This article, which is dedicated to portraits produced in the early 20th century using trick photography and to the historical and ontological relationship between photography and mirrors, is based on the assumption that it is necessary to think about the history of photography in an integrated manner, framing it in the broader context of media history and of more general theoretical questions such as the relationship between human beings and technology, the mediation between reality and imagination, and the interactions between the so-called “new” and “old” media. Mirrors and photography are means related, on the one hand, to pre-cinematographic shows and to the cinema itself, and on the other hand, to scientific devices, such as the telescope and microscope, which deserve to be rethought in terms of their mutual ambivalence. Configuring an “absolutely unreal” and “absolutely real” space, as suggested by the French philosopher Michel Foucault (1984/2005, p. 246), mirrors, like photography, became a paradigmatic example of a heterotopic space. In the history of photography and, in particular, of portraits using trick photography produced in the early decades of the 20th century, there was a marked use of mirrors and doubles, as devices able to present the disruption of human figure. We are referring to double portraits, photomultigraphs and photography using distorting mirrors (Bergeret & Drouin, 1893; Chaplot, 1904; Hopkins, 1897; Schnauss, 1890/1891; Woodbury, 1896/1905). Starting from a predisposition to rethink about the tradition of fantasy and trick photography in the general context of media history, we propose to retrace affinities between two “heterotopic” spaces – photography and mirrors.

Keywords: photography, mirror, media, heterotopy, formless

Jogos de espelhos: o duplo na fotografia recreativa do início do século XX

Resumo

O presente artigo, dedicado à produção retratística fotográfica lúdica do início do século XX, e à relação histórica e ontológica entre a fotografia e o espelho, parte do pressuposto segundo o qual seria necessário pensar a história da fotografia de modo integrado, enquadrando-a no contexto mais alargado da história dos média e de questões teóricas mais vastas como a relação entre a tecnologia e o humano, a mediação entre o real e o imaginário, e as interações entre os ditos novos e velhos média. O espelho e a fotografia são dois objetos, aparentados, por um lado, aos espetáculos pré-cinematográficos e ao próprio cinema, e por outro, aos aparelhos científicos, como o telescópio e o microscópio, que merecem ser repensados no que diz respeito à ambivalência que os aproxima. Configurando um espaço “absolutamente irreal” e “absolutamente real”, conforme sugeriu o filósofo Michel Foucault (1984/2005, p. 246) a propósito do espelho, o espelho, como a fotografia, seria exemplar de um espaço heterotópico. Na história da fotografia e, particularmente do retrato fotográfico lúdico das primeiras décadas do século XX, é assinalável o recurso ao espelho e ao duplo, enquanto dispositivo capaz de potenciar a destabilização da figura humana: referimos-nos ao retrato duplicado, à multifotografia e à fotografia com recurso a espelhos deformantes (Bergeret...
& Drouin, 1893; Chaplot, 1904; Hopkins, 1897; Schnauss, 1890/1891; Woodbury, 1896/1905).
Partindo de uma predisposição para repensar a tradição lúdica e fantasista no âmbito geral da história dos média, propom-nos retraçar afinidades entre dois espaços “heterotópicos”, que são a fotografia e o espelho.

**Palavras-chave:** fotografia, espelho, média, heterotopia, informe

Received: 09/12/2020 | Reviewed: 23/12/2020 | Accepted: 28/12/2020 | Published: 29/01/2021

### Mirror and photography: the story of two imaging devices

In *The mirror: a history*, Sabine Melchior-Bonnet describes the path that the mirror has traversed, with special emphasis on the West, from its initial consideration as a rare, precious and expensive object, a symbol of luxury and exuberance, to its progressive integration in furniture and domestic interiors and, finally, from the mid-19th century onwards, its proliferation in urban spaces: “in palaces, restaurants, cafes, entrances to buildings, theatres, casinos”, “at the opera” or even in department stores, boutiques and shop windows (Melchior-Bonnet, 1994/2016, p. 148). Between the second half of the 19th century and first half of the 20th century, mirrors effectively entered into a period of banalisation. This is indicated by the fact that the German philosopher Walter Benjamin dedicated a chapter of his *Passagens de Paris* (Das Passagenwerk [The Arcades Project]) to specular devices (Benjamin, 2019, pp. 668-673). Benjamin described the overabundance of mirrors in Paris at that time and their preponderance in everyday visual experience:

> where doors and walls are made of mirrors, there is no telling outside from in, with all the equivocal illumination. Paris is a city of mirrors. The asphalt of its roadways smooth as glass, and glass partitions at the entrance to all bistros. A profusion of windowpanes and mirrors in cafes, so as to make the inside brighter and to give all the tiny nooks and crannies, into which Parisian taverns separate, a pleasing amplitude. Women here look at themselves more than elsewhere. (...) But the man too, sees his own physiognomy flash by. (Benjamin, 2019 p. 668)

In light of Walter Benjamin’s considerations about the city, which are very close to those made by Siegfried Kracauer (1964/2013) and years earlier by Georg Simmel (2004), mirrors and photography, together with means of transport, public lighting, advertising, the illustrated press, cinema, among others, are part of this dense network of mediations that intensify daily urban experience. Apparently with a historical origin that is easier to date than the mirror, photography has also undergone a similar path of banalisation, as has also occurred with other types of communication media, that, by the end of the 19th century had become part of daily experience. Starting with the first image captured in Niépce Nicéphore’s trembling *View from the Window*, in 1826, photography began as a unique, precious and rare object – it is important to remember that the daguerreotype was not even mechanically reproducible; as Benjamin points it, Daguerre plates, “averaged 25 gold francs a plate” were often “kept in cases like jewellery” (Benjamin, 2012, p. 99). In the times of Nadar’s studio, portrait photography relied on “intellectual consciousness” (Freund, 1974, p. 43) and a strong “technical training” (Benjamin, 2012, p. 103). The Disderi *cartes de visite* were followed by the spread of photographic studios, with their tricks and accessories, their techniques of staging and touching up, as well as the increasingly thick photograph albums mentioned by Walter Benjamin (2012) in his “Short history of photography”. This path, accelerated by the 20th century Kodak’s happy moments, would attain a superabundant form, a constant and ubiquitous impulse in the 21st century with mobile phone cameras and social networks such as Instagram and Facebook (Lister, 1995/2013).

One of the aspects highlighted by Sabine Melchior-Bonnet in *The mirror: a history* is that, as
demonstrated by the myths of Narcissus and Perseus, mankind’s interest in seeing its own reflection is a kind of historical invariable, which means that it makes no sense to talk about a before and after the mirror (Melchior-Bonnet, 1994/2016, p. 23). Photography is also linked to this immemorial fascination with the reflected image, and our proposal is to think about it in conjunction with the mirrors, these “primitive speculative” machines (Miranda, 2019, p. 108). This is a way of reconsidering the role of the imagination, myth and legends in the construction of this medium as well as to cast some imprecision in relation to its historical origin. The photographic technique has been frequently linked to the Turin Shroud and was foreseen by Tiphaigne de la Roche with surprising accuracy in his novel, *Giphantie*, published in 1760:

> you know, that rays of light reflected from different bodies form pictures, paint the image reflected on all polished surfaces, for example, on the retina of the eye, on water, and on glass. The spirits have sought to fix these fleeting images; they have made a subtle matter by means of which a picture is formed in the twinkling of an eye. They coat a piece of canvas with this matter, and place it in front of the object to be taken. The first effect of this cloth is similar to that of a mirror, but by means of its viscous nature the prepared canvas, as is not the case with the mirror, retains a facsimile of the image. The mirror represents images faithfully, but retains none; our canvas reflects them no less faithfully, but retains them all. This impression of the image is instantaneous. The canvas is then removed and deposited in a dark place. An hour later the impression is dry, and you have a picture the more precious in that no art can imitate its truthfulness and it cannot be destroyed by time. (Tiphaigne de la Roche, 1760, pp. 131-133)

In addition to its importance from a historical perspective, the prophecy made in Charles François Tiphaigne de la Roche’s novel has the advantage of bringing together the two central elements of this article – photography and mirrors – and calls our attention to the lines of affinity and divergence, continuity and rupture between the specular image and the photographic image, whose understanding is largely inspired by so-called discourses of “index and reference” (Dubois, 1983/1999, p. 26). Photography and mirrors are, in our view, dually determined by their indicative characteristics of contiguity, to the extent that both are materially dependent on their referents, but also by their iconic aspects of similarity, insofar as their affinity with the referent is equally motivated by its link of similarity: in other words, photography and mirrors not only have an intrinsic relationship with the object that they reproduce, they also have an intimate affinity with the action of seeing that they simulate.

In terms of affinities, we must first of all highlight the mimetic character of the specular image and the photographic image, which brings them closer to the myth of Narcissus (Dubois, 1983/1999) since both carry verifiable, recognisable and spectral “doubles” of reality. In effect, diverging from Roland Barthes’ well-known observation, it is neither the photograph nor the mirror that we actually see: in both the photographic image and the specular image, “the referent adheres to the surface” (Barthes, 1980, p. 18). This is what Rosalind Krauss calls the “essentially double-sidedness of photography”, the “transparency of the photographic negative, the information on which, though reversed left and right, is fully intelligible from both front and back” (Krauss, 1985b, pp. 78-82). It is the capacity of photography and mirrors to duplicate the gaze that asserts them as prostheses of vision, a function that was subsequently assumed by cinema and television. The visual acuity of photography and mirrors are therefore comparable to the curtain that was so perfectly painted by Parrhasios it led Zeuxis to ask him impatiently to remove it, so that he could see the painting behind. Thinking of a brief essay by Vilém Flusser dedicated to the mirror, we might say that, in a figurative sense, this is the quality that unites a photograph with the reflecting face of the mirror, in other words, with its front side (Flusser, 1998, p. 67).

In terms of the divergences between photography and mirrors, we must highlight the opposition between the fleeting and impermanent character of the reflection in the mirror and the fixed and durable nature of the photographic image, which brings it closer to the myth of Medusa (Dubois,
1983/1999). It is due to this characteristic that photography is known as a “mirror with a memory”, according to the definition that Oliver William Holmes famously attributed to it in 1859 (Holmes, 1859). Umberto Eco, in an essay published in 1985 – in which he described photography as a “freezing mirror” (Eco, 2016, p. 38) and drew attention to its “iron” framing (Eco, 2016, p. 40) – demonstrates, through the description of the hypothetical and somewhat anecdotal situation of someone who sends his mirror as if he were sending his own portrait, the “forgotten” dimension of the mirror, that is its quality as a memoryless image which distinguishes it from the photographic, cinematographic and television image. It is this productive capacity of photography, which affirms it as a prosthesis of memory, also referred by Maria Augusta Babo, when discussing operations of retention, registration, and fixation, which, in photography, as in cinema and television, autonomise the specular image (Babo, 2016, p. 57). Referring again to Flusser’s essay dedicated to the mirror, we would say, by analogy, that this autonomous quality resides metaphorically inside the mirror, in the “grey matter of the silver nitrate” (Flusser, 1998, p. 68), from which Japanese invented “magic mirrors”, a technique sometimes included in manuals of trick photography of the late 19th century (Hopkins, 1897, p. 418) to which we will often refer in this article.

Reflecting on photography from the perspective of the mirror, from its front and back side, allows us to think of photography and media, in general, as heterotopic spaces, to resume a concept proposed by the French philosopher, Michel Foucault (1984/2005) in his essay “Espaços outros”. In this essay, the mirror is the first example that he presents of heterotopia: Foucault states that the mirror allows someone to look at themselves reflected in a real surface, with a material existence, and a concrete connection to their body, at the same time allows them to imagine themselves in an unreal dimension, whose existence is virtual and whose function in relation to their body is that of the double. This passage, which inevitably evokes Lacan’s famous theory of the mirror stage (Lacan, 1966), and which, in our view, must be recalled in order to think of both the specular image and the photographic image, can still be reread based on other characteristics of the heterotopic space-times suggested by Michel Foucault at the end of his text (Foucault, 1984/2005, pp. 251-252). Regardless of their capacity for inscription, registration and retention, which distinguish them, mirrors and photography are, in effect, exclusively human constructions, based on calculation, ordering and reason. But at the same time they are the product of the dream, the infinite and the adventure, having this privileged capacity which Foucault (1984/2005) attributes to heterotopias – to demonstrate the reversibility between the real and the imaginary, and finally to turn around all kinds of divisions, dichotomies and compartments, through which humans and language seek to order the disordered, tidy what is messy, and give form to the formless (l’informe), to use a term proposed by Georges Bataille and rethought by Rosalind Krauss (1985b) in relation to surrealist photography. We will return to the concept of formless at the end of this article.

**Mirrors, reflections and doubles in the history of photography**

In addition to these reflections on the close relationship between the specular image and the photographic image, it is important to point out, as Craig Owens notes, the “recurrence of the mirror in photography throughout the history of this medium” (Owens, 1978, p. 78). Different historians refer to the photographs of Lady Clementina Hawarden taken during the 1850s and 1860s as those that, for the first time, explored the theme of the mirror, reflection and glazed surfaces in photographic portraits (Henisch & Henisch, 1994, p. 43; Owens, 1978, p.79). In the portraits kept in the albums of the Hawarden family, which today are included in the Victoria & Albert Museum’s collection and which sometimes were recorded with a stereoscopic camera, the English aristocrat explored the idea of the double through countless devices, such as shadows, frames, windows and glazed and transparent surfaces, but above all by using mirrors. In these portraits produced in the aristocratic family’s home environment, their teenage daughters Clementina, Isabella and Florence, wearing elegant dresses, stretched out over the reflective surface of the mirrors, allowing their reflections to open up a different perspective on their
seductive poses and creating a complex vision. Mirrors, which also cause luminous effects in these portraits, are undoubtedly one of the main dreamlike devices of these portraits, that Carol Mavor (1999, p. 16) describes as follows: “reverie: dream, vision, illusion, fancy, figment, fantasy”.

If the historical intersection between photography and mirrors takes us back to Lady Clementina Hawarden's staged portraits in the elegant interior of her London home, in the mid-19th century, in South Kensington, the reflections on the facades and glass surfaces of the buildings of the city of Paris, as exemplarily recorded by Eugène Atget and by surrealist photographers in the early decades of the 20th century, are also part of this retrospective effort. As Clément Chéroux has pointed out, based on analysis of photographs of shop windows taken in Paris in the early decades of the 20th century, in this period, photographic practices, whether anonymous and commercial, or artistic and experimental, encountered an overabundance of glazed and mirrored surfaces that were analysed by Benjamin and other historians of the time, and whose reflective effects, more accidental or intentional, more discreet or ostentatious, functioned as “natural photomontages”, to use the expression of Lisette Model (Chéroux, 2013, p. 143). Eugène Atget produced a set of photographs in the first three decades of the 20th century, in which the recurring glazed and mirrored surfaces of the facades of Paris, in addition to the decorative and ornate mirrors inside the buildings, seem to exacerbate this labyrinthine experience of emptiness, of the “disappeared” and the “hidden”, a quality that the German philosopher, Walter Benjamin, associated with the clichés of the Parisian photographer (Benjamin, 2012, pp. 106-107).

Mirror games and the effects of reflections are recurrent and systematic in Atget’s images, including his famous photograph taken in 1902, of the facade of the antiques store, in which his profile and tripod are reflected with remarkable sharpness; the mirror of one of the rooms of the Hotel Matignon, where the carpets and armchairs and sofas protected with patterned cloths are reflected, taken in 1905; and the equally famous photograph of the facade of the Cabaret Tambour, taken in 1908, where two human faces intersect with the reflection of the tripod and the silhouette of Atget himself. In the late 1920s Atget took pictures of mirrored shop windows in the Avenue des Gobelins where the sky, branches of trees or the tripod are reflected, and whose recording Chéroux (2013, p. 158) suggests was perhaps already intended to be adapted to the surrealist taste and a remarkable heterogeneity. Although we cannot develop this theme further within the framework of this article, a wide variety of circumstances characterise Atget’s photographs and the heterogeneity of “utility regimes” that guided their abundant and disparate production (whether advertising, commercial, documentary, archival and/or artistic), as has been explained in the brilliant analyses by Rosalind Krauss (1982/1986), Abigail Solomon-Godeau (1986) and Clément Chéroux (2013). Indeed, it is an undoubtable fact that the encounter between photography and mirrors in Atget’s photographs, which has intrigued several observers and inspired a wide variety of speculations, assumptions and extrapolations, makes his corpus of images an inevitable reference in the context of this article.

If we can already recognise that the enthusiasm of the surrealists for Atget's photographs and for this disparate category of “window shopping” in Paris in the early decades of the 20th century, referred to by Clément Chéroux (2013), was a symptom of the importance of the figure of the double and of reflection for the surrealist movement led by André Breton, it would, of course, be reductive to sum up this importance on the basis of such sympathies. In fact, as demonstrated by Rosalind Krauss, in at least three essays published in the 1980s (Krauss, 1981, 1985a, 1985b), dedicated to surrealist photographic practices, there were several photographers linked to this movement, who made use of mirror effects and “en abyme” structure, affirming the double in surrealist photography as a “structural principle: both formal and thematic” (Krauss, 1985b, p. 74). Among the various photographic procedures that Krauss refers to, we are particularly interested in those that, according to the author, preserve the continuity of the photographic contact sheet, convulsing “the reality from within” (Krauss, 1985a, p. 28) and exploring the “doubling” procedure (Krauss, 1985a, p. 31) through processes such as double exposure, combination printing or the use of mirrored surfaces.
In addition to the photographic portraits of Raoul Ubac and Maurice Tabard that Krauss cited as an expressive example of the “labyrinthine doubling” and the “play of reflection” (Krauss, 1985b, p. 78), we would include in this imprecise and heterogeneous gallery of surrealist mirror photographs, André Kertész’s series, *Distortions*, briefly mentioned by Krauss. This series was produced in the 1930s for *Sourire*, a popular French women’s magazine, using two distorting mirrors from old amusement parks that Kertész had rented for this purpose (Kertesz, quoted in Gaillard, 1980). “Brassai’s fascination with mirrors” is another important example: in an article entitled “Photography en abyme”, Craig Owens refers to the photographs taken at the Bal des Quatre Saisons, in the rue de Lappe, in Paris in the 1930s by the Hungarian photographer who was close to the surrealist movement. Owens identifies at least three types of “reduplications”: he says that these images are triadically structured through photography, the mirror and the other (Owens, 1978, p. 81). Finally, as Gen Doy points out, Claude Cahun’s self-portraits, whose flirtations with the surrealist movement are widely known, with the reflection of her face appearing in a mirror or emerging undulating in a bell jar, allow the mirror to endow visibility to various different paradoxes: “inside/outside, me/other, presence/absence” were “conceptualised through the mediating surface of the mirror” (Doy, 2007, p. 58).

This article is neither about the portraits of Lady Clementina Hawarden nor the reflections in the windows of Paris by Eugène Atget, or even the prolific production of surrealist photographs involving mirrors. This latter group is clearly the one which maintains a more evident affinity with the playful and recreational practices of the early 20th century, as indeed has been exhaustively shown by Clément Chêroux (2013). Specifically, the subject analysed in this article are the popular trick photographs taken by amateur photographers, commercial photographic studios and ambulant photographers at funfairs and amusement parks who, in the late 19th century and early 20th century used mirrors and the doubling effect in their photographic portraits. These portraits, most of which are anonymous, belong to the vast category that we could call trick photography (*fotografia recreativa*, in Portuguese). The Anglo-Saxon term originates from French manuals for amateur photographers such as *Les recréations photographiques* (Photographic recreations) by Albert Bergeret and Felix Drouin (1893), *La photographe recreative et fantaisiste* (Recreational and whimsical photography) by Charles Chaplott (1904) and has recently been recovered by art historians such as Clément Chêroux (2013). We understand this concept in a broad sense, matching it to the photographic tricks that were disseminated in the picture postcards, illustrated press, manuals for amateur photographers and albums, which, in the final decades of the 19th century and early 20th century, used chemical retouching, optical manipulation and staging, whether produced by amateur photographers in a domestic context, by commercial photographers in a studio, or by ambulant photographers at funfairs and amusement parks (Correia, 2017).

Amongst the many tricks used in trick photography, in the late 19th century and early 20th century, the double or multiple portraits, using photomontage, are certainly one of the oldest and most recurring artifices, whose technique is didactically explained in the manuals and periodical publications of trick photography by amateur photographers, published at the turn of the century (Bergeret & Drouin, 1893, p. 180; Schnauss, 1890/1891, p. 53; Woodbury, 1896/1905, p. 106). The popularity of this doubling exercise, which takes us back to 1850, is found in many different countries (Henisch & Henisch, 1994, p. 44). It is thus symptomatic to recognise that in one of Georges Méliès' fantasy short films entitled *Le portrait mystérieux* (The mysterious portrait) made in 1899, Méliès duplicates himself in a photographic portrait. Thinking of this practice, there are countless famous examples, which have already been subject to many different studies and analyses: the double self-portrait produced by Oscar Gustave Rejlander, from Sweden, dated 1871, titled “OGR, the artist, presents OGR, the volunteer” (Hassner, 1998, p. 83; Henisch & Henisch, 1994, p. 44); the double portrait of the Frenchman Charles David Winter who greets himself in 1860 (Fabris, 2020); the photograph of the Brazilian emperor Dom Pedro II talking to himself, produced by the studio Carneiro & Gaspar in 1867 (Fabris, 2020, p. 21; Lissovsky, 2012, p. 8); the portraits of the Canadian Hannah Maynard drinking tea with herself, produced in the 1890s (Reichstein, 2007, p.12; Watson, 1996); the inventive double portraits of French engineer and photographer Henri Roger in a wide array of different situations (serving himself a drink, lighting a
cigarette, playing draughts with himself); and in the Portuguese context the double portraits of the actor Taborda (Soares, 2004, p. 125)... In fact, one of the oldest examples of such trick photography, to which we have had access, is a visiting card that reproduced the Portuguese actor, Francisco Alves da Silva Taborda, who begs for money from himself, that was presumably produced in the 1860s (Figure 1). Either produced in photographic studios or at home, these trick photographs always showed an individual with his double, as we can see in the four photographs produced by the Portuguese photographic studio, Foto Aliança, whose collection is now managed by the Museu da Imagem in Braga. In the set of portraits produced in the 1910s, that reveal remarkable expertise in terms of their execution and carefully crafted illusion, a smiling young man points to himself, a man with a grey moustache and a hat lights the cigarette that his double will smoke, a child plays with a bow, and a man on a chair carefully devotes himself to the pedicure of his double (Figure 2, 3, 4 and 5).

Figure 1. Unidentified author. Taborda begs for money from Taborda. Double portrait of the actor Taborda, circa 1860. Carte de visite format Source: Nuno Borges Araújo Collection
Figure 2. AAL000138 (montage, double, c. 1910) 107 unidentified author, Braga, c. 1910. Foto Aliança Source: Museu da Imagem, Braga

Figure 3. AAL001766. Félix Cruz, Largo dos Penedos, Braga, 1915. Foto Aliança Source: Museu da Imagem, Braga
Although the method of execution was even simpler, photo-multigraphs (*multiphoto* or *multiphotographie*, in French, multigraph photography and also fivefold portrait in English) seem to have become popular a little later. They were introduced in 1890 in photographic studios by professional photographers, in domestic contexts by amateur photographers and also in funfairs by ambulant photographers. According to the historical study by the Canadian Irwin Reichstein (2007), this technique of trick photography, which used mirrors, was reported by the specialised press, in the USA and Europe, namely in the magazines *The Popular Science News* and *La Science Illustrée* magazines, as having been invented around 1893 by an American photographer “from Atlantic City, New Jersey, Mr. Shaw” (Reichstein, 2007, p. 13). Roughly speaking, this technique used two mirrors placed at an angle of approximately 70º, in front of which the person posed, normally seated, while the photographer was hidden behind. In most cases, the result of this image,
whose optical principle was the same as the one applied to the kaleidoscope (Reichstein, 2007, p. 14), was a portrait of a man or a woman, repeated five times, as if the person in the portrait was having a meeting with oneself. This photographic process, which, according to an article published in 1895 in Wilson's Photographic Magazine, quoted by Reichstein (2007, p. 15), may have been inspired by the experience of a “passenger in an elevator”, was associated by the press and in the different manuals of that time with various purposes - including police, anthropological, commercial and advertising uses (especially in the fashion sector) - although we can only historically confirm their use in the framework of popular portrait photography.

As McManus notices (2008, p. 126), the renowned photo-multigraphs of Marcel Duchamp, Francis Picabia and Henri Pierre produced using this method, around 1917, at Broadway Photoshop, combined the technique of mirrors arrangement with a “photographic postcard machine” which allowed to obtain this type of portrait in a matter of seconds. The practice of executing these five-fold portraits, usually printed in a postcard format, was, as mentioned above, disseminated in the international press and in numerous manuals of trick photography, published at that time in Europe and the USA (Chaplot, 1904, p. 25; Hopkins, 1897, p. 451; Woodbury, 1896/1905, p. 8). This leads us to assume that the mirror trick portraits were common to several countries, even if the large majority of the examples reproduced by historians and acquired by collectors were produced in the USA (Figure 6). According to Reichstein (2007, pp. 14-16), their popularity waxed and waned over the early decades of the 20th century, remaining a commonly applied technique at least until the 1940s. Indeed, the photographic portrait described by Paul Auster (2010) in “Portrait of an invisible man” dates from the 1940s. In this autobiographical tale, the author recalls the photograph of his father. In this portrait, we see him “as if, by multiplying himself, he had inadvertently made himself disappear” (Auster, 2020, p. 31). In his description, the author draws attention to one aspect of these “five-in-one” portraits – another of the numerous designations applied to this practice – which seems decisive in their disrupting effect: the lack of visual contact between the different profiles captured in this kind of mirror trap:

> there are five images of him there, and yet the nature of the trick photography denies the possibility of eye contact among the various selves. Each one is condemned to go on staring into space, as if under the gaze of the others, but seeing nothing, never able to see anything. It is a picture of death, a portrait of an invisible man. (Auster, 2010, p. 31)
Araújo Collection

A similar disrupting effect can be noticed in photographic portraits produced using distorting mirrors, which became popular in the early 20th century in the “halls of mirrors” of funfairs and amusement parks. These portraits are part of the photographic production of ambulant photographers operating in funfairs and amusement parks, who were a sort of “photography acrobats” (Ernst Lacan, quoted in Chèroux, 2013, p. 123). We find this subject printed in picture postcards produced in Paris at Luna Park in 1910 as shown in Figure 7, and in the Grévin Museum, around the same date (Chéroux & Eskildsen, 2007, pp. 70-71). In early 20th century popular photography books, there are also frequent mentions to these distorted portraits - equally referred to as “photo-anamorphosis” (Chaplot, 1904, p.81) – which could be achieved with the most complex optical devices used in the so called “transformist photography” explored around 1880 by M. Louis Ducos du Hauron (Chaplot, 1904, p. 83). At the same time, this distorting effect could also be obtained through the simplest means, by using spherical, concave and convex mirrors (Bergeret & Drouin, 1893, p. 199; Schnauss, 1890/1891, p. 59) or even through the most prosaic use of everyday mirrored objects such as a spoon (Woodbury, 1896/1905, p. 12) or a decorative garden ball (Chaplot, 1904, p. 82).

![Figure 7](image)


Walter Benjamin, in his aforementioned chapter of As Passagens de Paris (Das Passagenwerk [The Arcades Project]) dedicated to mirrors, describes the attraction of the Grévin Museum’s famous Cabinet des Mirages (Hall of Mirrors), and compares the succession of images it offered with the visual spectacles of the Imperial Panorama, emphasising its effect of metamorphosis:

> the last and also the greatest work of this enchantment of mirrors is perhaps due to its high production costs, more than to its current strength of attraction and profitability, the fact that it can still be seen. This is the Cabinet des Mirages at the Grévin Museum. There, iron supports and huge mirrored surfaces could be seen for the last time, forming numerous angles. (...) A changing light and soft music accompany the show and each transformation is preceded by the classic ringing of the bell and the bump that we know from our old trips around the world, when, in the Imperial Panorama, before our eyes filled with the nostalgia of bidding farewell, an image slowly disappeared in the stereoscope before revealing the next image. (Benjamin, 2019, p. 669)
The optical manipulations produced by distorting mirrors, which, as pointed out by Sabine Melchior-Bonnet (1994/2016, p. 322), were “hallucinatory techniques, delirium machines”, made it possible to become more familiar with strangeness, ordering disorder, playing with the mysterious and fascinating powers of reflection. The mirror’s calculated distortion is therefore based, on the one hand, on the fantasy of “uncontrolled illusion” and, on the other hand, on the rationality of the “science of optical phenomena” (Melchior-Bonnet, 1994/2016, p. 322). Umberto Eco, in his turn, draws attention to a similar ambivalence: the distorting mirror, like a “prosthesis with hallucinatory functions”, places us on the unstable border between “the specular and the semiotic”. On the one hand, we accept having fun with the hallucinatory characteristics of the medium, tricking ourselves that we are in front of a flat mirror and believing in our unreal portrait, while on the other hand, we apply the most reasonable interpretive rules and norms of projection to decode the optics of the illusion (Eco, 2016, p. 32). This decoding, moreover, is fundamental in the artifices used in the hall of mirrors.

The abyss of photography or the inverted mirrors

The starting point for this article, which is dedicated to playful portraits produced in the early 20th century using trick photography and the historical and ontological relationship between photography and mirrors, is the assumption that was recently defended by Nicoletta Leonardi and Simone Natale, according to which it would be necessary to think about the history of photography in an integrated manner, framing it in the broader context of media history and its relations with other media. This implies inserting photography into the technological and cultural condition experienced at least since the 19th century, which is characterised, according to the definition provided by Erkki Huhtamo, quoted by the authors, by the fact that “a large number of people live under the constant influence of the media” (Leonardi & Natale, 2018, p. 2). On the other hand, this article is also based on the assumption that analysing photography on the basis of a network of relationships of continuity and rupture between the different media can enable us to relativise and explore the categories of “new” and “old” (Leonardi & Natale, 2018, p. 2), as well as questioning and challenging a progressivist vision of media history, which points “teleologically to the present media-cultural condition as their perfection” (Huhtamo & Parikka, 2011, p. 138). Hence, thinking about photo-multigraphs as well as about distorted and double portraits involves integrating these experimental photographic practices from the early 20th century into this broader context of an everyday experience, marked by the proliferation of different forms of cultural and technological mediation: from the daily flow of mail from the post office, to photographic studios, to the countless shop windows and their mannequins, to attractions of the illustrated press, cinema and advertising to the speed of transports. While this condition of technological mediation has one of its first expressions in the psychic and sensorial assault faced by passers-by of modern cities in the beginning of the 20th century and described by authors such as Benjamin, Simmel or Kracauer, we have to acknowledge that it is also shaped by the recent cultural and technological experience of screens, computers, social networks, of numerically produced images and their “euphoria, hallucinations, in short, anesthesia”, in the words of Moisés de Lemos Martins (2011, p. 74).

In this context, it seems useful to refer to Marshall McLuhan, who thought about the relationship between the electric age and the mechanical age, between cold and hot media and whose maxim according to which the media are extensions of the human senses is well known: he considered that the process of prolonging the human in the countless media, being concomitant with physical traumas and psychic shocks, was accompanied by contradictory phenomena of stimulation and numbness (McLuhan, 1964/2008, p. 56). In The Lover of Mechanisms - Narcissus as Narcosis, which corresponds to the fourth chapter of his well-known book Understanding Media : The Extensions of Man, McLuhan compares the media to the reflection of Narcissus in water (McLuhan, 1964/2008, p. 55); the mirror's action, inseparable from Narcissus' reluctance to recognise himself in his own image, is the metaphor chosen by McLuhan, and the one that recurs repeatedly throughout the book, to reflect on the “origin of the media, from speech to computers” (McLuhan,
1964/2008, p. 56). He considers that, having our perceptual needs amplified at a given moment, our body and our nervous system would have resolved the tension caused, through a phenomenon of “self-amputation”: just as Narcissus extended his image on the mirrored surface of the water, we would have prolonged our senses and our nervous system in the media, and like this mythological figure, we would be reluctant to recognise these extensions as dependent on us, that is, we would have difficulty in the action of “self-recognition” of the media (McLuhan, 1964/2008). This metaphor provided by McLuhan would be useful to us in that, on the one hand, it matches the specular device, fundamental for the definition of photography, to the archetype of the media and our relationship with technology and because, on the other hand, is based on a claim of a constitutive hybridity between the media and the human, that photographic recreations that combine photography and mirror, fixing the disorienting effects of duplication and multiplication of the human figure and registering the destabilising impact of its deformation, seem exemplary to us.

The ontological rapprochement between photography and mirrors offers the precise advantage of referring us to this broader discussion of the impact of photography on the modern experience, or to put it another way, to that “speculative wound opened up by photography in modernity”, as José Bragança de Miranda (2019, p. 97) formulates it in a recent article, already mentioned here, entitled “Fotografia e arqueologia do materialismo” (Photography and archaeology of materialism). Resuming the entry dedicated to “the fauna of mirrors” in Jorge Luís Borges’ Livro dos seres imaginários (Book of imaginary beings) (Borges, 2015, pp. 24-25) and matching the contemporary experience to the moment when, in Borges’ narrative, the fauna of mirrors threatens to leave the reflected surface and no longer docilely duplicates the gestures of terrestrial creatures, José Bragança de Miranda describes photography as a “future fossil”, explaining this statement with a passage from Lacan, in which he explains that at a time when the world was no longer inhabited by humans “the image in the mirror, the image in the lake” could still exist insofar as “we manufacture devices that we can imagine, without any audacity whatsoever, to be sufficiently complicated to be able to develop films by themselves, store them in boxes and deposit them in the refrigerator” (Miranda, 2019, p. 131). Returning to the Narcissus myth used by McLuhan, it is as if, suddenly, of the mythological figure there are only strange reflections in the water. Insisting on the effect of “disarticulation of the symbolic”, “redivision” “of the relationship between nature and history”, or also of crisis, disintegration and fragmentation, that photography, like other techniques of production, reproduction and distribution – the cinema, tape recorder or telephone, fax or radio”, or in short the “tele-technologies” – would engender in the contemporary condition, Miranda describes this condition as a “leap into the void” or a “fall into the formless”.

The anonymous portraits using trick photography produced in the early 20th century, which explore the double, multiple or distorted reflection of the human figure, deserve our attention since they present this “expression prior to words or thoughts”, in the words of Francis Ponge (1946/1977, p. 57), giving an image to the condition of the “formless”. L’informe (the formless) is precisely the concept introduced by Georges Bataille, that Rosalind Krauss explores in one of her aforementioned essays dedicated to surrealist photography, entitled “Corpus delicti”: the visual space of the formless, that in the photographic exercises of surrealists such as Maurice Tabard and Raoul Ubac, corresponded to a space convulsed by an external force, a disintegrating assault, inhabited by a “subject who is trapped in a cat’s cradle of representation, caught in a hall of mirrors, lost in a labyrinth” (Krauss, 1985b, p. 78). In the opinion of Krauss, the visual space of the formless is to a certain extent implicit in Jacques Lacan’s (1966) considerations about the mirror stage, in Roger Caillois’ studies on animal mimicry and in Sigmund Freud’s reflections on the “uncanny” of the double (2010). It is our understanding that although these portraits produced using mirrors do not represent the “violent deliquescence of matter” (Krauss, 1985b, p. 70) recognised by Rosalind Krauss in surrealist photography, they accomplish, through their photomontages and optical strategies, a comparable disorientation between the real and the imaginary, between the familiar and the strange, between the two sides of the mirror, sending us back to a space-time condition that is close to Michel Foucault’s “heterotopia” (1984/2005), already explained above, and transporting us to an ambivalence that is inherent to photography but also to other media.
Photography, presupposing the unfolding of nature and also the revision of history, pursuing the knowledge of the real just as much as the production of the unreal, opens a kind of breach, that destabilises the division between the two poles, between the reflecting side and the grey reverse side of the mirror. While the characteristics of accuracy, verisimilitude and “authenticity” bring photography closer to scientific observation instruments, such as the telescope and microscope, the traits of inventiveness, illusion and “revelation” bring it closer to spectacles such as the magic lantern and the cinema (Didi-Huberman, 1998, p. 75). This conception of photography is intrinsically connected to the need to think about its fundamental role in the definition of contemporary cultural and technological condition, which is determined by the ambivalence between scientific knowledge and the entertaining experimentation, the real and the unreal, as well as dependent on a hybridisation process between human beings and the machine, which was for the first time visually exemplified by the photographic portrait, as pointed out by countless thinkers, ranging from Walter Benjamin (2019) to André Bazin (1985/1991) and Vílem Flusser (1989). On the other hand, as we have already pointed out, this hybridisation process cannot be understood without facing the porosity of boundaries between the old and the new media, without studying the convergences and divergences between media, which reorganize human communication at least since the 19th century, as it was exemplarily perceived by Marshall McLuhan and as has been more recently claimed by thinkers such as Lev Manovich, who has repeatedly underlined the historical importance of the encounter between “Daguerre’s daguerreotype” and “Babbage’s analytical engine” in the mid-19th century (Manovich, 2001, p. 20). Indeed, the ambivalent condition between human and machine, real and unreal, the combined use of mirrors and photography, expressed through photo-multigraphs, distorted and double portraits, acquire a special significance when today, in the “region behind the mirrors”, in the era of “inverted mirrors”, to use the metaphor proposed by Vilém Flusser (1998, p. 71), we are rediscovering an uninterrupted flow of selfies, posts and stories, and are rewatching endless metamorphoses of the series, films and games that circulate somewhere between the cloud and the screens of our televisions, computers and mobile phones.

Translation: Formigueiro, Conteúdos Digitais, Lda.

Acknowledgements

This work is supported by national funds through FCT - Fundação para a Ciência e Tecnologia, I.P., under the project UIDB/00736/2020.

The author thanks Nuno Borges Araújo and Museu da Imagem.

Biographical note

**Maria da Luz Correia** is an Assistant Professor in the Department of Languages, Literatures and Cultures, in the University of Azores and a researcher at Communication and Society Research Centre (University of Minho). She holds a PhD in Communication Sciences, from the University of Minho, and in Sociology, from the Université Paris Descartes - Sorbonne. She is interested in the subjects of visual culture, history of media, image theory and history of photography.

ORCID: [http://orcid.org/0000-0003-2557-5102](http://orcid.org/0000-0003-2557-5102)

Email: mariadaluzcorreia@gmail.com maria.lf.correia@uac.pt

Address: Centro de Estudos de Comunicação e Sociedade, Instituto de Ciências Sociais, Universidade do Minho, campus de Gualtar, 4710-057 Braga, Portugal

Notes
1. “Mirrors have a curious feature. Until the moment I observe them, the features of my face are returned to me: but if I sent a loved one a mirror in the post, in which I had mirrored my reflection for a long time, so that I could remember this face, she would not be able to see me (and instead would see herself)” (Eco, 2016, p. 26).

2. “The mirror is, after all, a utopia, since it is a placeless place. In the mirror, I see myself there where I am not, in an unreal, virtual space that opens up behind the surface; I am over there, there where I am not, a sort of shadow that gives my own visibility to myself, that enables me to see myself there where I am absent: such is the utopia of the mirror. But it is also a heterotopia in so far as the mirror does exist in reality, where it exerts a sort of counteraction on the position that I occupy. From the standpoint of the mirror I discover my absence from the place where I am since I see myself over there. Starting from this gaze that is, as it were, directed toward me, from the ground of this virtual space that is on the other side of the glass, I come back toward myself; I begin again to direct my eyes toward myself and to reconstitute myself there where I am. The mirror functions as a heterotopia in this respect: it makes this place that I occupy at the moment when I look at myself in the glass at once absolutely real, connected with all the space that surrounds it, and absolutely unreal, since in order to be perceived it has to pass through this virtual point which is over ‘there’” (Foucault, 1984/2005, p. 246).

3. As Clément Chéroux explains, “this postcard, with a space for correspondence, address and stamp on the back, has a double advantage. For the seller, this is the cheapest photo paper on the market. For the client, it allows to send her portrait by mail, accompanied by a brief message” (Chéroux, 2013, p.132).

4. Walter Benjamin states: “what makes the first photographs so incomparable is perhaps this: that they present the earliest image of the encounter of machine and man” (Benjamin, 2019, p. 815). Bazin reports to the automatic origin of photography, to the essential “objectivity” of the “photographic eye”, to the fact that photography is the first art which enjoys human “absence” (Bazin, 1985/1991, p.22). Vilem Flusser describes the photographic practice as a game “against the device” (Flusser, 1989, p. 73).

References


Méliès, G. (1899). Le portrait mystérieux. Star Film.


