

# Graphic innovations implemented in the Brazilian press by Julião Machado in the end of the 19<sup>th</sup> Century

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The article is a research on the new graphic language implemented in Brazil by Portuguese illustrator Julião Machado in the late 19<sup>th</sup> Century. For this purpose, magazines *A Cigarra* and *A Bruxa* produced by Julião Machado and Olavo Bilac from 1895 to 1897 were chosen. Several contributions related to graphic analysis of such printings were enabled by microscopic exam of printed surfaces, and it is believed that the information were helpful in understanding the production and printing methods of such printings.

## 1. Julião Machado and his Graphic innovations

Julião Félix Machado arrived in Brazil in 1894 and began a trajectory of a quarter of a century of graphic work. In 1895, in partnership with renowned writer Olavo Bilac, he founded the illustrated magazine *A Cigarra* (Lima, 1963, p. 964-968).

The analysis of the images produced by Julião Machado in the late 19<sup>th</sup> Century enabled the identification of the construction process that systematically mingled several lithographic techniques used by the illustrator; hence most part of his production is formed of hybrid images.

His drawing technique was based on nib traces, and at times he used linear schemes characteristic of metal engraving, such as defined hatches and distinct contour lines. The constant use of clean and regular trace became his characteristic, and authors such as Herman Lima (1963) and Lustosa (2005) highlight this aspect which stands out among the Brazilian lithographic production of illustrated magazines of the 19<sup>th</sup> Century, that enhanced the use of crayon in the creation of drawings doted of smoky nuances.

The strong contour lines of the drawings by Julião were always printed in black, and to fill two colours printed magazines the artist deployed other techniques such as brush, ben day and sprinkled. The brush was used to fill areas of flat colour and lose traces that formed the main image or the background with fainted colour inks. It was common in his illustrations to find lose brush strokes forming the background of images and in some cases, even in text columns.

The sprinkled technique was always present in Julião's illustrations, who manipulated spills in different ways, depending on

his intentions for each produced scene. The fill was irregular and the density depended on the intensity of the sprinkles applied by the artist. Often, the sprinkled technique was used as background texture of the produced images and, other times as a fill for nib contoured figures, in which case paper masks were required in order to restrict the area to be worked.

Another method of filling and finishing widely used in the illustrations produced by Julião, especially in magazines *A Cigarra* and *A Bruxa* was the ben day pattern, mainly in reticulated and striped textures. In such case, the technique was applied especially to fill defined areas and contoured by trace. The malleability of gelled sheets used to transfer the patterns enabled them to be applied in areas with different contours because the illustrator simply had to press the previously tinted sheet with a tip over the print matrix and, therefore, his drawing would precisely define the tracing area.

On top of often mixing all methodologies of image construction described above in one drawing, in many occasions the hybridization happened through superposition of such techniques, creating new visual effects and textures. The great differential of Julião's work was the systematic use of this hybridization of techniques, this dynamic of work, which was translated in a unique visual result for that time, which cause the illustrator to stand out in the Brazilian press, reaching a position in which as well as collaborating with several periodic, he also artistically directed two very successful magazines.

According to Lustosa, Brazilian caricature underwent several transformations in the late 19<sup>th</sup> Century, and such changes are attributed, in many aspects, to Julião Machado. The aesthetics of the so called "smoky" was the common aspect of images published in illustrated magazines so far, following the school created by Ângelo Agostini. The fast, yet relevant, performance of Rafael Bordalo Pinheiro in Brazil has introduced some experiences and innovations. With Julião Machado and his simple and clean traces, a new aesthetic was permanently implemented, using new technologies for the production of lithographic images which were a fad in Paris (Lustosa in Cardoso, 2009, p. 39).

## 2. Magazines *A Cigarra* and *A Bruxa*

*A Cigarra* first started to be sold in Rio de Janeiro, then capital of the Republic, in May 9<sup>th</sup>, 1895 and had a short life, ceasing to be published less than a year later in January 16<sup>th</sup>, 1896. Its owner was a banker and sportsman Manoel Ribeiro Junior (Magalhães, 1974, p. 189), who had enough resources to ensure that the

magazine had a prosperous and luxurious start. *A Cigarra* had a weekly periodicity and was out every Thursday, counting on the writing by poet and writer Olavo Bilac, illustrations by Julião Machado and famous collaborators.

After the cancellation of publishing of *A Cigarra*, allegedly due to Olavo Bilac leaving the literary direction of magazine after publishing provocations against Brazilian President Marechal Floriano, magazine *A Bruxa* came into circulation. Published in February 7<sup>th</sup>, 1896 to June 30<sup>th</sup>, 1897, with a total of 64 editions. The magazine was weekly and was out every Friday. The two publications were advertised as being luxurious, colourful, illustrated and the cost of manufacturing them was high. Both had fixed sections which represented titles composed by drawn letters and accompanied by illustrations.

*A Cigarra* and *A Bruxa* had two covers in predetermined standard, the headings were composed by their editorial and logos. In addition to the heading on the top of the cover, there was a strict formula for presentation of information, divided into two columns, the narrower one on the left, used for texts, and the one on the right, used for displaying the cartoons by Julião Machado (figure 1). Said structure was accurately followed on the cover of both magazines, except for special editions, when the text column was replaced by a cartoon published in highlight.

The editions were printed in special glossy paper, with eight pages. They followed the common structure for that time, reserv-

ing half the edition for texts (pages 2, 3, 6 and 7) and the other one for illustrations. However, both magazines have represented a transition phase in the integration between images and text, since they did experiments in page compositions, intercalating among the texts different types of images which were elaborated for their personalized titles, their humorous and decorative vignettes, and even caricatures and cartoons. Therefore, the tradition division into text and image pages of contemporaneous illustrated magazines did not become an unbreakable rule for *A Cigarra* and *A Bruxa*. Their pages were malleable and adapted to the available content.

There was a great change in style and finishing of the images published in the magazines produced by Julião Machado. Orlando da Costa Ferreira considers *A Cigarra* a milestone in the transformation of graphic language among Brazilian illustrated magazines:

The cycle of lithographed magazines has terminated, the new cycle was the zincographical drawing by *A Cigarra* [1895-1896], of Julião Machado and Olavo Bilac [Ferreira, 1994, p. 407].

In affirming that the cycle of lithographed magazines had ended, one should take into consideration the change in configuration of illustrations and not the abandonment of the lithographic technique, thesis which will be sustained herein. What several authors understand as the introduction to zincographical drawing in magazine *A Cigarra*, does not refer to the production of embossed zinc clichés and consequential change in the images printing process. In the late 19<sup>th</sup> Century, the Brazilian press had access to a production method of embossed clichés which enabled the abovementioned innovations regarding the presentation of pages, previously exclusive of textual content, and hence, started to comprise several intercalated images [Werneck Sodré, 1966, p. 253-254]. The clichés produced in this way would resolve the incompatibility between the embossed printing of movable types and flat printing of lithographic images.

Such logic seems to be the plausible solution for the start of configuration of magazines that modernized the Brazilian press. However, the meticulous analysis of the collection with the aid of two microscopes that enhance printing points by 25 and 50 times, enabled to unveil the production method of magazines *A Cigarra* and *A Bruxa*.

The first discovery concerns the flat printing of texts, which confronts an obvious production method where mobile types are printed straight onto the paper, through tinting of the embossed surface. Based on the analysis carried out with the aid of microscopes, it was possible to confirm that it was a case of flat printing. There are no traces of pigmented edges that formed with the pressure of the embossed printing on the paper in the magazine texts. Also, all contours of characters are irregular, another evidence that there was transportation of typographic printing to a flat surface.

The images also include flat printings, and, therefore, the repeatedly reported explanations by authors that study the subject



Figure 1. Cover (*A Cigarra*, n.13, 1895).

about the easiness of producing embossed zincographic clichés, which were a fact at the time, do not correspond to the way *A Cigarra* and *A Bruxa* were produced. In relation to the images, besides the analysis supported by microscopes, the gestural and hybrid features of Julião Machado's production shall also be considered, as they do not relate with the embossed clichés of that time, which were less detailed.

Given the new findings, it was possible to understand the production of zincographic pages and the great differential of Julião Machado's work. The images were zincographic, but from a different technique, which employed the lithographic use of the zinc plate. Instead of stone, the printing is made through the metal plate previously assembled. At such time, there were transfer papers, which freed the artist from producing his/her drawings on top of printing surfaces and from having to draw inversely. Thus, Julião Machado produced his caricatures, titles and vignettes in transfer paper, from it the image was transported to the zinc plate, and the printing was lithographic, using the same principle of water and oily paint repulsion.

For the textual part, it was necessary to make the composition via mobile types of text columns, tint it with lithographic ink and print it on the transfer paper; then it would be passed onto the zinc plate, together with the images. This explains the irregular edges of characters, which cannot be noticed by the naked eye. In some pages the graphic stain is thicker or brighter, depending on how successful the text transfer process was, which confirms the hypothesis.

The flat printing of the text enabled the entire magazine to be produced from a single printing machine, and that the beginning of text and image articulation on the illustrated magazine pages happened regularly, becoming one of the most impactful and successful features. Furthermore, the image production by Julião Machado - based on the mixture of several techniques and drawings, rich in details and different fills - was enabled by the great flexibility of lithography, capable of miming the effects of all illustration and texture categories, even equivalent printing modes such as the texts composed of mobile types. In other words, the printing base of magazines continued to be lithography, however, using a zinc plate as a matrix, and several techniques which enabled escaping the aesthetics highly characteristic of lithographic crayon.

From the analysis of previously published magazines, the insertion of xylographic images in the text pages stands out, especially in *Semana Ilustrada* (1863) and *O Besouro* (1878), and also the similarity of the production mode entirely lithographic in *Psit!!!* (1877) magazine. They were relevant experiences and precursory to those identified in *A Cigarra*. However, the insertion of decorated titles and vignettes within all text pages, systematically, was a differential of Julião Machado's publication. In *Psit!!* which, for instance, used lithography for printing the entire magazine, the textual and imagery content was sectorized in pages: images took the top half of the page, whereas texts the bottom half.

Even in the last decade of the 19th Century, composition and print-

ing of pages were lengthy projects, relevant to the success of a magazine, particularly in relation to a magazine containing several images among the text, a detailed and costly work, being the pagination a challenge in every new edition.

Besides the graphic technology, the usage of colours in the production of magazines *A Cigarra* and *A Bruxa* was also investigated, since they were published in two colours: black and an auxiliary colour such as green, orange, blue, ochre. The auxiliary colours were often presented in faded tones, forming the background of pages and filling the images. Normally, the pages dedicated to textual content were printed in black, regardless of having illustrations. According to Cássio Loredano, this system of reproduction of illustrations was named "named colour" or "applied colour", which consisted of production of two printing matrixes, one with the "traced" drawing, which was always printed in black and another one, to apply colour. The process was described by Loredano when he investigated the production mode of Pimenta de Melo's printing plant, in the first decades of the 20th Century. For the similarity between the studied magazines, the following description of the process investigated by the author:

[...] it consisted in the "trace" made by the draftsman, that is, everything that is supposed to be presented in black in the magazine was sent to the shop to produce the cliché; from there, the original would go "up" to the draftsman to point out the colour [s] with washed brush strokes over the "trace"; then it would go "down" for the head of the shop to determine the application of what the artist had pointed out, requesting a new cliché for each colour [Loredano, 2002, p. 60].

Magazines *A Cigarra* and *A Bruxa* did not involve embossed clichés and only two matrixes were needed, one for the black colour and another for the second colour, which functioned as the fill and background of illustrations. On top of the washed brush strokes, a series of fill forms which included brush strokes, sprinkled, ben day and others.

A single edition stands out among the ones printed in several colours or polychromy. It is publication n. 61 of *A Bruxa*, which circulated in April 23rd, 1897, in which all pages intended for illustrations presented six colours, in different tones, which caused such edition to stand out among all others (figure 2). The perfect chromatic use catches attention, which required technical knowledge regarding the procedures used in the preparation of zinc plates and in the division and fitting of colours in the printing, forming new colours and tonalities.

In addition to the highlight for chromatic experiences, the illustrations were the differential of the publication. The pages dedicated to them were dynamic, enabled other ways of articulating graphic elements and differentiated from the strict structure of textual pages. Besides the exclusive pages used for the publication of illustrations *A Cigarra* and *A Bruxa*, the images were also valued in other pages, with usage of titles drawn in the fixed sections, and often in unique reports, in the illustrated vignettes which were intercalated amongst the text in some editions and the publication of illustrations and cartoons, which took over part



Figure 2. Polychromy (A Bruxa, n.61, p.4-5, 1897).

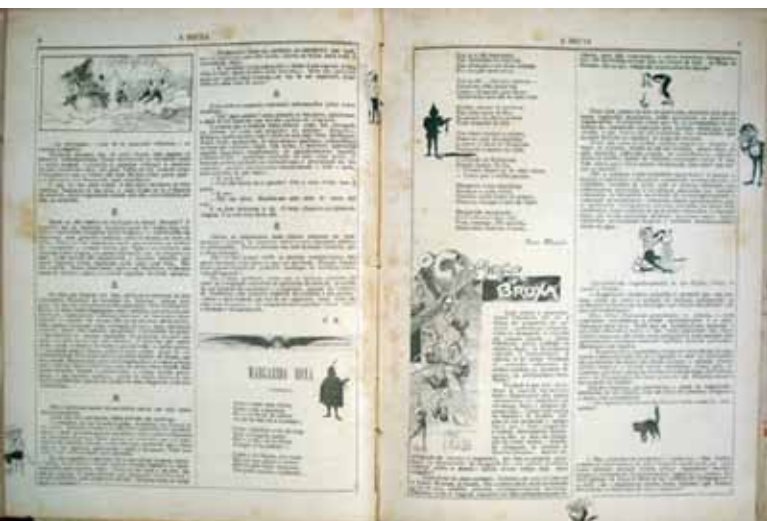


Figure 3. Illustrated titles and vignettes (A Bruxa, n.4, p.2-3, 1896).

of a text column. The illustrated vignettes enabled cleaner and brighter pages since they split subjects, functioned as decorative elements and created a white margin in their surroundings, as they often did not take up the whole width of the text column (figure 3). Also, they were relevant elements for the definition of the graphic identity of the periodic, since they were thematic vignettes. These first steps for integration of text and image in the Brazilian press generated several experimentations and publication of unusual pages.

### 3. Final remarks

The study of the dynamic of Julião Machado's work enabled the comprehension of the changes implemented in the graphic standard of illustrated magazines in the end of the 19<sup>th</sup> Century. Magazines A Cigarra and A Bruxa represented an experimental phase and the beginning of transition of the rigid structure of illustrated magazines of such period of time to great develop-

ment of irreverent and well diagrammed illustrated magazines of the beginning of the 20<sup>th</sup> Century. It is noticeable in the graphic design of the studied illustrated magazines the richness of images and graphic elements, which provided identity to such printings and are evidences that modern visual communication was booming and developing in Brazil. Even though Julião was not considered a designer, a common term in the 20<sup>th</sup> Century, this was the function he performed in A Cigarra and A Bruxa, being responsible for the entire visual of pages, the implementation of standards, the execution of vignettes, decorated titles and illustrations which formed his model. There is no doubt that there were projects which oriented the visual construction of magazines, since both presented standard patterns of pages and systematic use of graphic elements which provided personality and identity to the publications.

Analyzing the collection of A Cigarra and A Bruxa allowed the collection of information never published before, which complemented the bibliographic review, and enabled carrying out a graphical analysis from the viewpoint of design, so we could understand the logics behind the production of such periodics. Many contributions presented in terms of graphical analysis were enabled via microscopic analysis of the printed surfaces and it is believed that the information leveraged helped understanding the production and printing methods of the analyzed printings.

### References

- Cardoso, R. [Org.]. *Impresso no Brasil, 1808-1930: destaques da história gráfica no acervo da Biblioteca Nacional*. Rio de Janeiro: Verso Brasil, 2009.
- Ferreira, O. C. *Imagem e letra. Introdução à bibliologia brasileira: a imagem gravada*. São Paulo: Editora da Universidade de São Paulo, 1994.
- Lima, H. *História da caricatura no Brasil*. Rio de Janeiro: Livraria José Olympio Editora, 1963.
- Loredano, C. *O bonde e a linha: um perfil de J. Carlos*. São Paulo: Capivara, 2002.
- Lustosa, I. Ângelo Agostini, Julião Machado e o nascimento de uma caricatura brasileira. *História Viva*. n. 34, p. 84-87, 2005.
- Magalhães Júnior, R. *Olavo Bilac e sua época*. Rio de Janeiro: Ed. Americana, 1974.
- Sodré, N. W. *História da Imprensa no Brasil*. Rio de Janeiro: Civilização Brasileira, 1966.

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