

Glimpses of the colonial collections at the 1862 London Exhibition: The case of the Angolan 'Objects' at the Portuguese section

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Abstract: The 1862 London Exhibition 'was a symbol of mid-Victorian aspiration' with a clear image to the world of Britain's ambition and its empire. These kinds of exhibitions were opportunities for other empires, such as the Portuguese to assert and highlight the potential of its colonies. The case of the Portuguese representation during the 19th century in world exhibitions has been examined, however, the display of colonial products remains somehow less explored, namely, the ones related with the African flora. This research examines the representation of Portugal and its colonies at the 1862 London Exhibition, in particular, the case of the colonial objects of natural history collected what today is known as Angola. After the loss of Brazil, Africa was seen in a mythical way as the *Eldorado*, ready to fulfil the destiny of the nation by which it eventually could recover the status of a great power. Several aspects of the exhibition were analysed, in particular: objects and actors involved in the preparation of the Portuguese section. Regarding the later, two main figures were crucial for the organisation of this representation: Friedrich Welwitsch (1806-1872) who performed the *Iter Angolense* expedition (1853-1860), organised, contributed and suggested objects that should be collected from Angola and Júlio Máximo de Oliveira Pimentel (the second viscount of Vila Maior, 1809-1884) the royal commissioner at the London Exhibition. In order to understand which objects were on display, Welwitsch's publications: *The Preliminary Notes on various objects from Angola* (1861) and *Explanatory Synopsis of Samples of Timber and Medicinal Drugs* (1862) were crucial to

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this research. Although the Portuguese representation was severely criticised by the press, Welwitsch was awarded with four gold medals for the colonial objects presented.

Keywords: Angola; 1862 London Exhibition; Friedrich Welwitsch (1806-1872); Portugal; viscount of Vila Maior (1809-1884).

Introduction

The 19th century great exhibitions – world, universal or international – were places of wonder, exchanges and encounters which amplified the circulation and dissemination of knowledge, granting nations the opportunity to promote their technical, scientific and artistic progress. Universal exhibitions were visited by a huge public, which allowed new relations between science and the public – the popularisation of science, as well as the circulation of science and technology (Matos, Gouzévitch, and Lourenço 2010; Castro 2017). The topic on international exhibitions is not novelty and has resulted on rich and abundant literature which keeps growing (Bennett 1988; Çelik and Kinney 1990; Greenhalgh 1991; Gilbert 1994; Hoffenberg 2001; Mackenzie 2008; Qureshi 2011; Blanchard, Boëtsch, and Snoep 2011).

The case of Portuguese sections during the 19th century in world exhibitions has been examined as well (Vicente 2003; Cantinho 2006; Alves 2006; Matos 2010; Souto 2010, 2011; Castro 2017), however, the display of colonial products remains somehow less explored. At the time that these exhibitions occurred, Portugal was facing the period of Regeneration (1851), a new progressive cycle, whereby the country transitioned from a phase of conflict and uncertainty (Portuguese Civil War 1832-1834) to a period of relative political stability, social pacification and economic and technical-scientific development. For this reason, these grand events offer the possibility to present Portuguese products as part of the process of affirming the power of the Portuguese State (Souto 2010: 98). The international exhibitions of the 19th century ‘were used as vehicles to legitimate and disseminate the colonial policies of the European empires, and to spread propaganda about them’ and also reflected ‘the worldview of a society

that saw itself on a global scale and was the fruit of progress' (Castro 2017: 309). Having in mind these colonial ideas and representations, this research intends to go against the grain and give a glimpse of the products on display, spaces and actors involved in the execution of the representation of Portugal, namely the Portuguese colonies at the time, mainly Angola. In order to do this, the case of the Portuguese representation the London International exhibition 1862 has been analysed. After the independence of Brazil in 1822, which was only recognized by Portugal in 1825, the Portuguese empire tried to rebuild itself and Africa was part of this plan (Jerónimo 2018). It is important to have into account that Angola was considered the most promising province of the empire and seen as the new *Eldorado* of Portuguese imperial nationalism (Alexandre 1998: 151).

The Victorians and the 1862 London Exhibition

The Exhibition of 1862 grows as naturally out of that of 1851 as one generation proceeds from another. It is not an imitation but a consequence of its predecessor, and one, we cannot doubt, which is destined in its turn to form a link in a chain, and a step in a series, by which the progress of the arts may be periodically reckoned amongst us – arts that renew the youth of our civilisation, and help to prove that all our bygone triumphs are but the earnest and the prediction of greater triumphs yet to come.²

The International Exhibition of 1862 was held between 1st May and 1st November at South Kensington, London and received over six million visitors.³ Organized by the *Society for the Encouragement of Arts, Manufactures and Commerce*, held 28,000 exhibitors from thirty-six countries (Yallop 2011: 7).

² *The Illustrated London News*, 'The Exhibition of 1862', p.79, 25.1.1862.

³ 'The Exhibition Building of 1862', in Survey of London: Volume 38, South Kensington Museums Area, ed. F H W Sheppard (London, 1975), pp. 137-147. British History Online <http://www.british-history.ac.uk/survey-london/vol38/pp137-147> [accessed 13 February 2019]; Bureau International des Expositions, Expo 1862 Londres, <https://www.bie-paris.org/site/fr/1862-london> [accessed 13 February 2019].

Not only the 1851 Great Exhibition, but also the 1855 Paris Exhibition, 'had accustomed the Victorians to the idea of huge and eclectic displays, sparkling showcases for the most beautiful, the most efficient and the most innovative' and the 1862 London Exhibition was no exception (Yallop 2011: 9). The London exhibitor visitors were expected 'to be amazed and entertained by the practical, the pioneering and the extraordinary'. These expectations were also influenced by the press, as an example, *The Illustrated London News* (Figure 1) filled the imagination of those who had never before visited an exhibition, through its engravings and detailed descriptions in a special event supplement which informed about the exhibition's progress and related news.



Fig. 1. 'The International Exhibition: View of the Nave looking East' engraving from *The Illustrated London News*, p. 249, 30.8.1862. Copyrights: Public Domain, Google-digitised.

The 1862 London Exhibition 'was a symbol of mid-Victorian aspiration' with a clear image to the world of Britain's ambition and its empire. However, it was also the

possibility, to millions of visitors to admire the exotic and desire novelties, beautiful and unusual things (Yallop 2011: 9; Souto 2011). The exhibition had the emphasis on the historic and the romantic, focusing the public's attention 'on the beauty of medieval and Renaissance objects for the first time, introducing unknown styles and techniques' (Yallop 2011: 11). Nevertheless, the foundation of the exhibition was the manufacture and industrial production. The construction of the South Kensington building conceived for this event followed Francis Fowke (1823-1865) project and was marked by the architecture of cast iron, highlighting the idea of industrial production.⁴ The Exhibition Palace was conceived to represent the ideal of progress and the achievements of the Industrial Revolution, as a space of economic, social and political power and "for presenting and promoting the socio-economic development of an imperial Europe, which had mapped out the world" (Castro 2017: 309). Influenced by the imperial expansion in Africa and driven by great scientific expeditions to the interior of the African continent, the London Exhibition would function as a vehicle for propaganda and dissemination of the *exotic* to a wider audience (Souto 2011):

[...] the exhibitions provided unique opportunities to highlight new landscapes, especially those that exhibited the local indigenous artistic culture of the distant possessions belonging to the European colonial empires (Castro 2017: 309).

In this context, Portugal benefited from the results of the *Iter Angolense* expedition (1853-1860) performed by the Austrian botanist Friedrich Martin Joseph Welwitsch (1806-1872). Welwitsch became a member of the governmental commission, formed on 10th April 1861 with the mission to prepare samples of objects of the Portuguese representation, in particular the 5th section (products of the overseas territories) at the 1862 London Exhibition (Dolezal 1974: 67-68).⁵

The *Iter Angolense* expedition had as its main objectives "to obtain the most extensive knowledge [...] of natural products", promoting the "development of the wealth and

⁴ Bureau International des Expositions, Expo 1862 Londres, <https://www.bie-paris.org/site/fr/1862-london> [accessed 13 February 2019].

⁵ Diário de Lisboa, Número 85, Página 1027, 3^a Coluna, 17th April 1861.

well-being of its inhabitants; and relations with the Metropolis" (Albuquerque, Brummitt, and Figueiredo 2009: 641).⁶ Centered in Angola, the most promising province of the Portuguese empire, the expedition compiled collections, researches and inventories of the fauna, flora and mineral resources of Luanda, Bengo, Cuanza Norte, Malange, Benguela, Namibe and Huila provinces (Alexandre 1998: 151; Areias 2012: 38).

Preparing the representation of Portugal at the 1862 Exhibition

By royal decree of 10 April 1861, the king D. Pedro V (1837-1861) created the *National Products Exhibition Steering Committee/Comissão directora da exposição dos produtos nacionais* in Lisbon. This Committee aimed to organise an exhibition in Lisbon in order to choose the metropolitan and colonial products to be sent to London, the publication of the official programs of the event and the definition of the necessary measures for the success of the Portuguese representation.⁷ With the honorary presidency of D. Fernando II (1816-1885), father of D. Pedro V, the Commission was organised into five sections: agricultural industry; manufacturing industry; extractive industry, buildings and steam engines; fine Arts; and products from overseas provinces (Souto 2011: 90-91).⁸ Chaired by José Rodrigues Coelho de Amaral (1808-1873), former governor of Angola, and secretariat by Simão José da Luz Soriano (1802-1891), the 5th section had 10 vowels, including F. Welwitsch, who wrote the *Preliminary Notes on various objects from Angola, proper to the London exhibition/ Apontamentos preliminares de varios objectos de Angola, proprios á exposição de Londres* (1861).⁹

On 27 April the Committee was permanently installed in the *Ministry of Kingdom Affairs/Ministério dos Negócios do Reino*, and thereafter called the *Permanent Central Commission/ Comissão Central Permanente* being operational until July 1863.¹⁰

⁶ Decreto de 10 de Abril de 1852. *Collecção Official da Legislação Portugueza redigida por José Maximo de Castro Neto Leite e Vasconcellos*. Anno de 1852, Lisboa, Imprensa Nacional, 1853, p. 56.

⁷ Diario de Lisboa, n.º 84, 16-04-1861, p. 1017

⁸ Diario de Lisboa, n.º 84, 16-04-1861, p. 1017.

⁹ Diario de Lisboa, n.º 84, 16-04-1861, p. 1017-1018. Rectificações no Diário de Lisboa, n.º 85, 17-04-1861, p. 1027.

¹⁰ Decreto de 14 de Julho de 1863. *Collecção Official da Legislação Portugueza redigida por José Maximo de Castro Neto Leite e Vasconcellos*. Anno de 1863, Lisboa, Imprensa Nacional, 1864, p. 319.

Composed of 74 individuals, it was criticised for its excessive size, which would compromise its operability (Souto 2011: 90-91).

A decree sent by the Secretary of State for Navy and Overseas Affairs to the then Governor-General of Angola, Sebastião Lopes de Calheiros and Meneses (1816-1899),¹¹ urged him to “excite” the living forces of the Province, in order to send to Lisbon the main agricultural and industrial products of the region. With a pragmatic objective and clear political, economic and financial motivations, it was mentioned:

It should be borne in mind that these exhibitions are not only about the high deserving and absolute perfection of the products, but also about what each country can produce, so that often a less perfect article or object can be achieved for tiny prices and which meets many of human needs, deserves a prize and can show the existence of a profitable trade source.¹²

As mentioned previously, Welwitsch organised the showcase of colonial products from the Angolan possessions: botanical, ethnological, commercial, industrial and agricultural, for the London Exhibition. Besides contributing with collections from *Iter Angolense*, he also suggested other objects to be on display at the exhibition. In order to do this, Welwitsch produced a preliminary list which provided suggestions of several objects to be sent from Angola, which included several zoological specimens with the localities where these ‘objects’ could be found more easily.¹³

The *Preliminary Notes on various objects from Angola* was published on April 30, listing 34 colonial products indispensable to the London Exhibition.¹⁴ Although, Welwitsch refers to ‘objects’, they are in their majority natural products that have not been manufactured. Some of these listed ‘objects’ included: elephant teeth (Cassange and

¹¹ “Comissão Portugueza para a Exposição Universal de Londres no anno de 1862”. *Jornal do Commercio*, n.º 2280, 08-05-1861, p. 1.

¹² Portaria de 27 de Abril de 1861. *Collecção Official da Legislação Portugueza redigida por José Maximo de Castro Neto Leite e Vasconcellos. Anno de 1861*, Lisboa, Imprensa Nacional, 1862, p. 184-185. Translated from the Portuguese: “Que deve ter em vista que nestas exposições não se atende só ao alto merecimento e perfeição absoluta dos produtos, mas também se pretende conhecer o que cada país pode produzir, de modo que muitas vezes um artigo ou objecto menos perfeito, mas que se alcança por preços diminutos, e que satisfaz muitas das necessidades humanas, merece prémio e pode mostrar a existência de uma fonte de comércio proveitosa.”

¹³ Portaria de 30 de Abril de 1861. *Collecção Official da Legislação Portugueza...*, p. 185-187.

¹⁴ Portaria de 30 de Abril de 1861. *Collecção Official da Legislação Portugueza...*, p. 185-187.

Benguela), hippo's teeth (Loanda and Mossamedes), zebra fur (Mossamedes), boa skins (Loanda), ostrich feathers (Mossamedes), among others. The ethnological objects, the botanical and geological products listed, consisted in the following: weapons and suits of the 'natives' from different backlands, pottery and musical instruments made by the 'natives' (Golungo Alto), bricks (Huila), raw cotton (from Luanda, Ambaca, Mossamedes and Porto Pinda), gums, resins, fruits and seeds from different species, pineapple and banana fibers, tobacco leaves and cigars (Ambaca), coffee (Golungo Alto and Cazengo), petroleum (Libongo), salt (Porto Pinda, Mossamedes), just to name a few.¹⁵

The items suggested clearly demonstrate the necessity to show the exotic and to give a glimpse of 'The other' at the international exhibition. The examples of that are the animal teeth, feathers, fur and skins on display (Arnold 1996; Pratt 1992). The ethnological objects (weapons, suits, pottery and musical instruments) "seemed to emphasize to the Victorians the gulf of racial difference" and in the 1862 exhibition, the african objects "were most commonly kept separate from familiar works of art" (Yallop 2011b: 333). It is important to emphasize that the "display of ethnographic artefacts reinforced the Victorians' view of themselves as advanced, sophisticated and superior" (Yallop 2011b: 337).

Another exotic item was cotton, such as silk, was on display in almost every country represented in the exhibition, and Portugal was no exception.¹⁶ At Welwitsch's *Preliminary notes*, the first botanical product mentioned is cotton.¹⁷ The gums and resins also aroused interest, in particular, copal gum/*goma copal*, whose origin was a mystery to the Austrian collector (Welwitsch 1866). Welwitsch, while was in Angola tried to understand the species of trees that originated copal gum, and later suggested that the gum was a fossil resin (Welwitsch 1866). Although Welwitsch was focused on botanical

¹⁵ Portaria de 30 de Abril de 1861. *Collecção Official da Legislação Portugueza...*, p. 185-187.

¹⁶ Jornal do Commércio, Nº 2712, 21 October 1861, page 1.

¹⁷ Portaria de 30 de Abril de 1861. *Collecção Official da Legislação Portugueza...*, p. 185-187.

collections, the zoological items gave the exotic factor that was needed in order to display the Portuguese colonies at this exhibition, Angola in particular.

Accompanying the published list, were instructions for shipping the products, regarding its presentation, conservation, classification, and dispatch. The Central Commission made recommendations for exhibitors, which were published in various official bodies and press, with precise instructions for sending the goods to the metropolis - Lisbon. It was requested to send it "in excess of the quantity indicated to cover any accidental misconduct".¹⁸ The vegetable products should be packed in 1-liter or 1-kilogram wide-mouth glass-stoppered glass bottles. The wood samples, should be "bark logs of 0.15m long and about 0.08m in diameter".¹⁹

Setting the date of 31 October 1861 as the time limit to receive the products at the *Arsenal da Marinha/Navy Arsenal* in Lisbon, they should be accompanied by all the necessary additional information, in particular: the identification of the exhibitor; the common name of the product; the place and date of production; destination of the products after the end of the exhibition; refund, sale or assignment to the government, among others.²⁰ These kind of showcases, were traditionally presented at the *Arsenal da Marinha* before leaving to the world exhibitions (Cayolla 1945: XIII-XIV). It was mainly an opportunity to "test" the products and to select the best ones for the international exhibition. The exhibitions in Lisbon were an essential preparatory element for the construction of the official sections in international exhibitions. This also reflects all the propaganda around the exhibitions. Taking into consideration that the majority of the Portuguese audience was not able to visit the international exhibitions, these collections were on display to the Portuguese public. In this way, the public could have a sense of belonging to the Portuguese empire through its colonial collections.

¹⁸ "Exposição Universal de Londres. Comissão Central Portugueza", *A Revolução de Setembro*, n.º 5805, 13-09-1861, p. 3.

¹⁹ "Exposição Universal de Londres". *O Commercio do Porto*, n.º 218, 24-09-1861, p. 1.

²⁰ "Exposição Universal de Londres. Comissão Central Portugueza", *A Revolução de Setembro*, n.º 5805, 13-09-1861, p. 3; "Exposição Universal de Londres". *O Commercio do Porto*, n.º 158, 16-07-1861, p. 1.

Nevertheless, this process was extremely lengthy. In the press, it was mentioned the delays and difficulties of the district committees. In this sense, the traditional exhibition of national products, which took place in the *Sala da Fazenda*, a special room at the *Arsenal da Marinha*, would only be held in December, not allowing an evaluation and a rigorous and timely examination of the collections.²¹ According to the testimony of a journalist from the Portuguese newspaper *A Revolução de Setembro*, “the room was surrounded by shelves and showcases completely occupied by specimen collections”²². The same newspaper also reported on a collection of colonial products, prepared by the Overseas Council/ *Conselho Ultramarino* and presented to D. Fernando.²³

In the early months of 1862, initiatives related to the preparation of Portuguese participation intensified. On 3 March, the government appointed Júlio Máximo de Oliveira Pimentel (1809-1884), 2nd Viscount of Vila Maior, as Royal Commissioner for the London Exhibition.²⁴ His role was to “represent the economic interests of the country at the London Universal Exhibition”; “Chair the study committee”; and “inspect everything concerning the exhibition of Portuguese products”.²⁵

The Portuguese collections finally left Lisbon on 21 March, aboard the *Vasco da Gama* steam, arriving in London on 28 March.²⁶ The *Central Commission*, thus had only one month to transport, unpack and display the products at the South Kensington Exhibition Palace. In addition, only in July, two months after the inauguration of the London

²¹ “Exposição Universal de Londres em 1862”. *Jornal do Commercio*, n.º 2455, 05-12-1861, p. 1; “Exposição Universal de Londres. *O Commercio do Porto*, n.º 106, 11-05-1861, p. 1.

²² “Productos para a Exposição de Londres”, *A Revolução de Setembro*, n.º 5896, 31-12-1861, p. 2; “Visitas reaes”, *A Revolução de Setembro*, n.º 5952, 12-03-1862, p. 1.

²³ “Productos para a Exposição de Londres”, *A Revolução de Setembro*, n.º 5896, 31-12-1861, p. 2.

²⁴ Decreto de 3 de Março de 1862. *Collecção Official da Legislação Portugueza redigida por José Maximo de Castro Neto Leite e Vasconcellos. Anno de 1862*, Lisboa, Imprensa Nacional, 1863; *Relatorio do Commissario Regio...*, p. 3.

²⁵ “Instruções para regular o serviço dos commissarios portugueses à Exposição Universal de Londres”, 11-03-1862, p. 1 (PT-UC-FCT-BOT-VVM-L-11_0138). Arquivo da Universidade de Coimbra, Departamento de Ciências da Vida da Faculdade de Ciências e Tecnologia – Arquivo de Botânica, Fundo Visconde de Vila Maior, Secção Comissário régio à exposição de Londres de 1862, Série Correspondência Oficial do Governo.

²⁶ *Relatorio do Commissario Regio...*, p. 4; “Productos portuguezes”, *A Revolução de Setembro*, n.º 5950, 09-03-1862, p. 2.

Exhibition, was authorized the provision of 35 000 \$ 000 *reis* for expenditure on Portuguese products.²⁷

The Portuguese section at the 1862 International Exhibition

The South of Europe is wonderfully well represented by Spain and Portugal in the wine and food class. Out of 2200 exhibitors from those twin countries, more than one-half make a display of creature comforts. These comforts have a very wide range both in fluids and solids; and amongst the latter there will be almost everything from acor-coffee to sausages. Portugal promises to show some fine modelling in wax; and Spain one exhibitor of machinery.²⁸

The products from the Portuguese section that deserved more attention by the *Illustrated London News* were wine and food and “fine modelling in wax”, as the quote above demonstrates. The colonial products, although were not reported by this newspaper, caught the attention of scientific institutions and scientists, as we will demonstrate in this section.

Arriving in London, the royal commissioner encountered some constraints. Firstly, the small size of the space reserved for the Portuguese section, 445m² in total (Figure 2 & 3). Then, the products display had to take place in four different spaces: two on the ground floor – flanked by the sections of Spain and Italy – and two on the upper floor, where the collections of colonial products were accommodated.²⁹ According to the *Report of the Commissioner/ Relatório do Comissário Régio* there were 3 sections dedicated to the Angolan products, and one of them had Welwitsch’s name (Figure 3). The choice for a display typology based only on nationality was widely criticised, both

²⁷ Lei de 2 de Julho de 1862. *Collecção Oficial da Legislação Portugueza redigida por José Maximo de Castro Neto Leite e Vasconcellos. Anno de 1862*, Lisboa, Imprensa Nacional, 1863, p. 172.

²⁸ *The Illustrated London News*, ‘Progress of the International Exhibition’, p. 400, 19.4.1862

²⁹ *Relatorio do Comissario Regio...*, p. 8 e 10-11; LONDON INTERNATIONAL EXHIBITION, 1862, p. 123.

by the various national commissions – such as João de Andrade Corvo (1824-1890), by the exhibitors themselves and the press.

This model made it difficult to display products and evaluate them, damaging the activity of the international jury. In 1867, in reaction to this model at the Paris Universal Exhibition/ *Exposition Universelle d'Arte et d'Industrie*, would appear the system of the pavilions, showing the products by country and by typology (Souto 2011: 102-103).³⁰ From March to April 1862, the Viscount of Vila Maior was responsible for the design, planning and execution of the Portuguese section at the London International Exhibition, “obliged to draw up within a few hours a project that should be carefully considered and subjected to severe scrutiny to satisfy requirements of a methodical disposition and reasonable elegance.”³¹

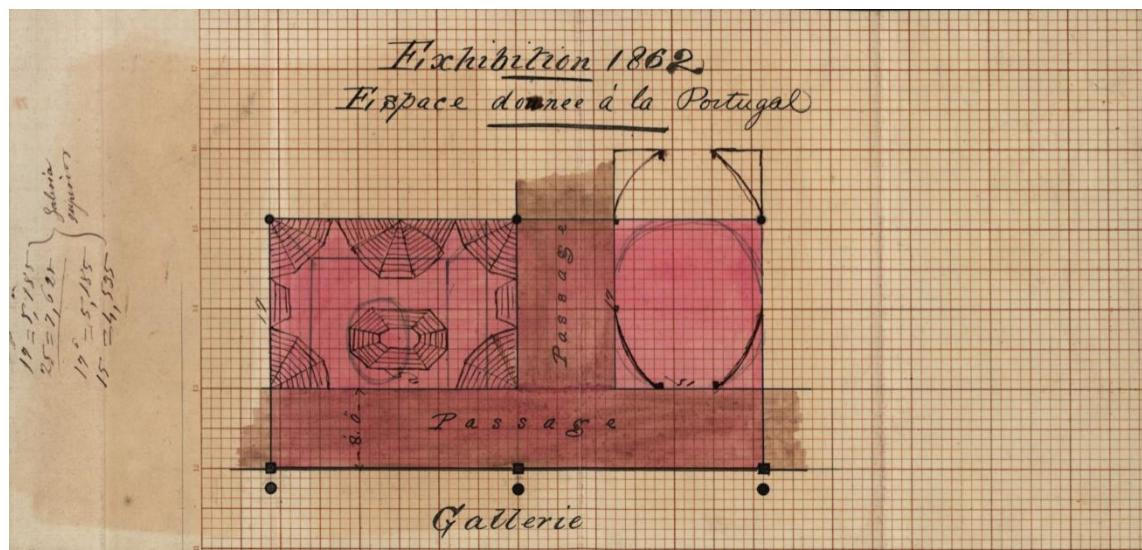


Fig. 2. Sketch of the space for Portugal on the top floor of the Palace of Exhibitions in South Kensington. Source: Unidentified Author. Arquivo da Universidade de Coimbra (PT-UC-FCT-BOT/VVM/L-04).

³⁰ “Palacio da Exposição de Paris”. *O Panorama*, n.º 30, 1867: 240.

³¹ *Relatorio do Commissario Regio...*, p. 9.

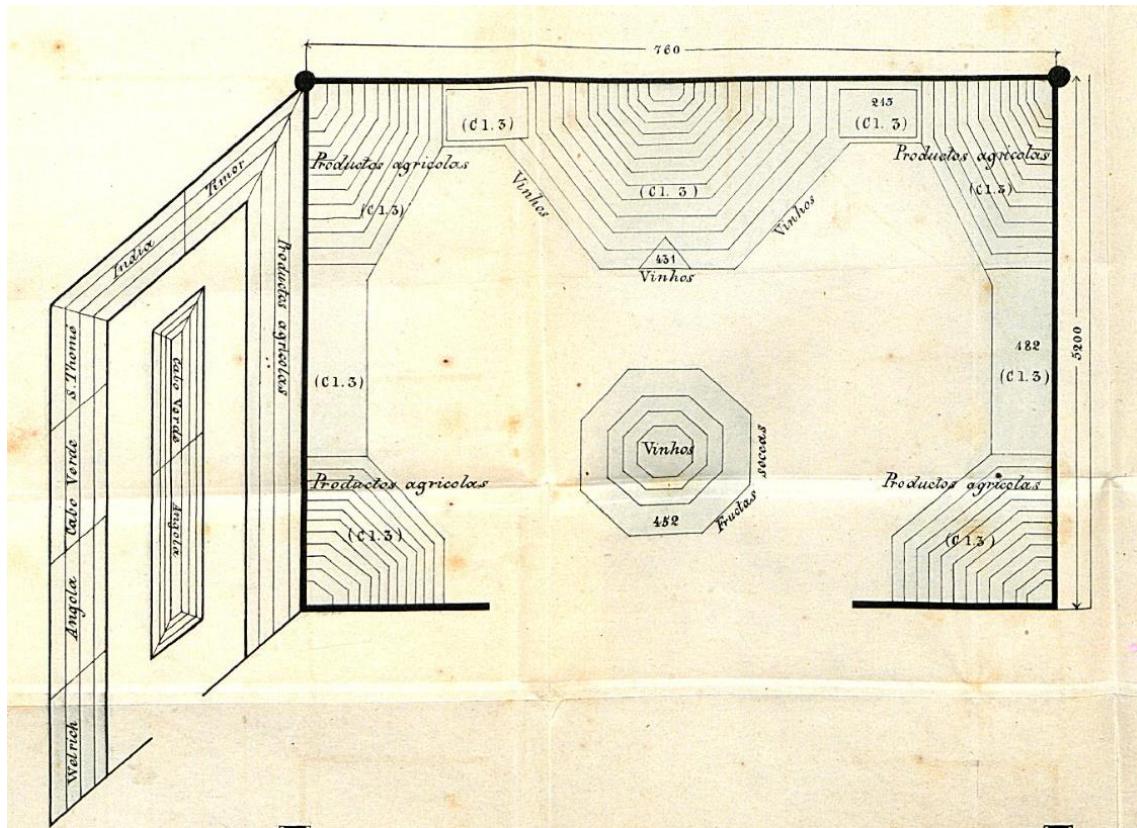


Fig. 3. Definitive floor plan of the Portuguese products display at the 1862 Exhibition, 1st floor. Source: *Relatorio do Comissario Regio...*, p. 66.

This planning was intricate, involving not only the hiring of specialized companies in London, but also the collection, transport, unpacking and storage of products sent from Portugal in different steamers, with transport guides addressed both for the royal commissioner and the consulate. In addition, the exhibition cabinets and tables had to be built on site, especially for the occasion.³² With the inauguration of the Exhibition on the 1st of May, the activity of the royal commissioner and the members of the study commission focused mainly on the support and clarification of the international jury, due to the poor organization of the Portuguese catalogue and the lack of additional information sent from national exhibitors.³³ In addition to the Viscount of Vila Maior,

³² Ofício do Visconde de Vila Maior para o Ministro das Obras Públicas, 28-04-1862 (PT-UC-FCT-BOT-VVM-L-11_0175). Arquivo da Universidade de Coimbra, Departamento de Ciências da Vida da Faculdade de Ciências e Tecnologia – Arquivo de Botânica, Fundo Visconde de Vila Maior, Secção Comissário régio à exposição de Londres de 1862, Série Minutas de correspondência expedida.

³³ Ofício do Visconde de Vila Maior para o Ministro das Obras Públicas, 28-04-1862 (PT-UC-FCT-BOT-VVM-L-11_0175). Arquivo da Universidade de Coimbra, Departamento de Ciências da Vida da Faculdade

this task was attended by João Palha de Faria Lacerda, Francisco António de Vasconcelos and Francisco Augusto Florido da Moita e Vasconcelos.³⁴

Together with the exhibition there were some parallel initiatives involving the commission, such as a meeting organized in August in Manchester by the *Cotton Supply Association* in the context of the international cotton crisis caused by the American Civil War, resulting in the shortage of cotton supply on the world market (Alves 2006).³⁵ The viscount of Vila Maior was present, representing the government, and sought investors to promote colonial cotton culture, mainly in Angola.³⁶ The cotton crisis was seen by the Portuguese government as an opportunity to promote the culture of cotton, a clear example of this was the work developed by Welwitsch on the cultivation of cotton in Angola (Welwitsch 1861, 1859). Concerning the Portuguese products exhibited, the press and catalogues focused mainly on agricultural products and on animal and vegetable substances used in manufacturing, similar to other countries such as Spain, Russia and Brazil.³⁷

The journal *A Revolução de Setembro*, focused on the predominance of colonial products, considering them as “peculiar”, but criticizing the way they were on display.³⁸ These “peculiar” products actually caught the attention of scientific institutions, companies and scientists, who during the Exhibition, contacted the royal commissioner in order to acquire some of these products. As an example of this, on 30 June 1862 William Jackson Hooker (1785-1865), director of the Royal Botanic Gardens, Kew, officiated with the Viscount of Vila Maior in order to obtain the sale or purchase of botanical products on display in the Portuguese section in order to enrich the National

de Ciências e Tecnologia – Arquivo de Botânica, Fundo Visconde de Vila Maior, Secção Comissário régio à exposição de Londres de 1862, Série Minutas de correspondência expedida.

³⁴ “Exposição Universal de Londres”. *O Commercio do Porto*, n.º 185, 13-08-1862, p. 1.

³⁵ *Relatorio do Commissario Regio...*, p. 40-41.

³⁶ *Relatorio do Commissario Regio...*, p. 40-41.

³⁷ “Exposição Universal de Londres”. *O Commercio do Porto*, n.º 106, 09-05-1862, p. 2; “Exposição Universal de Londres”. *O Commercio do Porto*, n.º 112, 16-05-1862, p. 1; London International Exhibition, 1862, p. 118.; THE INTERNATIONAL EXHIBITION, 1863, p. 313.

³⁸ A.J.S., “Impressões da Inglaterra e da Exposição”, *A Revolução de Setembro*, n.º 6100, 11-09-1862, p. 3.

Museum of Economic Botany's. Eventually, it was decided to hand over "an interesting collection of the Agricultural Products" (Figure 4).³⁹

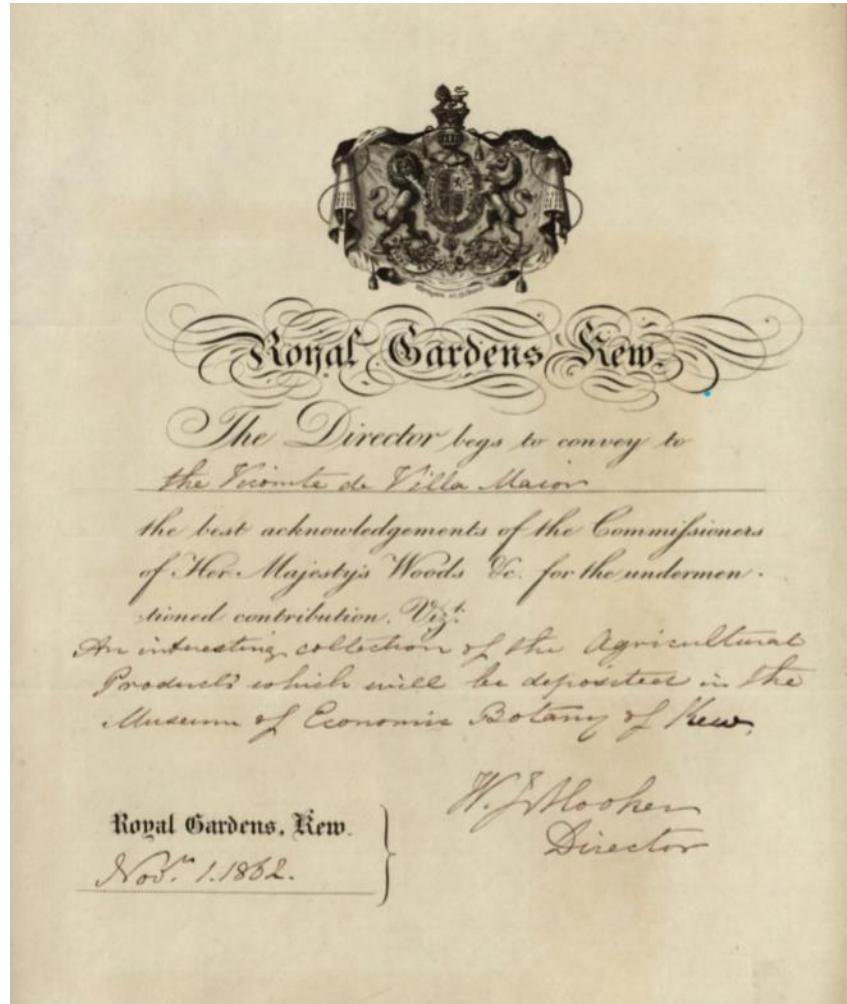


Fig. 4. Official document from W.J. Hooker acknowledging Viscount of Vila Maior (November 1, 1862). Source: Arquivo da Universidade de Coimbra (PT-UC-FCT-BOT/VVM/L-08).⁴⁰

³⁹ Ofício de W.J. Hooker, director of Royal Kew Gardens, 30-06-1862, p. 1 (PT-UC-FCT-BOT-VVM-L-02). Arquivo da Universidade de Coimbra, Departamento de Ciências da Vida da Faculdade de Ciências e Tecnologia – Arquivo de Botânica, Fundo Visconde de Vila Maior, Secção Comissário régio à exposição de Londres de 1862, Série Correspondência.

⁴⁰ Ofício de W.J. Hooker, director of Royal Kew Gardens, 01-11-1862 (PT-UC-FCT-BOT-VVM-L-08). Arquivo da Universidade de Coimbra, Departamento de Ciências da Vida da Faculdade de Ciências e Tecnologia – Arquivo de Botânica, Fundo Visconde de Vila Maior, Secção Comissário régio à exposição de Londres de 1862, Série Correspondência Expo 1862.

On 29 September Thomas Archer (1817-1885), director of the *Industrial Museum of Scotland*, requested the Portuguese Commissioner to send raw materials:

It will occur that very many of the specimens especially the raw produce will not be required again in Portugal; but will if deposited in one of the National Museums of Great Britain continue to further the chief object of the International Exhibition by keeping before the public the quality and peace of production of those articles.⁴¹

The official document included a list of articles of interest to the *Industrial Museum of Scotland*, namely the “Pharmaceutical products and preparations” (class 2) and “acorn coffee” (class 3). However, Júlio Máximo de Oliveira Pimentel had great difficulty in dealing with the requests received, as many exhibitors did not authorize the hand over or sale of the collections.⁴²

Following the Portuguese participation in the London Exhibition, the exhibitors received 165 bronze medals and 240 honorable mentions from the international jury, privileging unprocessed raw materials and food products (Souto 2011: 94).⁴³ The rewards were given to the national representatives at a public ceremony, held on July 11, 1862, at the Exhibition Palace.

Austrian botanist F. Welwitsch received four medals for his colonial collections: in class 2 (substances, chemicals and pharmaceutical processes) – sections A and B, chaired by Balard, were awarded two “for interesting medicinal substances collected in Angola”.⁴⁴ Class 3 (food substances, including wines), directed by Boussingault, awarded the

⁴¹ Ofício de Thomas Archer, director of the Industrial Museum of Scotland, 29-09-1862, p. 1 (PT-UC-FCT-BOT-VVM-L-02). Arquivo da Universidade de Coimbra, Departamento de Ciências da Vida da Faculdade de Ciências e Tecnologia – Arquivo de Botânica, Fundo Visconde de Vila Maior, Secção Comissário régio à exposição de Londres de 1862, Série Correspondência.

⁴² *Relatorio do Commissario Regio...*, p. 44.

⁴³ Ofício de 16 de Julho de 1862. *Diario de Lisboa*, n.º 167, 28-07-1862, p. 1983-1985; “Exposição Universal de Londres”. *O Commercio do Porto*, n.º 173, 30-07-1862, p. 2.

⁴⁴ *Relatorio do Commissario Regio...*, p. 108.

“Agricultural Product Collection – for excellence in quality”⁴⁵ (section A – agricultural production), and class 4 (animal and vegetable substances employed in manufacturing), chaired by Chevalier de Schwarz, recognized the quality of the “woods and gums of Angola” collected by the same naturalist (section C – vegetable substances).⁴⁶

It is important to consider that the jury evaluation took place between 7 May and 17 June, at a time when many exhibitors were still organizing their exhibitions. The press was quite incisive in this regard, criticizing the delay in dispatching the objects to London, the lack of national representation and the poor layout of the collections.⁴⁷

Another constraint was the organization of national catalogues, indispensable tools for judges’ work and the dissemination of products to visitors, traders and industry. These were poorly structured and incomplete – partly due to the submission of incomplete product sheets, undermining the assessment of the Portuguese section, as it had been established “that medals should be awarded without reference to nationalities, i.e. the rewards should fall solely on the absolute merit of the products”.⁴⁸

Delivered to Francisco de Almeida Portugal, 2nd Earl of Lavradio (1797-1870), the medals and honourable mentions would later be given to the Portuguese exhibitors. Regarding the destination of the rewards obtained by the producers in Angola, a decree, dated 5 May 1866, indicated that “the Medals and Diplomas... awarded to the Exhibitors of the Province who were most distinguished at the London Universal Exhibition” would be forwarded to the General Governor. These would be delivered at a formal session, which would be attended by members of the Government Council, the City Council and the main authorities of the province.⁴⁹

⁴⁵ *Relatorio do Commissario Regio...*, p. 109.

⁴⁶ *Relatorio do Commissario Regio...*, p. 112; SAMPAIO, A.R., “Política estrangeira – Londres, 2 de Agosto de 1862”, *A Revolução de Setembro*, n.º 6073, 12-08-1862, p. 1; SAMPAIO, A.R., “Política estrangeira – Londres, 3 de Agosto de 1862”, *A Revolução de Setembro*, n.º 6077, 14-08-1862, p. 1.

⁴⁷ ⁴⁸ Machado, J.C., “Três cartas III”. *Archivo Pittoresco*, 5.º ano, n.º 26, 1862, pp. 202-203; SAMPAIO, A.R., “Política estrangeira – Londres, 2 de Agosto de 1862”, *A Revolução de Setembro*, n.º 6073, 12-08-1862, p. 1; A.J.S., “Impressões da Inglaterra e da Exposição”, *A Revolução de Setembro*, n.º 6100, 11-09-1862, p. 3.

⁴⁸ “Relatorio do Sr. Visconde de Villar Maior, Commissario Regio na Exposição de Londres”, *A Revolução de Setembro*, n.º 6084, 23-08-1862, p. 3; “Exposição Universal de Londres”. *O Commercio do Porto*, n.º 185, 13-08-1862, p. 1.

⁴⁹ Portaria de 5 de Maio de 1866. *Annaes do Conselho Ultramarino. Parte official*, Série VII, 1866, p. 20.

Synopsis of samples of timber and medicinal drugs

At the London exhibition, Welwitsch himself contributed with objects from Angola, more precisely: 122 numbers of which 52 were timber samples (Dolezal 1974: 67-68). These specific items were collected by the Austrian botanist during the expedition *Iter Angolense*, between 1853 and 1860. Welwitsch, as the delegate of the Portuguese Government, accompanied the showcase to London and also its return to Lisbon, however, after that, the itinerary of the items is not clear (Cayolla 1945: XIV). As mentioned previously, as result of the products on display, the naturalist was awarded four gold medals for the objects presented.⁵⁰ According with the jury report, the samples of Angolan wood that the collection was made 'consisted of specimens full of interest and novelty, all unknown here' (Dolezal 1974: 67-68).

The detailed description of the objects on display was published at *Synopse Explicativa das Amostras de Madeiras e Drogas Medicinaes/ Explanatory Synopsis of Samples of Timber and Medicinal Drugs* (Welwitsch 1862).⁵¹ This publication also includes a collection of African medicinal drugs offered to the *Gabinete Pharmacologico da Escola Médico-Cirurgica de Lisboa / Pharmacological Office of the Medical-Surgical School of Lisbon* (Welwitsch 1862).

A copy of the *Synopse Explicativa*, which belonged to Welwitsch, is housed at the *Museu Nacional de História Natural e da Ciência / National Museum of Natural History and Science*, Lisbon (MUHNAC-UL). This publication has innumerable hand notes made by the Austrian botanist, adding extra information related to the species, habitat, uses and in some cases also corrects the published information. According to Conde de Ficalho (Francisco Manuel de Melo Breyner, 1837-1903) this particular *Synopse Explicativa* was offered to him by William Philip Hiern (1839-1925), a British mathematician and botanist (Ficalho 1947: 161). This is not surprising, taking into consideration that Hiern (1839-

⁵⁰ The medals distributed to the Portuguese exhibitors were delivered personally by the king in Lisbon at 11th May 1863 (Dolezal 1974: 68).

⁵¹ The manuscript drafts for this publication are housed at Academia de Ciências de Lisboa/ Academy of Sciences, Lisbon, Portugal (Manuscritos de Frederico Welwitsch, Série Azul, Cota 907, "F. A. W. Enumeração das amostras de Madeira que destina Frederico Welwitsch à Exposição Internacional de Londres em 1862").

1925) after Welwitsch's death, was employed to divide Welwitsch's African Collections and had access not only to the herbarium specimens but also to notes, diaries and books that belonged to the Austrian botanist (Hiern 1896; Albuquerque, Brummitt, and Figueiredo 2009: 642). In this way, when Ficalho published *Plantas Úteis Da África Portuguesa/ Useful Plants From Portuguese Africa*, he had in consideration not only Welwitsch's publication, but also his hand written notes at the *Synopse* (Ficalho 1947).

At *Synopse Explicativa* there are listed 52 numbers of wood samples and 96 numbers of medicinal drugs (Table 1) (Welwitsch 1862). In some cases, the same species appeared more than once and there are examples of introduced species, such as: *Melia azedarach* L. (no.24), *Spondias mombin* L. (no.28) and *Ceiba pentandra* (L.) Gaertn. (no.52) (POWO 2019; Ficalho 1947). Of the wood samples on display, it is worth mentioning: *Maerua angolensis* DC. (no. 39) and *Gardenia ternifolia* subsp. *jovis-tonantis* (Welw.) Verdc. (no.20 & no.44), both native species (POWO 2019).

The species *Maerua angolensis* was the first Angolan plant described in the scientific literature (1824). It was collected near Benguela by Joaquim José da Silva, a native from Rio de Janeiro who studied in Coimbra. Silva was sent to Angola by royal decree from 1783 to 1787 in a double role as Secretary of Angola and as a scientific explorer (Huntley 2008; Kananoja 2015).

The other species *Gardenia ternifolia* subsp. *jovis-tonantis*, (initially named by Welwitsch as *Decameria jovis-tonantis* Welw.) reflects the cross-cultural encounters between the collector and the local people. The specific epithet "jovis-tonantis" is related with the plant properties, the species branches were placed on the top of the straw roofed homes (*cubatas*) as a lightning rod because it was believed that could give protection from the electrical discharges. Taking into consideration this particular virtue, Welwitsch derived the species name "jovis-tonantis" and dedicated to the God of Thunder (Ficalho 1947: 197).

The case of *tacula* – *Pterocarpus tinctorius* Welw. (no.5), from the red wood it was possible to obtain a powder by friction over a stone (Ficalho 1947: 143-144). This *tacula* powder could be mixed with oil or water in order to prepare red pigments to be used on hair or skin – Welwitsch mentioned that in special occasions the feet of the local people

were painted in red to imitate shoes (Welwitsch 1862: 33). According to Kananoja, *tacula* was expensive, besides being used as dyestuff was also used as medicine and during female coming-of-age ceremonies (Kananoja 2015: 51-52). Kananoja also adds “the widespread use of *tacula* in West Central Africa reflected the symbolic association between color, the ancestral world, and liminal states of initiation and rites of passage” (Kananoja 2015: 54). Another species of *Pterocarpus*, which has the common name *mirahonde* – *Pterocarpus angolensis* DC. (no.48) was used to produce objects and weapons. From the wood trunk a blood colour resin was extracted, and according to Welwitsch the natives besides using it to treat their wounds they would sell it to the pharmacists at the Angolan coast, as *Dragon blood*, although this was not the real *Dragon blood*, because was not from the *Dracaena* (Figueiredo and Smith 2017: 84; Ficalho 1947: 144-145; Welwitsch 1862: 37).

There are also examples of species which were used and experimented by Welwitsch on his patients and on himself. The case of *losna-de-Humpata* – *Artemisia afra* Jacq. (no.57), Welwitsch confirmed the good results when using it for fever and stomach and *encotahóte* – ?*Andropogon stypticus* Welw. (no.61) was applied with good results on female patients with gynecological problems (Welwitsch 1862).

The case of *Cachinde-Candange* – *Myrothamnus flabellifolius* Welw. (no.58) is one of many examples of plants adopted by the Portuguese settlers and denominated as *alecrim-das-paredes*. The locals used it for headache, rheumatic pains and slight paralysis. The Portuguese had into account these medicinal properties and also used it in place of rosemary (*alecrim* in Portuguese) to perfume houses (Welwitsch 1862).

Unfortunately, it was not possible to trace the colonial objects that were on display at the 1862 London Exhibition. Taking into consideration that these objects remained silent at the newspapers and official reports, the only way to bring these objects back was through the descriptions at *Synopse*. These descriptions gave glimpses of the uses of the plants, but also of the cross-cultural encounters between the explorer and the locals. On Table 1 there are listed all the Angolan objects (149) organized by Welwitsch for the London Exhibition.

Final remarks

In the 1860s the organization and participation in international exhibitions was an essential instrument of political, economic, social, cultural and scientific diplomacy. The participation of the different nation-states in these exhibitions meant the affirmation of national autonomies, as a counterpoint to an increasingly global and internationalized context, taking into account the universal exhibitions as a “very powerful source for the most serious reflections, for the most important calculations, for the most important analyses, for the most productive studies”.⁵²

At this point, the colonial question was particularly complex with the expansion of European imperialism in Africa, marked not only by the political dimension but also by a strong economic, scientific and technological component. As mentioned by the newspaper *A Revolução de Setembro*:

[...]if we appear poorly before the assembly of peoples meeting in London, we will continue to be slighted and judged as unskillful in maintaining our autonomy [metropolitan and colonial] for lack of our own resources [...].⁵³

The centrality of politics in these events largely explains the composition of the Portuguese Permanent Central Commission, marked by personalities related to Regeneration and central and colonial administration. Despite current criticism from opposition newspapers such as *A Revolução de Setembro*,⁵⁴ and generalist newspapers, such as *Jornal do Commercio*, consider the commission as elite and unskilled,⁵⁵ it would play an important role in the good Portuguese results in London, especially in the area of colonial products. The action of the Royal Commissioner and the study commission, appointed by the Portuguese government, would be indispensable in assuming an ideal that considered the presence in these events as an indispensable mean in the context of Portuguese *Regeneration*, related to the urgent need of material and immaterial

⁵² “Comissão Portugueza para a Exposição Universal de Londres no anno de 1862”. *Jornal do Commercio*, n.º 2280, 08-05-1861, p. 1.

⁵³ “Exposição Universal de Londres. Comissão Central Portugueza”, *A Revolução de Setembro*, n.º 5805, 13-09-1861, p. 3.

⁵⁴ “Exposição Universal de Londres. Comissão Central Portugueza”, *A Revolução de Setembro*, n.º 5805, 13-09-1861, p. 3.

⁵⁵ “Portugal na exposição Universal de 1862”. *Jornal do Commercio*, n.º 2530, 11-03-1862, p. 1; “Exposição Universal de Londres”. *Jornal do Commercio*, n.º 2664, 24-08-1862, p. 1.

progress. According to João de Andrade Corvo, the exhibitions presented themselves as a central instrument of civilization, promoting human “material improvement”, collaboration and dialogue. Corvo considered the gathering and intellectual exchange between nations indispensable as a way of “patenting the productive forces” “and teaching each other the methods of creating wealth and satisfying not only the physical needs but also the intellectual needs of society”.⁵⁶

Most surprising would be the result of the collections sent by Welwitsch. Although the Portuguese representation was severely criticised by the press, Welwitsch was awarded with four gold medals for the colonial objects presented, as a result of hard work done in Angola and funded by the Portuguese government. It is a successful example of the articulation of imperial strategic objectives, with particular research agendas by naturalists and collectors that would mark the scientific expeditions in Africa in the 1860s and 1870s. The result is impressive compared to the results obtained by institutions such as the Overseas Council/ *Conselho Ultramarino*, which would only get two medals in London: one in 2nd Class – section A (chemicals and pharmaceuticals); and another in 4th Class – section C (animal and vegetable substances used in manufacturing).

This research brought to light objects that remained invisible since the London Exhibition of 1862. Welwitsch’s publications were crucial to understand which kind of colonial objects from Angola were on display. Although was not possible to trace these objects, the descriptions at the *Synopse* gave us a glimpse of tropicality: fruits, seeds, roots, gums, resins and manufactured objects such as hats, tobacco boxes, saddlebags, sieves and others. The descriptions included not only medicinal properties, but also different uses of the species. The species listed at *Synopse* were chosen to be on display for its fine quality, durability and medicinal properties. These species, besides being used for woodwork (furniture and construction), also had diverse uses in which different parts and forms of the plants were used (oil, powder, leaves and fruits) (Ficalho 1947). In addition, it is possible to notice that most of the species referred at the *Synopse* were used by Welwitsch not only on his patients, but also as a remedy to heal his own

⁵⁶ “Estudos sobre a Exposição de Londres”. *Jornal do Commercio*, n.º 2725, 06-11-1862, p. 2.

illnesses. On the other hand, through the Report by Royal Commissioner at the London Exhibition, it was possible to understand the spaces in which the portuguese section was inserted, in particular, the space where the angolan objects were displayed (Figure 3).

The publication of *Synopse*, following a common practice within the 19th century scientific community, would contribute to the circulation, transmission and dissemination of the knowledge acquired during the *Iter Angolense* expedition, simultaneously disseminating exotic objects and products in the European economic, scientific and cultural context. Familiarizing the public with new realities and spatialities was essential in the effort to scientifically recognize colonial empires, while simultaneously justifying the political and strategic interest of European nation-states in Africa, in order to reaffirm the economic potential of these territories – e.g. wood, cotton, coffee.

Table 1. The table compiles the common names and numbers given by Welwitsch to the objects on display in 1862 and the currently accepted names. It is important to state that this is merely a preliminary list, based on Welwitsch's *Synopsis*. Although several references were consulted in order to confirm the currently accepted names, it is still necessary to confront the information with the herbarium specimens. In addition, many of the common names changed through the decades, they also differ among the different ethnic groups and there are cases in which the fruit, flowers, roots and leaves have different names for the same species (Figueiredo and Smith 2017; WCSP 2019; IPNI 2019; GBIF.org 2019; ACTD 2019; NHM 2019; Ficalho 1947; Welwitsch 1862).

No. <i>Synopse</i>	Common name	Accepted name
Wood Samples from Angola (no. 1 to 52)		
1	<i>Calôlo</i>	<i>Phoenix reclinata</i> Jacq.

		Arecaceae
2	<i>Mangue do monte</i> <i>Mangue branco</i>	<i>Corynanthe paniculata</i> Welw. Rubiaceae
3	<i>Mafura</i> (Mozambique) <i>Guimbi</i> (interior of Angola)	<i>Trichilia emetica</i> Vahl Meliaceae
4	<i>Cosanza</i>	<i>Memecylon</i> sp. Melastomataceae
5	<i>Tacula</i> <i>Hûla de Golungo</i> <i>Alto</i>	<i>Pterocarpus tinctorius</i> Welw. Fabaceae
6	<i>Mucamba-camba</i> <i>Moreira</i> (Portuguese settlers)	<i>Milicia excelsa</i> (Wel.) C.C.Berg Moraceae
7	<i>Tacula do Zenza</i>	<i>Pterocarpus</i> sp. Fabaceae
8	<i>Musalengue</i>	<i>Premna angolensis</i> Gurke Lamiaceae
9	<i>Quiseco</i> <i>Quisécua</i> <i>Caseco</i>	<i>Millettia</i> sp. Fabaceae
10	<i>Mufufutu</i>	<i>Albizia ferruginea</i> (Guill. & Perr.) Benth. Fabaceae
11	<i>Mufufutu</i>	<i>Albizia angolensis</i> Welw. Fabaceae
12	<i>Mungundo</i>	<i>Symponia globulifera</i> L.f. Clusiaceae
13	<i>Muriambambe</i>	<i>Coffea canephora</i> Pierre ex A.Froehner

		Rubiaceae
14	<i>Moreira</i> <i>Mucamba-camba</i>	<i>Milicia excelsa</i> (Welw.) C.C.Berg Moraceae
15	Root of <i>Tacula</i>	<i>Pterocarpus</i> sp. Fabaceae
16	<i>Caseque</i>	<i>Milletia</i> sp. Fabaceae
17	<i>Quipuculo cafele</i>	<i>Vernonia doniana</i> DC. Asteraceae
18	<i>Dendo</i>	<i>Diospyros dendo</i> Welw. ex Hiern Ebenaceae
19	<i>Calusange</i>	<i>Steganotaenia araliacea</i> Hochst. Apiaceae
20	<i>Unday</i> <i>N-Day</i>	<i>Gardenia ternifolia</i> subsp. <i>jovis-tonantis</i> (Welw.) Verdc. Rubiaceae
21	<i>Quibaba</i>	<i>Entandrophragma angolense</i> (Welw.) Panshin Meliaceae
22	<i>Mucaça-Ncumbi</i>	<i>Carapa procera</i> DC. Meliaceae
23	<i>Calalanza</i> <i>Tacula falsa</i> (Portuguese settlers)	<i>Annea laxiflora</i> (Benth.) Mackinder&Wieringa Fabaceae
24	<i>Bombôlo</i>	<i>Melia azedarach</i> L. Meliaceae
25	<i>Quibaba roxa</i>	<i>Celtis africana</i> Burm.f. Cannabaceae
26	<i>Quibaba do</i> <i>Mussengue</i> <i>Quibaba do Hungo</i>	<i>Khaya anthotheca</i> (Welw.) C.DC. Meliaceae

27	<i>Mutune</i>	<i>Harungana madagascariensis</i> Lam. ex Poir. Hypericaceae
28	<i>Munguengue</i>	<i>Spondias mombin</i> L. Anacardiaceae
29	<i>Mutála-menha</i>	<i>Millettia nudiflora</i> Welw. ex Baker Fabaceae
30	<i>N-caça n-cumbi</i>	<i>Carapa procera</i> DC. Meliaceae
31	<i>Mulumba</i>	<i>Pterocarpus rotundifolius</i> (Sond.) Druce Fabaceae
32	<i>Mussondo</i> <i>Muçondo</i>	<i>Pseudospondias microcarpa</i> (A.Rich.) Engl. Anacardiaceae
33	<i>Cafequesu de monte</i> <i>Quisunhunga</i>	<i>Mimusops</i> sp. Sapotaceae
34	<i>Muance</i>	<i>Albizia welwitschii</i> Oliv. Fabaceae
35	<i>Quibosa iã mugito</i>	<i>Cordia</i> sp. Boraginaceae
36	<i>Mugongue</i>	<i>Premna angolensis</i> Gurke Lamiaceae
37	<i>Muzumba</i>	<i>Millettia versicolor</i> Welw. ex Baker Fabaceae
38	<i>Cafequesu</i>	<i>Mimusops</i> sp. Sapotaceae
39	<i>Muriangombe</i>	<i>Maerua angolensis</i> DC. Capparaceae
40	<i>Quitundo</i>	<i>Ozoroa insignis</i> Delile Anacardiaceae

41	<i>Pau Quicongo de Huilla</i>	<i>Tarchonanthus camphoratus</i> L. Asteraceae
42	<i>Maboca</i>	<i>Strychnos</i> sp. Loganiaceae
43	<i>Noxa / Nocha</i>	<i>Parinari curatellifolia</i> Planch. ex Benth. Chrysobalanaceae
44	<i>Unday de Huilla</i> <i>Mulábi</i>	<i>Gardenia ternifolia</i> subsp. <i>jovistantis</i> (Welw.) Verdc. Rubiaceae
45	<i>Mueia</i>	<i>Terminalia sericea</i> Burch. ex DC. Combretaceae
46		<i>Faurea rochetiana</i> (A.Rich.) Chiov Proteaceae
47	<i>N-panda</i> <i>Umpanda</i> <i>Mupanda</i> (Humpata)	<i>Brachystegia spiciformis</i> Benth. Fabaceae
48	<i>Mirahonde</i>	<i>Pterocarpus angolensis</i> DC. Fabaceae
49	<i>Figueira brava dos colonos de Huilla</i>	<i>Apodytes dimidiata</i> E.Mey. ex Arn. Icacinaceae
50	<i>Bimba</i>	<i>Aeschynomene elaphroxylon</i> (Guill. & Perr.) Taub. Fabaceae
51	Coffee tree trunk cross section	<i>Coffea canephora</i> Pierre ex A.Froehner Rubiaceae
52	Plates made of <i>Mufumeira</i> wood (<i>gamelas pequenas</i>)	<i>Ceiba pentandra</i> (L.) Gaertn. Malvaceae

	<i>Mufumeiras</i> (portuguese adaptation for Mufuma)	
Medicinal drug samples (no. 53 to 149)		
53	Micaceous iron ore	Mineral origin
54	Micaceous iron powder	Mineral origin
55	Iron pyrites	Mineral origin
56	<i>Pemba</i> Stone	Mineral origin (variety of clay)
57	<i>Losna de Humpata</i>	<i>Artemisia afra</i> Jacq. Asteraceae
58	<i>Cachinde-Candange</i> <i>Alecrim das paredes</i> (denomination by the Portuguese settlers)	<i>Myrothamnus flabellifolius</i> Welw. Myrothamnaceae
59	<i>Fel da terra de flor</i> <i>branca</i>	<i>Swertia welwitschii</i> Eng. Gentianaceae
60	<i>Avenca</i>	<i>Adiantum</i> sp. Adiantaceae
61	<i>Encotahóte</i> (<i>N-</i> <i>cotahóte</i>)	? <i>Andropogon stypticus</i> Welw.
62	<i>Catete Bulla</i>	<i>Tinnea antiscorbutica</i> Welw. Lamiaceae
63	<i>Barbas de Mulemba</i>	<i>Ficus thonningii</i> Blume Moraceae
64	Fruits and seeds of <i>Sacalaséne</i>	<i>Aframomum angustifolium</i> K.Schum. Zingiberaceae

65	<i>Sabongo</i> (fruits)	? <i>Xylopia aethiopica</i> A.Rich. Annonaceae
66	Fruits of <i>Butua</i> (<i>Butua</i> seeds)	<i>Tiliacora chrysobotrya</i> Welw. ex Ficalho Menispermaceae
67	Roots and stems of <i>Butua</i>	<i>Tiliacora chrysobotrya</i> Welw. ex Ficalho Menispermaceae
68	Trunk of <i>Butua</i>	<i>Tiliacora chrysobotrya</i> Welw. ex Ficalho Menispermaceae
69	Cross section of a <i>Butua</i> trunk	<i>Tiliacora chrysobotrya</i> Welw. ex Ficalho Menispermaceae
70	<i>Solanum tinctorium</i>	<i>Solanum scabrum</i> Mill. Solanaceae
71	<i>Dongos de Congo</i>	<i>Aframomum melegueta</i> (Roscoe) K.Schum. Zingiberaceae
72	Bark of <i>Mucumbi</i>	<i>Lannea</i> sp. Anacardiaceae
73	Trunk and bark of <i>Molungo</i>	<i>Erythrina abyssinica</i> Lam. Leguminosae
74	<i>Pepe</i> fruit <i>Gisepe</i> fruit	<i>Monodora myristica</i> Dunal Annonaceae
75	Bark of <i>Quibaba</i> (<i>Quibaba de Queta</i>)	<i>Entandrophragma angolense</i> C.DC. Meliaceae
76	<i>Gipepe de Songo</i> <i>Jipepe de Songo</i> <i>Xipepe de Songo</i>	<i>Monodora angolensis</i> Welw. Annonaceae

77	Bark and fruit of <i>Mulôlo</i>	? <i>Piliostigma thonningii</i> (Schumach.) Milne-Redh. Leguminosae
78	Root bark of <i>Mubango</i>	<i>Croton mubango</i> Müll.Arg. Euphorbiaceae
79	Root of <i>Mundondo</i>	<i>Mondia whitei</i> Skeels Asclepiadaceae
80	<i>Quibaba de</i> <i>Mussengue</i>	<i>Khaya anthotheca</i> C.DC. Meliaceae
81	Bark of <i>Musuemba</i>	<i>Albizia coriaria</i> Welw. Leguminosae
82	Bark of <i>Musoso</i>	<i>Entada abyssinica</i> Steud. Leguminosae
83	<i>Pau Quicongo de</i> <i>Huila</i>	<i>Tarchonanthus camphoratus</i> L. Asteraceae
84	Powder of <i>Pau</i> <i>Quicongo de Huila</i>	<i>Tarchonanthus camphoratus</i> L. Asteraceae
85	Root of <i>Tacula</i>	<i>Pterocarpus</i> sp. Fabaceae
86	Powder of <i>Tacula</i>	<i>Pterocarpus</i> sp. Fabaceae
87	<i>Umpeque</i> fruits	<i>Ximenia americana</i> L. Olacaceae
88	<i>Maboca</i> fruits	<i>Strychnos cocculoides</i> Baker Loganiaceae <i>Strychnos spinosa</i> Lam. Loganiaceae
89	<i>Massambala branco</i>	<i>Sorghum</i> sp. Poaceae
90	<i>Massambala rubro</i>	<i>Sorghum</i> sp. Poaceae

91	<i>Massango liso</i>	<i>Pennisetum</i> sp. Poaceae
92	<i>Massango barbado</i>	<i>Pennisetum</i> sp. Poaceae
93	<i>Milho (Mupungo)</i>	<i>Zea mays</i> L. Poaceae
94	<i>Mubafo</i> resin	<i>Pachylobus edulis</i> G.Don Burseraceae
95	<i>Goma copal de Benguela</i> (Ocote or Cocote)	
96	<i>Goma copal do Zenza de Golungo</i>	
97	<i>Goma Tragacantha</i> Alquitiri Chixe (tree) Ici ià Chixe (gum)	<i>Sterculia setigera</i> Delile Malvaceae
98	<i>Goma de Muance</i>	<i>Albizia welwitschii</i> Oliv. Fabaceae
99	<i>Goma de Mumango</i>	<i>Croton mubango</i> Müll.Arg. Euphorbiaceae
100	<i>Sangue de Drago</i> Mirahonde (locals from Huíla) Ngillasonde (locals from Pungo Andongo)	<i>Pterocarpus angolensis</i> DC. Fabaceae
101	<i>Cabella</i>	<i>Xylopia aethiopica</i> (Dunal) A.Rich. Annonaceae
102	<i>Marabú</i> feathers	Animal origin

103	<i>N-Bungo</i> (tobacco boxes) <i>Quiambungo</i>	<i>Oxytenanthera abyssinica</i> Munro Poaceae
104	Elephant tail (diadem)	Animal origin
105	Sieve made of <i>Súbi</i>	<i>Marantochloa conferta</i> (Benth.) A.C.Ley Marantaceae <i>Marantochloa purpurea</i> (Ridl.) Milne-Redh. Marantaceae
106	<i>Bordão</i> Palm tree filaments <i>Jimbusu</i>	<i>Raphia textilis</i> Welw. Arecaceae
107	<i>Mateva de Pôrto</i> <i>Pinda</i> (with fruits)	<i>Hyphaene petersiana</i> Klotzsch ex Mart. Arecaceae
108	Indigenous saddlebag, made from Imbondeiro's bark	<i>Adansonia digitata</i> L. Bombacaceae
108 B	Rope made from Imbondeiro's bark	<i>Adansonia digitata</i> L. Bombacaceae
109	Imbondeiro's bark	<i>Adansonia digitata</i> L. Bombacaceae
110	Workpieces of <i>Mabéla</i> (or <i>Mabella</i>)	<i>Raphia textilis</i> Welw. Arecaceae
111	<i>Mabéla branca</i>	<i>Raphia textilis</i> Welw. Arecaceae
112	<i>Bordão</i> fruits	<i>Raphia textilis</i> Welw.

		Arecaceae
113	<i>Cachingas</i> (Sobas cap)	<i>Raphia textilis</i> Welw. Arecaceae
114	Pineapple filaments	<i>Ananas comosus</i> (L.) Merr. Bromeliaceae
115	Banana filaments	<i>Musa acuminata</i> Colla Musaceae
116	Mundondo filaments and fruit	<i>Mondia whitei</i> Skeels Asclepiadaceae
117	<i>Cachinga</i> (Sobas cap) made of banana filaments	<i>Musa acuminata</i> Colla Musaceae
118	<i>Subi</i> rods	<i>Marantochloa conferta</i> (Benth.) A.C.Ley Marantaceae <i>Marantochloa purpurea</i> (Ridl.) Milne-Redh. Marantaceae
119	<i>Quibosa</i>	<i>Triumfetta</i> sp. Tiliaceae
120	<i>Cairo da palmeira</i> <i>Dendem</i>	<i>Elaeis guineensis</i> Jacq. Arecaceae
121	<i>Calolo</i> haulm to start a hat	<i>Phoenix reclinata</i> Jacq. Arecaceae
122	<i>Sabugo</i> (marrow of the papyrus)	<i>Cyperus papyrus</i> L. Cyperaceae
123	<i>Lã de palmeira</i> (Ucúcu)	<i>Elaeis guineensis</i> Jacq. Arecaceae
124	<i>Cola</i> (Coleira fruit)	<i>Cola acuminata</i> (P.Beauv.) Schott & Endl. Sterculiaceae

125	<i>Riamba</i> <i>Liamba</i> <i>Diamba</i>	<i>Cannabis sativa</i> L. Cannabaceae
126	Powder of <i>Caseque</i> (or <i>Caseco</i>)	<i>Milletia</i> sp. Leguminosae
127	<i>Mucôco</i>	<i>Triclisia sacleuxii</i> Diels Menispermaceae
128	<i>Mûcua</i>	<i>Adansonia digitata</i> L. Bombacaceae
129	<i>Orucú</i> fruits <i>Urucú</i> <i>Quisafu</i>	<i>Bixa orellana</i> L. Bixaceae
130	Bark of <i>Mungo</i> <i>Mohambo</i>	<i>Hallea stipulosa</i> (DC.) J.-F.Leroy Rubiaceae
131	<i>Bálsamo de S.Tomé</i>	Burseraceae
132	<i>Goma arábica</i>	? <i>Acacia</i> sp. Mimosaceae
133	<i>Goma elástica de</i> <i>Hungo</i> <i>Mupapata</i>	? <i>Ficus elastica</i> Roxb. ex Hornem. Moraceae
134	<i>Goma elástica de</i> <i>Golungo Alto</i> <i>Licongue</i>	<i>Landolphia owariensis</i> P.Beauv. Apocynaceae
135	<i>Goma de Cajueiro</i>	<i>Anacardium occidentale</i> L. Anacardiaceae
136	<i>Castanhas de Caju</i> (from Luanda)	<i>Anacardium occidentale</i> L. Anacardiaceae
137	<i>Mutúge</i> fruits <i>Moscardeira Brava</i> <i>de Angola</i>	<i>Pycnanthus angolensis</i> (Welw.) Exell Myristicaceae

138	<i>Cassia fistula de Angola (Cannafistula)</i>	<i>Cassia fistula</i> L. Leguminosae
139	<i>Cassia fistula de Huila</i>	<i>Cassia fistula</i> L. Leguminosae
140	Seeds of <i>Nocha</i> (or <i>Noxa</i>)	<i>Parinari curatellifolia</i> Planch. ex Benth. Chrysobalanaceae
141	<i>Dendem</i> fruits	<i>Elaeis guineensis</i> Jacq. Arecaceae
142	<i>Amêndoas de Disanha</i>	<i>Treculia africana</i> Decne. ex Trécul Moraceae
143	<i>Cambundo</i>	<i>Coix lacryma</i> L. Poaceae
144	<i>Fel da terra de flor roxa</i>	<i>Faroa salutaris</i> Welw. Gentianaceae
145	<i>Fel da terra de flor amarela</i>	<i>Sebaea brachyphylla</i> Griseb. Gentianaceae
146	Stems of <i>Mobiro</i>	<i>Adenia lobata</i> Engl. Passifloraceae <i>Adenia lobata</i> subsp. <i>rumpicifolia</i> (Engl.) Lye Passifloraceae
147	<i>Salsaparrilha de Angola</i>	<i>Smilax anceps</i> Willd. Smilacaceae
148	<i>Cahembia-émhbia</i>	<i>Wissadula rostrata</i> (Schumach.) Hook.f. Malvaceae
149	<i>Múbafo</i> bark	<i>Pachylobus edulis</i> G.Don Burseraceae

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