

# STEREOSCOPY IN NINETEENTH CENTURY BRAZIL: THE CASE OF RIO DE JANEIRO

MARIA CRISTINA MIRANDA  
DA SILVA

## Abstract

This study presents a preliminary systematisation of the stereographs that are part of the public collections of Rio de Janeiro. We start with an investigation of the presence of optical devices in nineteenth century Brazil, especially in the city of Rio de Janeiro, examining both users and diffusers, as well as the forms of observation and social contexts of their use. Our original research was based on the studies of the *first cinema*, especially the work of Tom Gunning and Charles Musser, and on art history by Jonathan Crary, authors who helped us analyse, respectively, the re-contextualization process regarding the use of optical devices and the resizing of the *observer of modernity*. Our empirical work was based on the systematic study of advertisements published in the newspapers of the period in question, especially in the *Jornal do Commercio*, between the 1850s and the 1870s. We conducted a survey of the establishments that imported and marketed these devices during the period, using advertisements published in *Almanak Laemmert*, between the years 1844 and 1889. We place a special emphasis on the arrival of photography in Brazil and to the precocity with which stereoscopy was developed here by the photographer Revert Henrique Klumb. We mapped themes as a reference for Brazilian visuality, and made an inventory of the Brazilian photographers who developed this technique in their works. From the information gathered, we answered research questions about the presence of optical devices in the city of Rio de Janeiro in the nineteenth century, especially stereoscopy considering its particularities in the historical, economic and social context of the time.

**Keywords:** *stereoscopy, optical devices, Rio de Janeiro in the nineteenth century, observer, modernity.*

## **STEREOSCOPY IN NINETEENTH CENTURY BRAZIL: THE CASE OF RIO DE JANEIRO**

This study is part of the doctoral thesis *The Presence of Equipment and Optical Devices in Nineteenth Century Rio de Janeiro*, defended in 2006, in the Graduate Program in Communication and Semiotics at Pontifical Catholic University of São Paulo (PUC-SP), under the guidance of Professor Arlindo Machado. In that thesis, we investigated the presence and the use of optical devices of the nineteenth century, such as cosmoramas, dioramas, magic lanterns, panoramas, and stereoscopes, among others, in Brazil, especially in Rio de Janeiro.

Our theory is based on the studies of art historian Jonathan Crary (1994, 1999), and on research about the pre-cinema, especially the works of Tom Gunning (1995) and Charles Musser (1990), we can state that the use of these devices, starting from the question of the real and the illusory, strongly contributed to the creation of the modern viewer. A thorough consideration of the changes in the social space and on the experience of those times concerning the forms of observation arising from the unique characteristics of these devices, and on the manners in which they were used and displayed, as well as on the relationship between science (especially physics and physiology), and the begin-

ning of industrialisation and modernity, allowed us to highlight a resizing of the history of visuality during the nineteenth century. We investigated the nature and character of such relationships in nineteenth century Brazil based on a preliminary systematisation of the stereographs in the public collections of Rio de Janeiro, considering the particularities of the historical, economic and social context of the time. Considering the scope of the subject and the available space we shall only be discussing the stereographs produced by Revert Henrique Klumb in this study.

### **The Arrival and Expansion of Photography in Rio de Janeiro**

The taste for novelty, in particular for scientific novelty, from the perspective of building an image of a civilised Brazil connected to Europe, contributed to the development of photography there. Brazil made a list of inventions in the visual field due to the research of Hercule Florence, residing in Campinas, São Paulo, who discovered in 1833, some years before the news arrived from France, the ability to fix images with light, using the term "photography" (the writing of light) for the first time in 1834. The daguerreotype arrived in Brazil in late 1839<sup>1</sup>. D. Pedro II, fourteen at the time, became interested in the device and was the first to buy one in Rio de Janeiro, two months after the first demonstrations of how it worked by Compté at the Pharoux Pier.

Although in tune with the latest European inventions, the consumer market for the expansion of photography in Brazil was quite different (and smaller) than the one in the large European and North American centres. Brazil is a large country and, at the end of the first half of the nineteenth century, was divided into the major port cities, where the more affluent sections of the population were located (merchants, the aristocracy and the nobility) who were "receptive to foreign fads and consumers of imported manufactures", and the small urban centres of the interior and rural areas, which remained, as in previous centuries, "a world apart from civilisation" (Kossoy, 1980b: 26-7).

In the first half of the nineteenth century, the production of country views, especially in demand by foreign visitors, was supplied through painting and by the production of prints and engravings, however, their high cost opened fertile ground in the market of landscape photography, especially in the city of Rio de Janeiro. The constitution of the public sphere and the formation of leisure and culture spaces, giving it the "civilising" element sought by the Court, was also part of the expansion of the photographic record.

The introduction of wet collodion processes for plates and the albumen paper for copies allowed a greater reproducibility in photography, with a low production cost for photographers, and making it

more affordable for customers anxious for representation. Among the formats with more commercial appeal, were pictures for the *carte de visite* and later the *Cabinet* size (of slightly larger format), representing landscapes, architecture, portraits, customs, and other subjects, also produced in stereoscopic cards. A new visual universe was opened to Rio de Janeiro's population through the "foreign" views shown by the apparatuses and optical devices, intensifying the use of images and initiating a process of self-representation through photographic images, both in stereoscopic and conventional formats.

## Stereoscopy

Stereoscopy is by itself a separate chapter in the history of optical devices, particularly due to the type of perceptual experience it provides. Distinct from the classical view model, subsumed by the *camera obscura* and other projection devices, the stereoscopic apparatus is aligned with devices from research in the field of the physiology of subjective vision in the 1820s and 1830s, where the image is perceived through the proper functioning of vision. To see the images displayed in relief, the gaze must engage in a kind of "visual operation" which requires a certain concentration, which we designate as the "stereoscopic gaze".

Conceived originally by the English physicist Charles Wheatstone to observe the

binocular vision phenomenon through drawn images, the stereoscope was marketed on a large scale only from the 1850s onwards, after David Brewster (a Scottish physicist) having incorporated the invention into the photographic technique, turned it into a more compact model with a greater potential for commercialization. Brewster's device was shown to the public for the first time at the London Universal Exhibition of 1851 and became popular and the all the rage in fashion. Three years later, in 1854, the first company for the production and distribution of stereoscopic views was created—the London Stereoscopic Company—with slogan "A stereoscope in every home". According to Huhtamo (n/d) in 1856 the list of views offered for sale had grown from 10,000 to a 100,000 images, a true "stereoscopic mania". In 1862, the company the "exclusive licensee of the second Universal Exhibition held in London," sold about a million stereoscopic cards according to Turazzi (1995: 51).

The use of stereoscopic images, mass-produced with views and other subjects from around the world, especially from Europe and the United States, also spread across the world. From the second half of the nineteenth century, "views" could be observed in various leisure and education spaces, for example, as "visual aids" in complementary activities to religious, artistic or scientific education (Rayfield, 1998).

In the harmony of "home", in family gatherings, and among friends, stereoscopic views brought a public space into the private sphere, be it landscapes of distant lands or habits and curiosities not shown before. The stereoscope facilitated and encouraged "public consumption in private" (Rayfield, 1998).

More than a connection between the domestic space and the different places, monuments, and world habits one may wish to see, the "stereoscopic gaze" allowed the "virtual" exploration, almost "tactile", of such spaces.

Unlike the landscapes reproduced in the panoramas and other image projection devices that approached the representation of the *camera obscura* model based on the perspective, the stereoscopic image is an "apparition" formed on the optical axis of the observer, from the simultaneous perception of two images. As Cray points out (1994: 173-5), when designing the first model of the stereoscope, Wheatstone was not looking for a new way of showing a picture or a drawing, but the "absolute equivalence of the stereoscopic image and the object", or "to reproduce the real presence of a physical object or of a specific scene". The effect he was expecting from the stereoscope was not "just the likeness but an obvious, immediate 'tangibility'", embodied in a kind of "virtual presence" of the object or image represented, or,

more than that, in a sense of immersion in the observed scene.

The effect of the “real” provided by the stereoscopic images, based on the sense of three-dimensionality, varied according to the composition of the image. Some images seem more “three-dimensional” than others, depending on the arrangement of the representation of objects, since “to obtain a sharp stereoscopic effect” there must be “objects creating obstacles to first and second plane”, that is “there should be many points in the image that require significant changes in the convergence angle of the two optical axes” where the image is formed. The more objects represented in different planes, the greater the effect of depth or three-dimensionality in the observation. “The most intense experience of stereoscopic vision coincides therefore with a space saturated with objects, with a fullness of material”, typical of the nineteenth century bourgeois life (Crary, 1994: 176).

Stereoscopic vision thus created a kind of “virtual experience of the modern city” and of everything that made it (the new means of transportation, paved streets, buildings, etc.) taking the observer into the “crowd” of such public space.

### Stereoscopy in Brazil

In Brazil, stereoscopy had a relatively small presence, although consumption

was much lower than in other main cities of the world. In the case of Rio de Janeiro, stereoscopic consumption gave observers an entrance into the “civilising” modernity of other nations, as it enabled them to create a self-image of a country of growth and on its way to progress and civilisation.

Authors like Turazzi (1995), Kossoy (1980b, 2002), Vasquez (2002) and Parente (1999) are unanimous in naming the German photographer Revert Henrique Klumb, who had lived in Rio de Janeiro since 1852, as the pioneer of stereoscopic photography in Brazil. In the years 1855 and 1856, Klumb advertised his services at 64, Rua dos Ourives, as the *Photographo da Academia Imperial de Bellas Artes* [Photographer of the Imperial Academy of Fine Arts] in the Almanak. In 1857 and 1858, he announced photography lessons at his home at 18, Ladeira do Castelo. In 1861 he was awarded the title of “*Photografo da Caza Imperial*” [Photographer of the Imperial House] (Kossoy, 2002: 192) and went on to advertise his trade at 94, Rua de São José, in the Almanak. From 1863 to 1867 he advertised his services together with his partner Paul Robin, establishing the *Photographia Brasileira*, at 94 and 98 Rua de São José. Later he finally installed himself in Petrópolis-RJ.

Throughout his activity in Rio de Janeiro, Klumb produced hundreds of views of the major public monuments and public

parks of the time, many ordered by the Emperor Pedro II and largely in the form of stereographs. According to Turazzi (1995: 210; 248) Klumb presented stereoscopic photographs to the general public for the first time in 1860, at one of the General Fine Arts Exhibitions of the Imperial Academy in the Exhibition of Industry Artefacts and Fine Arts Application section. By the National Exhibition of 1866, the exhibition of stereographs was earning a status of its own. In this exhibition, the series of photographs was divided into “panoramas”, “various panoramas for albums”, “stereoscopes”, “albums” and “pictures”. In the “stereoscopes” subclass up 70 views were announced, “several of Rio de Janeiro, Tijuca, Serra dos Órgãos, Teresopolis, Public Garden, Botanical Garden, etc.” The views were sold at \$10,000 (ten thousand reis) for a choice of a dozen and \$9,000 (nine thousand reis) a dozen. In comparison, the panoramic views of albums were sold at \$2,500 to \$3,000 each. This shows the high prices of the stereographs, added to the fact that to observe the images it was necessary to have a stereoscope, which limited public consumption (Turazzi, 1995: 125; 128).

Although most of the stereographs discussed in this study have been verified as by Klumb, there were other nineteenth century photographers dedicated to the production of stereoscopic views of Rio de Janeiro, such as the Hungarians Biranyi and Kornis, established in the city

in the 1850s, Lamartres in 1858, and Afonso Ruelle in the 1860s. We also find registers of stereographic records by the photographers Carneiro and Smith, who worked in Rio de Janeiro between the 1850s and 1880s, and Marc Ferrez, between 1860 and 1900.

We would like to draw attention to the stereoscopic work of Georges Leuzinger's photographic studio in Rio de Janeiro, more specifically the series "Vistas de Rio de Janeiro" probably made by his son-in-law Franz Keller, possibly in collaboration with Marc Ferrez, or continued by him during his last years of work at this establishment (Kossoy, 2002: 204-205, 188; "Cadernos de Fotografia Brasileira: Georges Leuzinger". S. Paulo: Instituto Moreira Salles, 2006), even though, at the time of this research, no examples of this stereoscopic work had been found in Rio's public collections.

Georges Leuzinger advertised his establishment, located at Rua do Ouvidor nº36, in the Almanak Laemmert from 1845. From 1854 onwards he started to advertise in the photography section of the almanac, a "special workshop and the best English equipment for landscapes, various stereoscopes and views and daily life" (emphasis added) (Almanak, 1866:644). In the prints, paper and props section, his son, Jorge Leuzinger advertised "Great variety of photographs, panoramic views of the city and nearby areas, stereoscopes and daily

life, etc." [emphasis added] (Almanak, 1866:566). There were 19 advertisements in a row, until 1884. Similarly, the photographer and businessman, Henri Desirée Domère, advertised his establishment at Rua do Ouvidor n. 102, since 1854, and, from 1863, he started to advertise the sale of "stereoscopes and the views that go with them" (Almanak, 1863:589), which appeared in the Almanack until 1880.

In advertisements published in the *Jornal do Commercio* we find that the production of stereographs was offered as another of the photographic techniques that was in vogue at the time and/or served to highlight the activity of the photographers. At other times, "exhibitions" were announced, so that the public could attest the photographers' work and, at the same time, be encouraged to consume the views and portraits produced, among which were those in a stereoscopic format:

THE TEMPLE OF ART — English spoken — on parle français — E pluribus unum / Photographic Establishment / Carneiro e Smith / Rua dos Latoeiros 60 / A house dedicated to photography in old coloured bound screen. Portraits to be sent in letters. / EXHIBITION. / Rua do Ouvidor at the corner of dos Ourives / Ambrotype — Melainotype — Photographs — Stereoscope —

Coloured Miniatures / Daguerreotypes copies eight times bigger than the original. [emphasis added] (Jornal do Commercio, December 5, 1858, p. 3).

The opening of the advertisement, informing us of a familiarity with English and French, as well as the location of the establishment, the "noble" Rua do Ouvidor, indicated the type of audience that was targeted for the consumption of the images being offered.

The presence of stereoscopy in Brazil, however, was not limited to local productions. Acquired on trips to other countries, or even imported by dealers or individuals, stereoscopes were much appreciated, especially after the 1860s. At that time, the market for photographic views in the city of Rio de Janeiro was more developed, and there was a new clientele, beyond the official nobility and wealthy merchants, "a number of middle-class representatives—military men, priests, government officials, artists, teachers, professionals and others" (Kossoy, 1980b: 41). In spite of the expansion of the market for photographs and stereoscopic views, the latter had restricted consumption among the private sphere, although available to curious eyes in some establishments, as we saw in the Carneiro & Smith's advertisement "The Temple of Art". This is also confirmed, for example, in the text of another advertisement in the *Jornal do*

*Commercio* (December 14, 1854, p. 4) at the same time:

(...) stereoscopes [sic] with very nice views of Paris, Rome and different places, fun to own for family meetings, for which we invite the amateur gentlemen to come see the effect they produce; [...]. We sell everything at a friendly price at the Imperial Music Press of Filippone and C. Rua dos Latoeiros, No. 59 [emphasis added].

The advertisement, we emphasise, is from 1854, three years after the apparatus had been publicly displayed for the first time at the Great Exhibition in London (1851), and indicates its target audience from the start: the private consumer, especially in the family household. It should be noted, however, that there are still major gaps in the literature on the stereoscopic records in Brazil in the nineteenth century<sup>2</sup>, particularly in relation to information on the reception and consumption of stereographs. In order to verify and systematise the stereoscopic records that circulated in the city of Rio de Janeiro in the nineteenth century, the main iconographic public collections of the city were consulted, in order to map both the stereographs produced by photographers who worked in Rio de Janeiro and those acquired by residents in the city.

The 718 stereographs verified in the public collections in Rio de Janeiro<sup>3</sup>, can be divided into two groups: those that were produced in Brazil by professional photographers (commissioned by the Emperor, by private people, or on a photographer's own initiative) and those that were produced (mostly in Europe and USA) as part of a series of views to be marketed around the world. In the researched collections we found 405 Brazilian stereographs and 313 from other countries, some from the early twentieth century, which shall only be considered for comparison.

Concerning stereographs produced in Brazil in the nineteenth-century, especially in Rio de Janeiro, we note the presence in the collections surveyed, of the following photographers or publishers: Revert Henrique Klumb, Carneiro and Smith, anonymous organised by Roberts and Co., F. Bastos, Alfredo E. and C. Santos and Marc Ferrez. The considerably larger volume of Klumb's stereographs in the researched collections allows for a section of its own.

### Klumb's Stereographs

According to the mapping of public collections in the cities of Rio de Janeiro and Petrópolis, most of the Klumb's verified work is held in the National Library, in the *Collection of Empress Thereza Christina Maria*, where we recorded the existence of 265 stereoviews by

the photographer<sup>4</sup>. We also found stereoview by Klumb in the collections of the Imperial Museum (14) and in the Institute Moreira Salles (11). Klumb's stereographs consist mainly of records from multiple locations in the cities of Rio de Janeiro and Petrópolis (views, monuments, buildings) and portraits of the imperial family, which are relevant for understanding Brazil's entrance to "civilising" modernity.

The oldest of Klumb's stereographs in the *Collection of Empress Thereza Christina Maria* (a collection at the National Library), were produced, it is estimated, between 1855 and 1856. Among them were two views of the Military School in Largo de São Francisco<sup>5</sup>. Parente (1999) also shows three stereographs belonging to the collection that would have been produced in 1855: a) a view of the convent of Barbadinhos and the Church of San Sebastian on the Morro do Castelo; b) a portrait of Dom Pedro II; and c) a portrait of the Empress Tereza Christina.

Most of the photographer's stereographs in this collection, however, are from 1860 (202 stereographs). Among them, that stand out, are: 36 views of Tijuca<sup>6</sup>; 28 views of the Public Garden; 16 views of the city centre of Rio de Janeiro, taken from the towers of the Church of San Francis of Paula, from the Morro do Castelo, from Santa Tereza and Ilha das Cobras; 9 views of Saint Christopher Palace (now the National Museum

at Quinta da Boa Vista: overview, side views, outbuildings and vicinity); 5 views of the Navy Yard in Rio de Janeiro (taken from Ilha das Cobras and the National Observatory in the Morro do Castelo: the Emperor's Pavilion, main façade and São Bento Monastery, Arsenal tip); 20 stereoviews of plants and vegetation (4 of them depicting vegetation specifically from the state of Minas Gerais, and other inventoried plants typical of the country, stating the scientific name of the plant manuscript in ink on the back of support cards); 30 views of the city of Petrópolis; 6 views of the Estrada da União e Indústria connecting the State of Rio de Janeiro to the State of Minas Gerais. In addition to these, we also found stereographs from various locations and buildings of the city in 1860 (churches, palaces, different neighbourhoods, squares, etc.).

Dated between 1861 and 1865, we found 28 stereographs by Klumb, including 19 views of the Imperial Palace of Laranjeiras (main façade, general views, interior, vegetation), and people posing for pictures. The residence of Princess Isabel and Count d'Eu, also known as Paço Isabel, now Guanabara Palace, located in Guanabara, now Pinheiro Machado).

We also found two stereographs from 1869 by Klumb, four from the 1860s (n/d) one from 1880 (Hotel Pharoux – Largo do Paço) and twenty-one with no

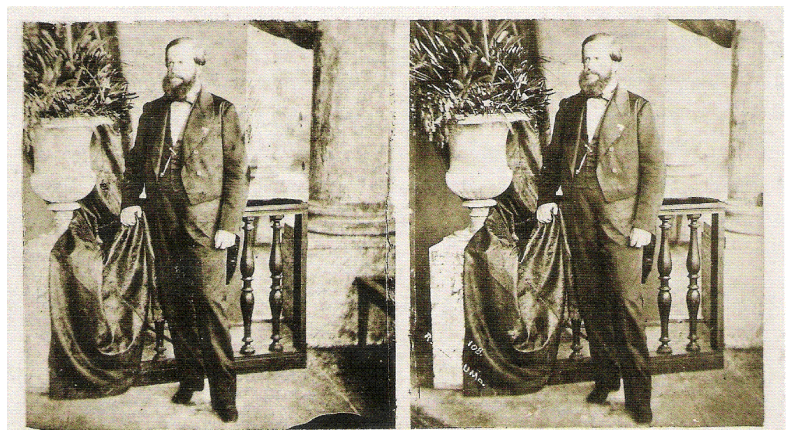
defined date, but estimated as being from 1800.

We also found some portraits in the set of stereographs: the Imperial Family visiting the Farm of Mariano Procópio Ferreira (JF-MG); Princess Isabel; Empress Tereza Christina; Princess Leopoldina, Princess Elizabeth with an unidentified girl; Portrait of a Drover, and St. Christopher. We would also like to note four stereographs (from 1860), displaying the furniture from one of the residences of the imperial family.

The totality of Klumb's stereoscopic work, present in the surveyed collections, allows us to make some initial speculations. Klumb's stereographs are part of a social demand for typical images of the cultural panorama of the nineteenth century. An inventory of the city of Rio de Janeiro consists of its churches,

public buildings, monuments, streets, hills, views of various city angles taken from the top of the hills and towers of churches, empire portraits, and the characteristics of the country's vegetation. It shows a developing city, with its people and customs, surrounded by a lush nature. A rummage through the territory, as highlighted by Turazzi (2000: 13-14), "in addition to being a subject matter to scientists, [was] also a political necessity towards the consolidation of the Imperial State."

The countless records of the imperial family, especially the images of the Emperor Pedro II, were "equally important to the process of construction of the Brazilian nationality", especially with regard to "ensur[ing] the stability of the monarchical central power". In addition to the pictures, which sought to build the image of a "citizen king", "a lover of literature and



**Pedro II, Emperor of Brazil, aged 39, 1855.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard. Collection of the National Library.

the arts”, the recorded travels of D. Pedro II to other cities and provinces also contributed to strengthening and preserving the national unity of such a large country (Turazzi, 1995: 107).

The repertoire of portraits and views of the city and the country contributed to the consolidation of a collective memory, combining the coastal cities with the most remote rural areas and different regions of the country.

In the same manner the portraits helped to identify belonging to a certain class while building a social identity, the images of the city created an urban imaginary. Urban views completed “the process of self-representation of the bourgeois society” (Lima, 1991: 78-79). The image of a civilised country was built through photographs and stereoscopic views, both

within the country and in its relations with other nations.

As Turazzi demonstrated (1995: 93-153), Brazil’s participation in local and international exhibitions substantiated the self-affirmation of Brazil as a civilised and developing country. It was necessary to show other nations our “immense natural resources and [the] civilisation stages progressively achieved by the Empire”. Brazilian photography (including that in stereoscopic format) thus appears in the universal and national exhibitions from the earliest times. While “from an internal point of view, photography [...] was associated with the characteristic cosmopolitanism of the modern era” and promoted the affirmation of national identity, internationally it produced a “visibility” of the wealth and progress of the country.

The image being built was closer to the vision of the aristocratic and of the bourgeois elites, of a civilising present and a modern future, than to a colonial past. As noted by Fabris (1991: 45), photography revealed itself as “a powerful instrument of social cohesion”, offering “to the hegemonic layers a repertoire of common images” that constituted themselves in “an ‘ideal imaginary museum’, consisting of both ‘private’ icons [...] and ‘public’ icons, released by the various stereoscopic exhibits”.

Consequently, Klumb’s stereographs and, as we shall see later, also those of other Brazilian photographers who worked in the nineteenth-century, helped in building the image of a “Modern Brazil”, recreating its urban spaces and, above all, bringing the observer into a modernity built by the gaze.

In this sense, we can highlight, for example, the views of the city centre of Rio de Janeiro taken by Klumb from the top of a church tower, revealing an urbanised city full of buildings, as well as the record of the “bystanders” that was “made in the day Procession of Corpus Christi”, representing the movement of the “crowd” in the same was as the Impressionistic paintings would later reveal (Vasquez, 2001: 40).



**Imperial Family visiting the Farm of Mariano Procópio, Juiz de Fora, c. 1875.**  
R. H. Klumb. Stereoview. Albuminated paper on cardboard. Collection of the National Library. (Apud Parente, 1999:40)<sup>7</sup>





**The city centre: View taken from the tower top of the Church of St. Francis of Paula, c. 1870.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard. Collection of the National Library.



**Carmo Church and the Imperial Chapel - Procession of Corpus Christi, c. 1860.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard, 8x14 cm Collection of the National Library

The observers of the nineteenth-century know and recognise the urban areas inventoried throughout the images. More than that, they become part of the modern landscape. In the "frozen scenes of cosmopolitanism" Brazil can look like

any other "modern" nation, however, as demonstrated Fabris (1991: 45), the equivalence is only illusory, "one builds a Brazil that is not Brazil; is a vision of Brazil through bourgeois eyes where the particular becomes exotic and is catalogued as a curiosity".

It is necessary to emphasise, nonetheless, a feature of Klumb's work which is not exhausted in the "views" of the city of Rio de Janeiro and in the records of activities related to the imperial family. According to Vasquez (2001:32) there was a "reiterated interest on the part of Klumb by the workers" of city in its records. Stereographs such as "Master Valentim's fountain" (1860) can thus be highlighted, in which Klumb depicts slaves washing clothes in the main city fountain. In the same place, Klumb captures the images of sailors. Another highlight are the stereographs that recorded

the Tijuca Forest, including the "record of washerwomen while working and a man blatantly wiping himself after cooling off in the dam" (Vasquez, 2001: 35).

These records by Klumb almost constitute an exception to his time because, as Mauad pointed out (2004: 15), in general, "the popular classes only appeared in photographs under the condition of *typos humanos* (human types), as objects of attention for the photographic houses, so that these could reproduce the picturesque side of imperial society". The desire for the representation of a "Modern Brazil", supposedly civilised and proud of its imported European customs, where "the slave world, the world of work, should be transparent and silent", "an invisible world", did not erase, however, "the marks of an almost African empire" (Schwarcz, 1998: 116).

Klumb's work is filled with these examples. The origin of this "gaze" by Klumb, more socially oriented than most other photographers of his time, could be due to his feelings regarding his social class. As Vasquez has shown (2001: 19), unlike most of the photographers who had a more solid financial situation, "Klumb did not even have all the equipment necessary for the performance of his profession, being the 'partner' of a camera with the French Alphonse Rouel".

On the other hand, the reality experienced by Klumb was strongly marked by



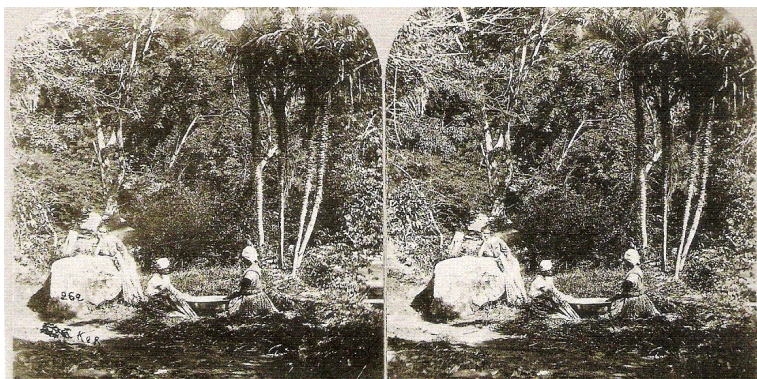
**The fountain on Largo do Paço (Master Valentim's Fountain), c. 1860.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard, 8 x 14 cm. Collection of the National Library.



**Matelots faisant de l'eau à la Fontaine du Largo do Paço, n/d.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard, 8 x 14 cm. Collection of the National Library.

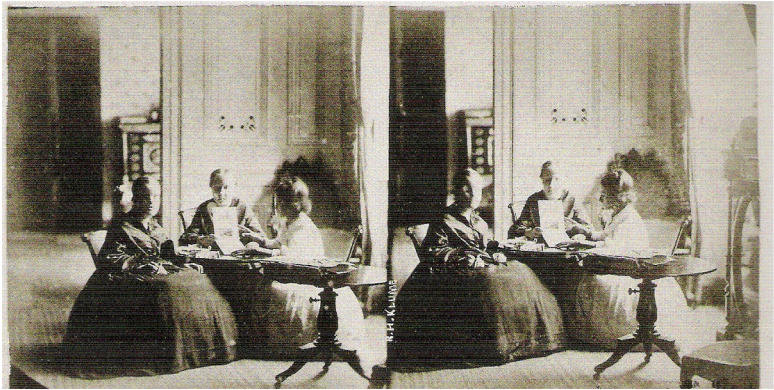


**Alto da Boa Vista: two slaves washing clothes under the gaze of a white woman, c. 1870.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard. Collection of the National Library. (Apud Parente, 1999: 34)

its relationship with the imperial family. In 1861 Klumb received the title "Photographer of the Imperial House" and his work mainly focused on the systematic recording of the main monuments and public spaces of the time, probably largely by indication or order of the Emperor Pedro II, becoming an "official account" of Rio's empire. Records of the imperial family are greatly present in his work, as well as the spaces they inhabited.

As the favourite photographer of Empress Tereza Christina Maria, Klumb taught photography to Princess Isabel, which probably enabled him to share the private spaces of the family. The stereographs, which record a moment of "intimacy" for the princesses, "examining photographs" (Parente, 1999: 42), sitting around a table, probably in one of the rooms of one of her family homes, as well as the record of the furniture in another, are evidence that the photographer had privileged access to these spaces. These records can also be considered metaphors of the nineteenth century observer's enjoyment of the private space, more suitable for the "stereoscopic gaze".



**Princesses Isabel and Leopoldina with a girl examining photographs, c. 1870.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard. Collection of the National Library. (Apud Parente, 1999: 42)



**Furniture of a residence of the Imperial Family: Bed, 1860.**

R. H. Klumb. Stereoview. Albuminated paper on cardboard. Collection of the National Library.

### Other stereographs produced in Rio de Janeiro

Other Brazilian photographers who worked in Rio de Janeiro in the mid-nineteenth-century also dedicated themselves to the production of stereoscopic views, however, most stereographs that were available in the collections are from

the late nineteenth century and early twentieth century.

In the period studied in the collections of the Imperial Museum, in the *Lorenço Luiz Lacombe Collection*, we would like to highlight a set of twenty stereographs by the photographers Carneiro & Smith at the inauguration of the equestrian

statue of Emperor Pedro I by the French sculptor Louis Rochet, on March 30, 1862, in the Largo do Rossio (Praça Tiradentes). The stereographs were produced during the ceremony of the unveiling of the statue, in a time sequence which recorded: a) the moment before the ceremony (many people in the square, the statue still covered); b) the time during the opening ceremony (people arranged in a semicircle, varying the covered and discovered statue after the official opening); c) after the ceremony, with the population already dispersed, and the deconstruction of the spaces assembled for the celebration (such as the “Arch of Triumph”, assembled especially for the occasion, already with its bare columns). In this sequence, we note the angle at which the views were taken: a higher point of view, providing a view of the whole ceremony – probably the photographer was at a window or on a balcony of a building, because, in some of them, we see one edge of a roof at the bottom right of the photo. In addition to these clichés almost “taken from the air”, we see pictures of the statue from various perspectives/views.

On the back of some of the stereographs are verified records of their provenience, in French. We cannot say whether the stereographs were made to order by some foreign visitor or by the emperor himself, or if they had been produced as a means of disseminating the official event to a wider market<sup>8</sup>. The bold angle

from which views were taken should be highlighted as part of the innovative creativity of the photographers of the time, as well as the time sequence of the record. A question is raised, however: why does the interest in the whole ceremony (overview) prevail over the more private aspects of closer frameworks? Why not record the details related to the population who attended the ceremony?

It is noteworthy that the equestrian statue of Emperor Pedro I was the first public monument of its kind to be erected in the city. According to Lima (2000: 43), it was “one of the civic events more fully recorded in people’s imagination”. From the perspective of building, the image of a “Modern Brazil” therefore, a detailed record of the observer public, would not be recommended. As Schwarcz indicated (1998: 213), celebrations linked to the imperial family were always related to a “great civilising motto” with pomp and circumstance, and were inscribed in the memory and created a tradition. “A great amount of money would be spent on these occasions. They used to erect daises, boardwalks, pavilions, decorate them lavishly with works of art” (ibid.). The record was therefore more closely linked to the construction of a national memory to be inserted into the project of a Brazil under development.

Although is it not in the scope of this research to examine other initiatives of this type, such as, for example, look-

ing in the catalogues of foreign corporations for the presence of thematic stereographs on Brazil, which would be part of a work guided by other questions, it is noteworthy that the interest generated abroad by the stereoscopic views of Brazil was not exclusive to the late nineteenth century. Kossoy (1980b: 60), for example, states, “around 1861/2, photographers from the Amateur Photographic Association were in Brazil, documenting “picturesque” scenes and views of Rio de Janeiro for the production of stereoscopic cards”.

Similarly, the foreign production of the thematic series also had its consumption space in the city of Rio de Janeiro after the mid-nineteenth century, although it has only been possible for us so far to verify those belonging to the Emperor Pedro II, legated to the collections of Rio de Janeiro.

### **Stereographs from Other Countries Present in the Collections of Rio de Janeiro: “Virtual” Tourism and Insertion in the Image of Modernity**

As Ortiz highlights (1991: 152), tourism was a nineteenth-century invention. With the development of the means of transportation, especially powered by steam (ships and trains), the distances became smaller and travelling less tiring, safer and a little more affordable for the majority of the European popu-

lation. It is also in this period that travel agencies start to appear, inviting people to take “practical” or “economic” travel. According to Hobsbawm (1997: 284-9), in the mid-1860s France’s middle class was experiencing a true travel boom, from the longest journeys (summer or winter holidays) to the “tours, which were becoming more convenient and fast”, especially in order to admire the romantic landscapes and the monuments of culture. These *tours*, however, were not cheap. The tourist was the object of “railroads, hotels, tour guides”, and so many other expenses, among which was that of “a booming industry”, the souvenir, which is strongly linked to the diffusion of the photographic image.

If the rise of photography would be celebrated as the image “closest” to reality, stereoscopic images potentiate this type of discourse. In an article from 1853, it was stated that through the stereoscope “on the tables of our drawing-rooms we can look at our leisure, at those very distant scenes in which we are interested, without the effort of making the journey<sup>9</sup>”. Some years later, in one of the his articles for the *Atlantic Monthly*, Oliver Wendell Holmes, in 1861, recommended a virtual tour of the United States and Europe through the use of stereoscopic views, suggesting to young Americans that they could “learn more” about the difference between these civilisations through a single “stereoscopic gaze” than in a school book<sup>10</sup>.

Unlike the devices based in a dark chamber, where the observer and the image are located in different planes, stereoscopic vision, formed in the subject's own body (Crary, 1994), provided a kind of immersion in the landscape, and would subsume the discourse about the "mental rip", that is, the "virtual tour". More than examining the views, the viewer could "be part of them":

[...] With the aid of the stereoscope, we can see with our eyes, all the memorable places of the world; we can appreciate the most famous works of art, and watch all the men of our era that stood out<sup>11</sup>.

While photography brought the "world" into the home, stereoscopy transported the viewer to the "world". The example highlighted by Schiavo (2003: 129) is illustrative: an article in 1871 suggested that if a traveller wanted to go to New York or to Niagara Falls, they could, through stereoscopic views, design several itineraries at the points tickets were sold. The views could "undoubtedly tempt him/her to go one way, return the other, and entice him/her to a second trip to test a third<sup>12</sup>".

As Adams noted (2004: 50), stereographs as souvenirs offered "the authenticating private experience", independent of the observer having physically been in the place portrayed. Those who

watched the stereoscopic images recovered "partially the place or original event that they did not necessarily experienced" and were the co-creators of a private narrative. In the collections of selected views, an "imaginary museum" was created.

"Tourist" images were not a part of the domestic collection of stereoscopic images, however. The values of a bourgeois society on the rise were also disseminated through the views in the wake of the "universality of capitalism, of the market its products and of the socialization of its principles on a global scale", especially as regards the incorporation of "colonial" and "backward" regions in relation to the "European epicentre" (Pesavento, 1997: 57).

In the Collection of the Imperial Museum, in addition to 57 stereoscopic photographs produced in Brazil, we found 116 stereographic records, for which, from printed information on media cards and notes on their backs, we found photographers or publishers, dates and production sites. They were: B. W. Kilburn (or Kilburn Brothers), USA (51 stereoscopic photographs between 1870 and 1890, 26 of them undated); HP (Henri Plaut), Europe (23 n/d stereoscopic photographs); Gustav Liersch & Co., Berlin (19 stereoscopic photographs, 6 from 1896 and 13 n/d); Sophus Williams, Berlin (8 stereoscopic photographs; 5 produced between 1895-6 and 3 n/d); Collection

LL, Paris (7 stereoscopic photographs without a specific date); J. Rodenstock, Berlin (1 stereoscopic photograph n/d); Fränkische Schweiz (1 stereoscopic photograph n/d).

While most verified stereographs may be contextualised within the logic of the production of a form of "tourism" through images, other themes were part of the universe covered by stereographs. According to our research, we can divide the verified stereographs into five groups of subjects: 1) Fun themes – everyday situations, staged by animals, "humanised" by costumes and sets, or assigning mocking titles to the scenes shown; 2) Scenes of everyday life – women playing tennis, a girl with a cat in her lap, children on the beach, a group of hunters with dogs, etc.; 3) historical and political events that marked important dates; 4) scientific and artistic inventories – such as, for example, a picture gallery at Buckingham Palace, England, or the interior of the Natural History Department in Washington DC, USA, a large hall with many showcases; 5) tourist sights. This latter group, where verified stereographs are most common, enables some subdivisions: a) aspects of different cities and countries (streets, squares, parks, bridges, gardens, buildings) invoking a civilisation model to be followed; b) exotic places of exuberant nature, such as Yellowstone Park and Niagara Falls; and c) records of historical monuments such as the pyramids of Egypt.

Seven (7) stereoscopic photographs from the 1870s stand out in the collection, published by B. W. Kilburn, USA. Three of them date back to 1870 and show amusing themes with animals and humans (“El barbero” monkeys exercising the office of “barber”, “Classical Music”, an orchestra of bears on a stage with bears in the audience, “The snowy owl”). The titles are written in front of the support card, preceded by numbers (3285, 3291 and 3296, respectively) demonstrating that, possibly, they were part of a large series of thematic marketed stereographs. Also on the front of the support card, we verify the inscription *Entered according to act in the year 1870 by James A. Hurst in the Office of the Librarian of Congress, at Washington DC* On the back of the card is the authorship of the photographs, *Photographed and Published by BW Kilburn / Littleton, N. H.* The other four (4) stereographs date to 1877 and offer views of Ireland and an abbey in Scotland. These stereographs are also numbered, demonstrating that they were part of another thematic series. The other stereographs are all from the late nineteenth century.

In the Collection of the National Library, in addition to 273 stereoscopic photographs produced in Brazil, we find 147 stereographic records in the collection of Empress Thereza Christina Maria, in which, according to the information available in the collection catalogue, are

photographers or publishers, dates and production sites.

In addition to the traditional “touristic” images, other sets of stereographs stand out, such as the set of 19 stereoscopic photographs by Frank Robbin, of the oil region in Pennsylvania, United States, produced between 1875 and 1876, including a view showing more than 150 oil wells and a log of oil refining at the Imperial refinery (the largest US oil refinery at the time). According to the information in the collection catalogue, Emperor Pedro II saw this region during his visit to the US between 15/4 and 12/6 1876. The stereoviews are part of a series, *Frank Robbin’s Stereoscopic Views, of the Pennsylvania Oil Region, Oil City: Views of the Penna. Oil Region.*

The stereoscopic views were not just related to leisure, and were not intended only for the non-committed tourist souvenir, but also to exalt certain economic characteristics of the “developed” countries. The other stereographs we found fit into the same pattern, bound by the corporations that traded the views: E. H. T. Anthony, New York, USA (1 stereograph dated 1865)<sup>13</sup>; D. R. Holmes, South African Museum (8 stereographs, 188?) And Views of the Kerguelen Island, Indian Ocean (26 stereographs 1874); Baker & Record Photographers, Saratoga Springs, USA (53 stereographs n/d); Saratoga Photographer Co., Saratoga Springs, USA (21 stereo-

graphs 18??); Ruins of the Temple of Jupiter and Samson, Baalbek, Lebanon (10 stereographs, n/d). We also found one stereograph of the Philadelphia International Exhibition, 1876, and eight stereographs of places and monuments in Italy with an indication that they were produced in the nineteenth century, but no specific date.

The variety of themes available through the stereoscopic views produced for marketing – situations of daily life, funny themes, historical or political events, scientific or artistic inventories, views from various countries, monuments, historic sites – were part of the world view of the bourgeois society of the nineteenth century, of the illustrated rationalised project and of positivist ideals, in the exploration of new lands in search of the exotic, in the praise of progress and civilisation, and, above all, of a growing demand for new images. It broadened the horizons of viewers with numerous overlapping views that formed a panel of the modern world, acclimatising people to the ephemeral, to a new temporality, to a new speed, to the new experiences of the flow of information. At the same time, the kind of peculiar “gaze” in the individual binocular vision device needed to observe the images formed subjectively, produced a new observer.

Imagistic tourism, the exaltation of progress and science, were also part

of the visual references in the world offered to Brazilians, who entered the era of consumption of "civilising" images. More than that, the "stereoscopic gaze" of those images placed the observers into modernity and helped them build a "Modern Brazil".

The stereographs verified were part of the private collection of the Emperor Pedro II. The consumption of foreign and Brazilian views was not restricted to this monarch, however. Mapping the trade of optical instruments and devices (as well as the images produced for them) in Rio de Janeiro, demonstrates that there was a growing market for the provision of stereoscopes for consumption in various establishments.

## Endnotes

- 1 Brought by the abbot Louis Compte "on his journey around the world, in the training ship *L'Orientale*" who arrived in Rio de Janeiro on December 23, 1839, according to Kossoy (1980b: 17).
- 2 In 2006, only a Brazilian publication on the subject was verified, by José Inácio Parente (1999). There is also the work of Vasquez (2001) on the photographer Klumb.
- 3 A survey conducted at the National Library, the Imperial Museum, and the Moreira Salles Institute - RJ. Other collections will be surveyed to complement this study, such as: Collection Empress Leopoldina in the Brazilian Geographic Historical Institute (IHGB) and Collection of the National History Museum (as well as the National Library, both institutions received the private collections of Emperor Pedro II, after his exile in Europe in the late nineteenth-century). In the collection of the Museum of Image and Sound (MIS-RJ) we noted a large number of stereographs by the photographer Guilherme Santos, dating between 1914 and 1957, which surpassed the proposed period for this study.
- 4 At the time of this research, these stereographs were not accessible because the collection was in inventory by the federal police. The collection's catalogue, however, which was complete, stating title, date, author, photography description and other relevant information, made possible a preliminary systematisation. From the beginning of 2015, the collection has been available for viewing and research into the Portal Brasileira Fotográfica, organised by the National Library Foundation and the Institute Moreira Sales. Retrieved September 28, 2015, in <http://brasilianafotografica.bn.br>
- 5 According to the catalogue card (41/78): "view taken from the church tower of St. Francis of Paula: roof and part of the main façade;

## References

- Adams, Gavin. (2004). *A Mirada Estereoscópica e a sua Expressão no Brasil*. 2 vol. São Paulo: Universidade de São Paulo. Thesis (PhD in Comunicação e Artes)
- Alencastro, Luis Felipe de (1997). Vida privada e ordem privada no Império. In Novais, Fernando A. (Coord.) & Alencastro, Luiz Felipe de (Org.), *História da vida privada no Brasil* (pp. 11-93). São Paulo: Companhia das Letras (História da vida privada no Brasil; 2).
- Crary, Jonathan (1994). *L'Art de l'Observateur: Vision et Modernité au XIX siècle*. Nîmes: Éditions Jacqueline Chambon. Trad. Frédéric Maurin. Original title: *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*.
- . (1999). *Suspensions of Perception: Attention, Spectacle, and Modern Culture*. London: MIT.
- . (2001). A visão que se desprende: Monet e o observador atento do século XIX. In Charney, Leo & Schwartz, Vanessa R. (org.), *O Cinema e a Invenção da Vida Moderna*. São Paulo: Cosac & Naify.
- . (2002). Géricault, the panorama, and sites of reality in the early Nineteenth Century. *Grey Room*. Cambridge, MA: The MIT Press, 9 (Fall): 5-25.
- Fabris, Annateresa (1991). O circuito social da fotografia: estudo de caso – I. In Fabris, Annateresa (org.), *Fotografia: Usos e Funções no século XIX*. São Paulo: Universidade de São Paulo (Coleção texto & arte; v. 3).
- Ferrez, Gilberto (1985). *A Fotografia no Brasil: 1840-1900*. Rio de Janeiro: FUNARTE: Fundação Nacional Pró-Memória (História da Fotografia no Brasil).
- Hobsbawm, Eric J (1997). *A Era do Capital: 1848-1875*. 5 ed. rev. Rio de Janeiro: Paz e Terra.
- Huhtamo, Erkki (n.d). Armchair traveller on the Ford of Jordan. The home, the stereoscope and the virtual voyager. *Mediamatic Magazine*, v. 8, n. 2/3 the home issue. Retrieved from <http://www.mediamatic.net/5910/en/armchair-traveller-on-the-ford-of-jordan>
- Kossov, Boris. (1980a) *Hercules Florence - 1833: A Descoberta Isolada da Fotografia no Brasil*, 2nd ed., S. Paulo: Livraria Duas Cidades.
- . (1980b) *Origens e Expansão da Fotografia no Brasil – século XIX*. Rio de Janeiro: FUNARTE.
- . (2002) *Dicionário Histórico Fotográfico Brasileiro: Fotógrafos e Ofício da Fotografia no Brasil (1833-1910)*. São Paulo: Instituto Moreira Salles.
- Lima, Evelyn Furquim Werneck (2000). *Arquitetura do Espetáculo: Teatros e Cinemas na Formação da Praça Tiradentes e da Cinelândia*. Rio de Janeiro: UFRJ.
- Lima, Solange Ferraz de (1991). Circuito social da fotografia: estudo de caso – II. In Fabris, Annateresa (org.), *Fotografia: Usos e Funções no Século XIX*. São Paulo: Universidade de São Paulo (Coleção texto & arte; v. 3).
- Mauad, Ana Maria (1997). Imagem e auto-imagem no Segundo Reinado. In Novais, Fernando A. (coord.) & Alencastro, Felipe de. (org.), *História da Vida Privada no Brasil* (pp.181-231). São Paulo: Companhia das Letras (História da vida privada no Brasil; 2).
- buildings of the current Rua do Teatro and part of the main façade. It is currently the headquarters of the Institute of Philosophy and Social Sciences of the Federal University of Rio de Janeiro.*" According to Parente (1999: 28), however, this stereoscopy should have been dated 1870.
- 6 With the following themes: Mr Bennett's Farmstead; Hotel Bennett (partial views, access roads, site of the baths, black employees working in the barn and other outbuildings); vegetation; Small Cascade (access paths such as bridges, Largo da Boa Vista Square); Grand Cascade; Cascade of the Cross; English Hotel (partial view and hotel views taken); residences of Mr Taunay, Pecher and Genty; partial view of the Alto da Boa Vista (vegetation and relief); black washerwomen; fire; views (Bico do Papagaio, new path to the Botanical Garden); mountains of Tijuca. According to Vasquez (2001: 35), Klumb would have been the first photographer "to venture into the Tijuca Forest" to take a considerable number of views.
- 7 According to Schwarcz (1998: 360), based on research at the Mariano Procópio Museum, the records of that visit were made by Klumb in 1861.
- 8 According to Ferrez (1985: 37), these photographers were the "best who knew how to advertise their establishments" in Rio de Janeiro in the mid-nineteenth century.
- 9 The Progress of Photography. *Art Journal*. London, August 1, 1853, p. 181, *Apud* Schiavo (2003: 129).
- 10 Holmes, in *Atlantic Monthly* 8, no. 45, p. 23, *Apud* Schiavo (2003: 113).
- 11 Stereoscopes and Photographs. *Home Journal*. New York, October 1, 1859, p. 2. *Apud* Schiavo (2003: 129).
- 12 Photography as Applied to Business. *Photographic Times* 1, no. 4, 1871, p. 49, *Apud* Schiavo (2003:129).



- . (1999). A vida das crianças de elite durante o império. In Del Priore, Mary (org.), *História das Crianças no Brasil*. São Paulo: Contexto.
- . (2004). Entre retratos e paisagens: modos de ver e representar no Brasil oitocentista. *Studium*. Campinas, SP: Laboratório de Media e Tecnologias de Comunicação/ Departamento de Multimeios UNICAMP, 15 (Summer). Retrieved from <http://www.studium.iar.unicamp.br/15/01.html>
- Ortiz, Renato (1991). *Cultura e Modernidade*. São Paulo: Brasiliense.
- Parente, José Inácio (1999). *A Estereoscopia no Brasil: 1850-1930*. Rio de Janeiro: Sextante.
- Pesavento, Sandra Jatahy (1997). *Exposições Universais. Espetáculos da Modernidade do Século XIX*. São Paulo: HUCITEC.
- Rayfield, Beth (1998). Double Dating: Courtship Ritual and the Radical Potential of Stereographic Viewing. *Iconomania: Studies in Visual Culture*. Riverside, CA: Department of History of Art, University of California.
- Schiavo, Laura Burd (2003). From phantom image to perfect vision: physiological optics, commercial photography, and the popularization of the stereoscope. In Gitelman, Lisa & Pingree, Geoffrey B. (Ed.), *New Media, 1740-1915*. London: MIT: 113-138.
- Schwarcz, Lília Moritz (1998). *As Barbas do Imperador: D. Pedro II, Um Monarca nos Trópicos*. São Paulo: Companhia das letras.
- Turazzi, Maria Inez (1995). *Poses e Trejeitos: a Fotografia e as Exposições na Era do Espetáculo (1839-1889)*. Rio de Janeiro: Rocco.
- . (2000). *Marc Ferrez*. São Paulo: Cosac & Naif.
- Vasquez, Pedro Karp (2002). *A Fotografia no Império*. Rio de Janeiro: Jorge Zahar. (Descobrimo o Brasil).
- . (2001). *Revert Henrique Klumb: um Alemão na Corte Imperial brasileira*. Rio de Janeiro: Capivara.
- . (n.d). *Fotografia Brasileira do Século XIX.*. Retrieved from <http://djweb.com.br/historia/seculo19/seculo19.htm>

13 In the *Almanak Laemmert* of 1880, an advertisement from the firm E. & H. T. Anthony & Co. offered for sale stereoscopes, graphoscopes and magic lanterns, as well as "stereoscopic views from all parts of the world" in an establishment located in New York. *Almanak* (1880: 1005).