for the amount of indigo that arrived in the Portuguese ports, we can conclude that the most sought-after type was the "indigo from the Castillian Indies".9 After arriving at the Atlantic ports, part of the Guatemaltecan indigo went to Castille to be used in the wool industry and later re-exported as part of a manufactured product to the kingdom of Portugal. There were higher import duties on the "lãa de aninhos tintos em azul, ou lavados" than on other types of wool and it was subject to higher standards, leading us to conclude that the value of this product was higher than that of the other ones.<sup>10</sup>

In fact, after arriving in Europe via these Hispanic ports, the Central American indigo would either stay in Castille to be used in the textile industry or travel from these ports to other places. The networks established by the Portuguese *conversos*, who had kept their contacts with the economic centers of the Iberian peninsula, were crucial for the circulation of indigo to other international ports (Broens, 1989; Ebben, 1993; López Belinchón, 2001). The involvement of the Sephardic Jews and Portuguese traders from Livorno in the indigo trade was also considerable (Diago Hernando, 2010).

Based on the commercial information regarding one of many Portuguese companies that were operating at the time, it is possible to trace the route travelled by this product after arriving in Europe. In letters written in mid-1672, a few Portuguese traders in Rome, Livorno, and Naples mentioned the indigo and the "crates from Guatemala" they had bought in Cadiz, making references to the fact that they had passed through Livorno.<sup>11</sup> In the case of

<sup>9</sup> BAJ, 44-XIII-42, n.º 50, ff. 443-494. Pauta que hâo de ter os officiaes dos portos secos, & molhados de que he contratador Manoel da Costa Martinz; do que ha de entrar do Reyno de Castella, & deste Reyno para o de Castella. Lisboa, 1668. The part that mentions indigo is on f. 447. The four types of indigo are: "anil de bolinho da India, anil dito de Cerqueja, anil dito baixo, anil de Indias de Castella".

<sup>10</sup> Ibidem, f. 47or.

<sup>11</sup> AHN, *Estado*, 4907 (I). Please refer to the letters sent by Francisco Nicolás de Silva (Rome) and Pedro de Silva Enriques (Livorno) to Andrés de Silva (Naples) on 30-04-1672 and 22-08-1672, respectively.

the Portuguese trader Francisco Nicolás de Silva, from Rome, who bought significant amounts of indigo in Cadiz through his agents settled in Livorno and Naples (many of whom were his relatives), it was even possible to ascertain his involvement in the Castilian wool trade. Similarly to what had happened with the trading house of the Cortizos Villasante, Francisco Nicolás obtained a substantial income from the export of Castilian wool in 1680.<sup>12</sup>

Benjamin Barsulay and Gabriel Arias sent to Andrés de Silva, in Naples, large quantities of indigo and vanilla for sale.<sup>13</sup> During the last quarter of the 17<sup>th</sup> century, many of the correspondents and agents with whom these traders dealt to buy indigo in ports like Cadiz or Seville were Portuguese. However, they also resorted to the Italians on a regular basis, something that hints at the high degree of complexity of this web of constant transnational collaboration.<sup>14</sup> The Portuguese agents Gregorio Mendes and Sorcau Henriques provided information to their colleagues in Italy, from Seville and Cadiz respectively, not only about the prices of indigo, but also about the status of the shipments sent in Dutch and English vessels.<sup>15</sup> On the other hand, Italian agents like Jaime Gavalla, from Cadiz, Giovanni Battista Carminali, from Venice, the Garibaldo's company, from Madrid, or Franchi and Paulini's company, from Alicante, were continuously exchanging information with the Portuguese Silva, from Livorno, about the purchase and sale of wool and indigo in the 17th century.16 The contacts between Silva and the Italian company Ginori & Cavalli were especially important in the indigo trade.<sup>17</sup> The Ginori brothers held the Florentine consulates in the ports of Cadiz and Lisbon and their commercial networks connected the American world to the Mediterranean region through the port of Livorno, thus confirming the persistence of an interplay between the two Iberian empires promoted by this family and the business it developed in Cadiz and Lisbon.

- 12 AGS, Contaduría de Mercedes, 1393, 13. 15/03/1680. Interest in favor of Francisco Nicolás de Silva.
- 13 AHN, Estado, 4907 (I), 24-07-1671.
- 14 We recommend the most recent studies by Amélia Polónia and Cátia Antunes (2014) on the functioning and organization of these global commercial networks in international ports.
- 15 AHN, *Estado*, 5007 (I), 27-06-1679, letter fom Sorcau Henriquez's company (Seville) to Duarte and Luis de Silva's company (Livorno); AHN, *Estado*, 5010 (I), 12-12-1688, letter from Gregorio Mendes (Cadiz) to Luis de Silva (Livorno) providing information about the cochineal trade and the prices of indigo.
- 16 Please refer to the following commercial letters sent to Duarte and Luis de Silva, a company managed by Portuguese in Livorno: AHN, *Estado*, 5005 (I), 04-11-1674, Gavalla; AHN, *Estado*, 5010 (I), 27-11-1688, Carminali; AHN, *Estado*, 5007 (I), 22-06-1679, Garibaldo company; AHN, *Estado*, 5007 (I), 23-10-1679, Franchi & Paulini company.
- 17 By way of example, please refer to the letter AHN, *Estado*, 5007 (1), 04-02-1679, in which the Italians requested an acknowldgement of receipt of the indigo that had been sent to Silva.

Indigo also met another basic requirement to become one of the most popular products in Europe: its production required only a limited number of low-skilled workers, except during the harvest season, in June or July (Pérez Herrero, 1992, p.117). However, working in indigo production was extremely toxic, a fact that triggered interesting synergies in other domains.

# "IT RELEASES A SMOKE SO BAD THAT IT DAMAGES YOUR BRAINS". INDIGO AND THE WORKFORCE

Two documents sent in 1610 from Madrid to the president and the ombudsmen of the Real Audiencia of Guatemala and to the governor of Nicaragua, respectively, addressed the process of extraction of the indigo plant:

It has been verified and addressed, in the council of the Indies, the investment it would be advisable to make in order to sow indigo (in a way that could be useful for those provinces and their surroundings) and obtain considerable profits from it.<sup>18</sup>

This can be considered as the first reference to the goal of obtaining maximum profits from the production of indigo, although, as mentioned above, its cultivation and extraction were already widespread across a considerable area of the Pacific coast of Audiencia of Guatemala. Furthermore, the Pacific coast cultivators systematized the way in which the plant should be processed. Undoubtedly, they were making use of information that had been sent by other agents who had already noted the convenience and advantages of processing and selling the Central American indigo plant.<sup>19</sup>

In the same document there was information regarding the disadvantages of dealing with an indigo *obraje*. In fact, some of the stages of the production process of the indigo dye, which would later be exported, were extremely toxic and dangerous for the indigenous people:

Working with indigo is causing many people to fall ill and die, because it is a very strong herb. Just by putting one's hands or feet in the water [...] the herb eats at them and causes cancer. Then, battering the water with dye releases a smoke so bad it damages your brains and leads to other damages that have caused the death of many indigenous people [...].<sup>20</sup>

<sup>18</sup> AGCA, A.1.23. leg. 1514, ff. 193 and 194. Letters of 01-11-1610 to Audiencia of Guatemala and to Nicaragua, respectively.

<sup>19</sup> AGI, *Indiferente*, 1530, n.º 17. Letter by Carlos Arellano, who lived in Mérida (province of Yucatán) describing the sowing and benefits of the indigo plant.

<sup>20</sup> AGCA, A.1.23. leg. 1514, ff. 193 and 194.

The socioeconomic effects caused by these disadvantages were immediately felt (Wagner, 1994; Lovell and Lutz, 1995). There are records of many deaths among the indigenous people who performed these tasks. In a few recent studies there is an emphasis on the idea that the expansion of indigo and of the farms dedicated to its cultivation were the reason behind the disintegration of some indigenous communities, as in the case of the province of San Salvador, under the jurisdiction of Audiencia of Guatemala (Tous, 2008). As McCreery pointed out, the Spanish began forcing the pipiles people of the coast of El Salvador to pay their share of taxes by working in indigo farms (McCreery, 2006). The expansion of the indigo farms led the lands that were suitable for this crop to be concentrated in the hands of a creole and peninsular minority, thereby causing a food crisis and the disappearance of the indigenous population in certain Central American areas (Flores Macal, 1978; Mintz, 1985; Schwartz, 2005). For the case of the Portuguese Empire the same situation has been demonstrated (Cardoso and Chambouleyron, 2014).

This process had many socioeconomic impacts: "[...] the existing indigo mills mark the places where the indigenous villages used to stand [...]" (Cabezas Carcache, 1993). At the time, some people were already aware that the production of indigo dye was causing the devastation of entire indigenous villages. A document sent in 1636 from Audiencia of Guatemala to the Spanish government made another reference to the conditions in which some indigenous people lived and to their difficult coexistence with the slaves:

Nowadays, there are places that have been emptied of people because they died, not only as a result of the excess workload demanded by their employers, which is a lot more than human strength can handle [...], but also because the work is ruled by the slaves and by the blacks that force these indigenous workers to perform the tasks they had been entrusted with as slaves. They treat the indigenous people as their own slaves.<sup>21</sup>

Situations like this had been common for a long time. Pleas made to the president and the ombudsmen of Audiencia of Guatemala asking them to act efficiently against the Spanish, the mulattos, and the blacks who treated the indigenous people "worse than slaves" were constant. There were numerous

<sup>21</sup> AGI, *Guatemala*, 125, n.º 14. Álvaro de Quiñones Osorio, president of Audiencia de Guatemala, reported the damages suffered by the indigenous people who were working in the indigo *obrajes*.

<sup>22</sup> AGCA, A1.23, 1513, f. 676, 02-09-1587. Royal decree.

legislative acts that expressly forbade the blacks, seen as "universally badly behaved" <sup>23</sup>, from living in the indigenous villages. <sup>24</sup>

It was in the low and warm lands of the Guatemaltecan east and south, the areas that were more attractive to the Spanish and more suitable to grow indigo, from which the indigenous people almost completely disappeared (Lutz, 1993; Batres et al., 2005). On the other hand, the indigenous people had a higher survival rate in the Guatemaltecan highlands, an area that did not offer the most attractive conditions for living or exploiting the indigo business (Lovell, 2002). In short, the production of indigo triggered a migration of indigenous people that led to a demographic readjustment in the Guatemaltecan area (Lutz and Lovell, 2000). This process occurred together with an entry of slaves of African descent in the area and the social effects triggered by their arrival (Calderón Diemecke de González, 1973; Lizcano, 1993; Lokken, 2010).

Within the regulatory framework defined by the *Leyes Nuevas* (1542), which permanently sought to justify the use of the indigenous people and the slaves of African descent (García Añoveros, 2000), in 1549 there was a specific order for the protection of the indigenous born in Audiencia of Guatemala that prevented them from being hired to work in fabric manufacturing and sugarmills, "because it is said that one mill is enough to kill a thousand of them in a year". These conditions were extended and, theoretically, they should also have been applied to mining operations. In fact, the use of slave workers due to the ban from hiring indigenous people occurred also in the province of Honduras. The Honduran mine owners were continuously complaining about the difficulties caused by the shortage of workers. As mentioned by Melida Velásquez, in 1599 the Hispanic Monarchy allowed the Portuguese Pedro Gómez Reinel to take 200 slaves each year to the city of Trujillo. An identical clause is found in the agreement concluded with Juan Rodríguez Coutinho early in 1601 (Velásquez, 2001, p. 208).

In 1561 it was decreed that, in order to ease the situation faced by the indigenous people, the tax on the value of the slaves of African descent sold in the jurisdiction of Audiencia of Guatemala should be repealed to prevent the indigenous people from being hired to work in the mines and mills due to the lack of slaves.<sup>26</sup> The legislation on the subject was being continuously repeated,

<sup>23</sup> AGCA, A1.23, 1513, f. 557, 25-11-1578. Royal prohibition decree.

Other prohibitions in which the blacks were banned from living in the indigenous villages of Audiencia of Guatemala in: AGCA, A1.23, 1513, 23-09-1580, f. 579 and 22-12-1605, f. 47V; AGCA, A1.24, 1558, f. 198V, 21-03-1636, a royal decree that repeats the need to comply with the previously mentioned prohibition orders.

<sup>25</sup> AGCA, A1.23, leg. 1511, f. 108, 29-04-1549.

<sup>26</sup> AGCA, A1.23, leg. 1512, f. 292, 15-09-1561 and AGCA, A1.23, leg. 4575, f. 244, 15-09-1561.

emphasizing the prohibition to hire indigenous people to work in the indigo obrajes. In fact, in 1581 a new law was introduced stating the need to use slaves of African descent in the production of indigo, "which is abundantly produced in this warm land and, because it is a very profitable commodity and there are no black workers, the indigenous were called to harvest it and make it profitable (...)".27 On this occasion there was even a reference to the shortage of slaves to work with indigo in the area, proving once again the complementarity between the slaves of African descent workforce and the production of indigo. In order to cover this shortage, many slaves who were working in other trades were redirected to the indigo farms. That was the case with "40 black men and 20 black women" who were working in Nicaragua, in the construction of two galleons that were to sail to the Western islands. A Royal Decree established that they should work 6 months a year in the extraction of indigo.<sup>28</sup> In this way, there would also be savings in the salaries paid to the indigenous workers and the product could reach more competitive prices. Two months later, the cabildo of León (province of Nicaragua) asked the government of Madrid to send 100 slaves of African descent:

The benefits of indigo have been discovered in this land and, for being such a poor province, it would greatly benefit if your Majesty would be so kind as to send one hundred black men to assist in this particular area.<sup>29</sup>

Years later, the *cabildo* presented a similar request that reflected identical interests: "one hundred slaves to work with the indigo dye, which yields the highest earnings in this land". The convenience of using slave workers in indigo and other production areas was well-known. In one of the many bans aimed at protecting the indigenous people it was said that slaves of African descent or manumitted slaves should be employed in the extraction of mineral "so as not to reduce the profits" the reason why a direct connection was established between slave workers and these industries.

Consequently, from the early 17<sup>th</sup> century on, the slaves were gradually introduced into indigo, sugar, and also cattle farms (Sánchez Ochoa, 1993, p. 226). However, the slaves demanded by the Guatemaltecan indigo industry greatly exceeded the supply that was legally allowed by the Crown by resort-

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27 AGCA, A1.23, leg. 1513, f. 565, 15-05-1581.
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<sup>28</sup> AGCA, A1.23, leg. 1513, f. 565, 06-09-1579.

<sup>29</sup> AGI, Guatemala, 43, N. 18, 12-11-1579.

<sup>30</sup> AGI, Guatemala, 43, N. 21, 22-01-1586.

<sup>31</sup> AGCA, A1.23, leg. 4576, f. 50, 24-01-1601.

ing to private investors through the so-called *asiento* (Palomo de Lewin, 1993, p. 276).

Between 1635 and 1690, the importation of slaves witnessed a sharp drop that coincided with a decrease in the Central American exports, a circumstance that suggests a connection, even if partial, between slavery and the indigo trade.

Between 1651 and 1662, the Crown was once again directly responsible for managing the exploitation of the African slave trade revealing its inability to meet the demand, due to a shortage of resources (Guzmán Navarro, 1982).

Two specific documents have crucial data on the shortage of slave workers for the extraction of indigo during the second half of the 17th century. Both mention two requests to increase the number of slaves that were legally introduced through the asientos. The first (1664), sent by the Spanish government, asked Audiencia of Guatemala to provide information about the request from the city of Guatemala regarding the import of 2000 slaves of African descent who would be exclusively employed in the production of indigo dye. The proposal was to introduce that number of slaves via the port of Honduras during the seven years for which Domenico Grillo and Ambrosio Lomelín's asiento was valid (Palomo de Lewin, 1993, p. 278; Vila Vilar, 1977; Vega Franco, 1984). The acceptance of the request is not extant but, according to the second document we quote, it seems that the slaves were actually introduced via Cartagena, Portobelo, or Veracruz, and not via Honduras. In fact, the second document, from 1671, is a Royal Decree through which Audiencia of Guatemala was asked to say if it would be convenient to accept a request made by the representative of the city of Santiago de Guatemala: the annual import of 500 slaves to be employed in the extraction of indigo. The request was made considering the importance that the slaves had "for the agricultural farms, the indigo obrajes, the mills and trapiches of sugar and other products".32 In the same document it was also stated that virtually all the activity of these obrajes had stopped "due to the lack of black slaves".

The need to employ slaves in the production of indigo opened two interesting processes that corresponded to two ways of obtaining this type of worker: a legal one and an illegal one. In the former, the owners of the indigo *obrajes* were forced to buy slaves and, consequently, the cost of indigo production rose, leading to an increase in the price of the product in the European markets. However, we should note that the slaves were not paid for their labor (unlike the indigenous people), so it was possible to amortize that purchase in the long run, despite the fact that the mortality rates remained high. In fact, it seems that this was not a very profitable solution, because working with a product as

toxic as indigo was also affecting the slaves of African descent, who frequently saw their health being undermined. On the other hand, there were two main illegal ways to meet the demand of workers for the production of indigo. One was the smuggling of slaves and the possibility of buying slaves at lower prices (by evading the payment of *aranceles* and *asiento* rights). The annulment of the *asiento* by Philip IV, in 1640, favored the emergence of smuggling due to a lack of supply (Palomo de Lewin, 1993, p. 275; Vila Vilar, 1976). Undoubtedly, the introduction of slaves was particularly exposed to smuggling in a Central American area in which fraud and illegal activities aimed at getting 'round the Hispanic monopoly that thrived.<sup>33</sup> Unfortunately, we know little about the number of smuggled slaves that travelled to Audiencia of Guatemala from the Honduran ports - the official enclaves chosen due to the fact that they faced the Caribbean and were rather convenient.

In this case, it seems plausible that the English, from their privileged positions in the Caribbean and the Antilles, were able to take advantage of the growing and unmet Spanish demand for slaves to work in Central America by smuggling them via Belize, Jamaica, or Barbados through a route that would later (1713) become formal thanks to a concession granted by the Spanish crown to the Royal English Company. Law has mentioned that fewer than 10% of the slaves from the so-called "Slave Coast", in Africa, remained in Barbados and Jamaica (Law, 2001, p. 33). A search in *Voyages: The Trans-Atlantic Slave Trade Database*<sup>34</sup> reveals the important role played by the English traders in the introduction of slaves – most of whom came from the Gulf of Benin, Guinea, and Biafra – in Jamaica and Barbados between 1660 and 1670, the period in which the demand for slaves to work in the Central American dyeing industry and the difficulty in meeting it reached a peak. However, it is not possible to ascertain whether the slaves' final destinations were the Spanish Central American colonies.

What we did manage to reasonably demonstrate was the participation of the island of Jamaica in the Central American indigo trade and re-export to England in the early 18<sup>th</sup> century. According to the information sent by the governor of the island of Jamaica, Sir William Beeston, to the *Council of Trade and Plantations* on April 20<sup>th</sup>, 1700, of the 500,000 *libras* sent every year to London from Jamaica, nearly 150,000 were in "gold and silver, coin and uncoined",

<sup>33</sup> By way of example, please refer to: AGCA, A1.23, leg. 1514, f. 11, 03-10-1601. "Informado Su Majestad de los constantes fraudes en las Reales arcas de la Audiencia de Guatemala recomienda sean dictadas medidas".

Project directed by David Eltis and Martin Halbert (Emory University, Atlanta, Georgia, EUA): http://www.slavevoyages.org/ (visited on 30-09-2016).

and the rest in other commodities, with an emphasis on sugar, indigo, and Campeche wood (Martínez Ruiz, 2011, p. 182).

It was possible to maintain low costs in the production of indigo, thus allowing a higher profit margin, because the owners of the *obrajes* were continuously bypassing the pressure and the control of the Hispanic government to prevent the employment of indigenous people, who often received only clothes and food instead of a salary in exchange for their work (Tandeter, 1982). Sometimes, the employment of slaves of African descent in the indigo farms was merely a ploy to show the authorities that slaves were being hired instead of indigenous people (Palomo de Lewin, 1993, p. 280). Undoubtedly, the most frequently used method to obtain workers was to violate the laws that forbade the employment of indigenous people. An example of this is the appointment of Cerrato as president of Audiencia of Guatemala to fight illegal slavery in Central America. In 1549, while travelling in San Salvador, he found many indigenous people who were kept as slaves. He freed 500 of these who were kept as slaves by nearly 40 residents, in that one province alone (Sherman, 1989). Cerrato was implacable in his fight against illegal slavery. In 1636, Álvaro de Quiñones Osorio, president of Audiencia of Guatemala, provided information on the suffering that the indigenous people were experiencing, since they continued to be hired for the production of indigo dye.35

The law was not always strongly enforced in Audiencia of Guatemala. The need to use indigenous people as slave workers at very low costs led the owners of the *obrajes* to resort to all kinds of bribes and frauds with the complicity of the people responsible for maintaining the law. The failure of the judges or *visitadores* to play their roles in the control of the indigo *obrajes* reached such proportions that they were dismissed and their responsibility transferred to the *Alcaldes Mayores*:

Therefore, there was a decision to dismiss these judges because their financial costs and salaries were covered at the expense of indigenous blood, and it is said that their only goal is to work as accomplices of the owners of the *obrajes* when it comes to their operation and revenues. The judge only wants an *obraje* to work well and have lots of indigenous workers [...].<sup>36</sup>

The geographic distance to the Council of the Indies (in Seville) made it infeasible to ensure the compliance with the laws that regulated work in the *obrajes*. And if that were not enough, the Spanish government itself did not

<sup>35</sup> AGI, *Guatemala*, 125, n.º 14. A compelling memoir comprising 115 folios of explicit critics to this situation.

<sup>36</sup> AGCA, A1.23, leg. 1516, ff. 20-23, 03-07-1627.

show much interest in these illegal activities, and even offered the possibility of removing the *jueces de visita* from the chain of control of the indigo *obrajes* if the farm owners paid 100 *libras* of dye every year directly to the king, thereby generating an income of 30,000 *ducados*.<sup>37</sup> It was, undoubtedly, a form of institutionalized fraud. When the Spanish government exerted pressure by sending *jueces de comisión*, there were protests in the affected provinces, which considered that "those judges were not necessary because these were first instance issues for which the governors were responsible".<sup>38</sup>

Additionally, the dyad that combined the production of indigo dye with the introduction of slaves resulted in the specific appointment of private judges to control the "compositions of the *obrajes*"<sup>39</sup> and to introduce slaves in the provinces covered by the jurisdiction of Audiencia of Guatemala.<sup>40</sup> These figures, who were well-known in all the territories of the Spanish Monarchy (Sanz Ayán, 1996; Crespo Solana, 2013; Zaugg, 2011; García Montón, 2015), were crucial in promoting commercial transactions and streamlining administrative and bureaucratic procedures that were often too slow. The appointment of private judges implied the annulment of the competencies of the ordinary judiciary. In America, these private judges would only respond to appeals from the Council of the Indies and "to no other judge, *audiencia* or court in the Indies".<sup>41</sup> Generally, the socio-professional profile of the *jueces conservadores* responded to the same parameters. Most of them had provided judicial services to the Monarchy and belonged to the *audiencias*.

#### CONCLUSIONS: GLOBAL ECONOMY AND SOCIAL EFFECTS

This article is framed in a context of globalization and interconnection between the Pacific, the Atlantic and the Mediterranean spheres that involved different agents, and applied it to the study of a specific product (Böttcher, Hausberger and Ibarra, 2011; Fusaro, 2008; Aram and Yun, 2014).

The comprehensive study regarding the production, circulation, and consumption of colors provided by American dyes can provide a good opportunity to analyze the operation and impact of this globalization process. The arrival of the Europeans in America, as a part of the expansionist process on a

<sup>37</sup> AGCA, A1.23, leg. 1517, f. 35, 12-03-1643.

<sup>38</sup> AGI, *Guatemala*, 43, n.º 35, 02-08-1632. Memoir from the province of Nicaragua asking for *juez de comisión* to be sent both to this province and to San Salvador to "investigate the production of indigo dye".

<sup>39</sup> AGCA, A1.23, leg. 4586, f. 270r and v. 07-04-1696.

<sup>40</sup> AGCA, A1.23, leg. 4582, f. 311, 10-02-1676.

<sup>41</sup> AGCA, A1.23, leg. 4587, ff. 155-158, 03-03-1682.

global level that began in the 16<sup>th</sup> century, had immediate consequences in the establishment of contacts and permanent interactions between the geographical areas of Africa, America, and Europe.

The production and trade of indigo during the 16<sup>th</sup> and 17<sup>th</sup> centuries allows us to analyze the path and interactions of a "total product" that, on a global scale, favored the creation of economic and social links with other markets. Cultivated on the Pacific coast, indigo was exported to Europe via the Atlantic and then re-exported to other Mediterranean ports and to Northern Europe, largely thanks to the international commercial networks. In this sense, one of the future research lines could be to use the comparative approach in the analysis between Indigo, Cochineal, and Brazilwood in order to deepen knowledge on the permeability between the Atlantic and Mediterranean trade and to measure the impact of the practice of monopolistic barriers, theorized especially for Iberian empires.

The chronological framework that we have considered is a seldom explored period, but one that is very attractive, due partly to the major role that indigo came to play later on, in periods that are much better known and documented. Undoubtedly, from 1750 on the production of indigo saw a dramatic surge (Wortman, 1982; Fernández Molina, 2003; Acuña-Ortega, 1978; Floyd, 1965). This also led to exponential growth in the fraudulent activities that surrounded the industry (Garrigus, 1993). In the first half of the 18th century there were already signs of economic vitality and of a definitive take-off of the Central American indigo trade (Santos Pérez, 1999). The landowner class grew stronger around this product, because the enourmous profits obtained with the favorable prices of indigo allowed this social group to increase its cohesion and political power (Flores Macal, 1978; Santos Pérez, 2000). It is easier to understand the momentum generated by indigo in other spheres in this period. By way of example, we can mention that some of the taxes on indigo exports supported chairs in the University of San Carlos of Guatemala, paid for the maintenance of 100 guards and 25 horsemen to serve the Audiencia, and financed construction works in the Castle of Omoa.<sup>42</sup> Furthermore, Central American indigo strengthened the links between the Atlantic and the Northern European ports. In the mid-18th century, indigo was playing a key role among the imported products that travelled from the Spanish ports to ports like Amsterdam (Crespo Solana, 2000, p. 29).43

<sup>42</sup> Please refer to AGCA, A1.3.1, leg. 1882, exp. 12236, f. 134, 25-04-1758; AGCA, A2.1, leg. 2, exp. 3, f. 1, 18-10-1718; AGCA, A1.23, leg. 4624, f. 104, 12-02-1760, respectively. The first two proposals were not accepted.

<sup>43</sup> Against the 2,225 *libras* of cochineal there is a reference to the arrival of 19,280 *libras* of indigo exported to Amsterdam in 1753.

Therefore, the Central American indigo dye should be considered, not only as a dynamic product on a local scale, but also as a commodity with global implications that had knock-on effects, some of which with important social consequences, namely the presence and gradual integration of African descendents in the area and its coexistence with the indigenous and European societies. Consequently, we should assess its social impacts on the places where the slaves came from (Law, 1991). On the other hand, indigo allows us to establish a continental interrelation and a continuous dialogue between America, Africa, Europe, and the Pacific area, in line with the new historiographic trends in Atlantic History and the global trade.

At the end of the 18<sup>th</sup> century the competition from other dyes, together with the replacement of entire indigo plantations with other, more profitable, crops (e.g., coffee or tobacco) led the indigo dye to lose its importance in the European markets.

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AGCA, Archivo General de Centro América (Guatemala) AGI, Archivo General de Indias (Spain) AGS, Archivo General de Simancas (Spain) AHN, Archivo Histórico Nacional (Spain) AHPS, Archivo Histórico Provincial de Sevilla (Spain) ASFI, Archivio Storico di Firenze (Italy) BAJ, Biblioteca da Ajuda (Portugal)



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