

# Polaroid 2.0

## Photo-Objects and Analogue Instant Photography in the Digital Age

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**Abstract:** The article focuses on the reconfiguration of analogue instant photography (Polaroid-like) in the digital age. Drawing on STS literature on the mutual shaping of users and technology, and on anthropology and the history of photography, it adopts the concept of “photo-object” to discuss how the digitalization of photography stimulated a change in the cultural significance of materiality in the context of aspirational amateur photography, thus showing how this triggered a redefinition of instant photography as a more authentic form of aspirational practice. The article is based on empirical data collected during a multi-sited ethnography conducted in Italy between 2014 and 2015. By focusing on Polaroid’s “objectness” and its dialectical tension with the immateriality of digital photography, the paper highlights an increasingly common process of circulation between analogue and digital photographic environments and argues that this process of circulation can be conceived in terms of a “remediation” process between analogue and digital practices.

**Keywords:** Polaroid; photo-object; multi-sited ethnography; technological resistance; remediation.

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### I. Introduction

In 2008, the financial and market difficulties faced by the Polaroid Corporation led it to cease the production of analogue instant film products. Since then, instant films for vintage Polaroid cameras have come back to the market thanks to a new company called “The Impossible Project”, which acquired and adapted the former Polaroid production plant

in Enschede, Netherlands (Bonanos 2012). This has been the basis for a resurgence of instant analogue photography amongst *aspirational amateurs*<sup>1</sup>.

The re-appropriation of Polaroid technology has been sustained by the emergence of a collective action of *technological resistance* to digital photography (Kline and Pinch 1996). At the same time, digital infrastructure and platforms have proved to be essential to the organization of communities of practice (Lave and Wenger 1991), devoted to Polaroid photography, and to the reconfiguration of the practice itself. In the practices of aspirational amateurs, the materiality of instant prints is culturally opposed to the immateriality of digital photographs; on the other hand, instant prints have to be translated into digital form in order to circulate, to affirm a resistant group identity, and to organize community activities. In the following pages I will argue that this process of *remediation* of the “old” by the “new” technology represents the process through which the cultural significance of instant photography is negotiated, and social distinctions are maintained (Henning 2007).

## 2. Theoretical Framework

This article has been developed with two intertwined purposes. On the one hand, it aims to contribute to the theoretical and empirical work that, in the last 20 years, has put under scrutiny the socio-material dimension of photography (Batchen 1997; Edwards and Hart 2004) and, more broadly, the intersection of visuality and materiality in contemporary visual cultures and practices (Rose and Tolia-Kelly 2012). On the other hand, by offering an empirical analysis centred on the physical production and digital circulation of film-based photographs, this article aims to shed light on some of the manifold and situated ways in which digitalization plays a role in reconfiguring photography’s materiality.

To develop this analysis, I will draw upon the work of historians of photography such as Geoffery Batchen and Elizabeth Edwards, who stressed the need to “think photography beyond the visual” and to pay attention to the objectness of photographs. As Elizabeth Edwards (2009a, 335) puts it: “The photograph has always existed, not merely as an image but in relation to the human body, tactile in experienced time, objects

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<sup>1</sup> I am grateful to an anonymous reviewer for suggesting to me that the formerly adopted term ‘serious amateur’, which pre-dates digital photography, and refers to those amateur photographers with darkroom skills, can not be simply transposed to analogue enthusiasts, since the ‘serious amateur’ has now gravitated to digital photography. Accordingly, I adopted the term ‘aspirational amateur’, which points to two general, key aspects of this figure, whether s/he is a digital or analogue photographer: the ethic of self-improvement, and her or his self-conscious aspiration to produce art (Pollen and Baillie 2012).

functioning within everyday practice". In order to investigate photography not solely as a visual phenomenon, but also as a set of practices producing highly charged social objects, which mediate and are entangled in human relationships, these scholars have developed the conception of the photograph as a *photo-object*, by which they address the inseparable nature of the visual and the material that characterizes the social experience of photography (Edwards and Hart 2004). The material elements of photography are of key importance here because the focus on materiality emphasizes the relational qualities of photographs in social contexts, where the relationship between people and people, and people and things, is mediated by the physical properties of photographs and by the senses involved in their production and use (Di Bello 2008; Edwards 2009b).

Thus, central to the effort to understand photography beyond the visual is the analysis of the main forms taken by photo-materiality: the plasticity of the image itself; the presentational forms with which photographs are enmeshed, such as albums, mounts and frames; and the physical traces of usage and time (Edwards 2001, 2012; Edwards and Hart 2004). Secondly, this branch of research characterizes itself for the attention paid to the circulation of photo-objects. For instance, Edwards (2012) argues that photographs are objects specifically made to have social trajectories, and draws upon the works of Appadurai (1986) and Kopytoff (1986) to illustrate how the process of mutual constitution of the visual and the material is continuously rearticulated through the social and cultural biography of photo-objects. Like any other object, photo-objects cannot be fully understood through one moment of their existence, but only as belonging in a continuing process of production, consumption, exchange, and usage, in which they are active entities, and by which they are in turn marked and shaped.

Other scholars expanded this view of the interrelation between materiality and circulation by developing theoretical models which are more photographic in their conception. Anthropologist Deborah Poole (1997) raises questions about the multiplicity of trajectories followed by photographs, and places the social shaping of photographs' meanings in the fluid relationship between their representational content, use value, and material forms. She argues that material and cultural work required for producing, consuming, and exchanging photographs occurs on the background of a *visual economy*, within which visual cultures and practices constitute, and are constituted by, dynamic assemblages of sociality, visibility, and materiality. The concept of visual economy is thus a means for "thinking about visual images as parts of a comprehensive organization of people, ideas, and objects" (1997, 8). Within this organization, the objectness of photographs matters, especially as they move across spatial, social, and cultural boundaries.

Materiality acquires an even more active and dynamic role in the conception of photography as a *complex* proposed by historian James Louis

Hevia (2009). Drawing upon Latour (1988) and Actor-network theory, Hevia argues that the social saliency of photography is activated by networks of humans and non-humans. He takes into account the materiality of photographs, technologies, and the entire set of activities related to photography. By encompassing these elements as parts of a hybrid photography complex, he attributes to photography “a novel form of agency, one understood in terms of the capacity to mobilize and deploy elements for generating new material realities. The photograph is thus neither reflection nor representation of the real, but a kind of metonymic sign of the photography complex in operation” (Hevia 2009, 81). Photographs, in this view, can be seen as objects mobilized through socio-technical networks which partake in the production and reproduction of those same networks.

Following the steps of these scholars, sometimes referred to as *photo-materialists* (Buse 2010b), I will assume in my discussion that: 1) photographic practices are *loci* of co-production of the visual, the material, and the social; 2) photo-objects are both outcomes of this process and active participants in it; 3) photo-objects are not static, but circulate and “live” in a constant tension between mutability and immutability, which is locally managed and resolved through actors’ performances.

### 3. Data Collection

This article is based on empirical data collected during a multi-sited ethnography (Marcus 1995) conducted in Italy between 2014 and 2015. Fieldwork included the observation of activities organized by three different communities of photographers devoted to analogue instant photography (Polaroid-like), such as workshops, meetings, and exhibitions. It also included visits to specialized shops and private homes. Twenty-four, in-depth semi-structured interviews with members of the communities were conducted. Each interview lasted from 50 to 180 minutes. Given the field sites, interviews were conducted in Italian and translated into English by the author. The names of interviewees have been changed to ensure confidentiality. During fieldwork, over 1,000 photographs documenting practitioners’ activities were also produced.

### 4. The Shift of Instant Photography from Mass to Niche Market: Obsolescence, Technological Resistance, and Materiality

When in 1947 the founder of the Polaroid Corporation, Edwin H. Land, announced the invention of instant photography, he dubbed it “one-step photography”, because it was capable of eliminating a number

of steps between the exposure of photosensitive supports and the viewing of finished prints. In his article “A New One-Step Photographic Process,” Land described his invention as basically: “...a camera and a photographic process that would produce a finished positive print, directly from the camera, immediately after exposure.” (Land 1947, 61). He emphasized how many steps his invention had compressed into one by listing the conventional sequence of the photographic process: “Expose, develop the negative, rinse, fix, wash, dry, expose the positive through the negative, develop, rinse, fix, wash, dry” (1947, 62).

In this first version of instant photography, users were still responsible for pulling the film out of the camera and peeling the negative away from the positive print. After 25 more years of research, in 1972 Land eventually achieved his aim of reducing the photographic process to a single operation by developing a second generation of cameras, which mechanically ejected images that automatically developed before the eyes of the users. With the invention of this new technology, named SX-70, “absolute one-step photography” was born (Land 1972) (for a detailed account of SX-70 development see Bonanos 2012; Garud and Munir 2008). The SX-70 system was made of two parts: the automatic camera and the so-called “integral” film – where the term “integral” refers to the fact that the film itself integrates all the layers and chemicals needed to expose, develop, and fix a positive image without producing a negative. As the exposed film was automatically ejected from the camera, it was pressed between a pair of rollers that ruptured a “pod” containing chemicals. In the course of a minute, the chemical mixture developed and stabilized the positive image, producing the iconic white-bordered Polaroid print.

Two considerations are worth mentioning in order to develop my argument. They both relate to the specific distribution of competences between the photographer and the camera that is enabled by the use of Polaroid technology. In this respect, I will first illustrate how this distribution, at the time of Polaroid’s mass diffusion, had been perceived as a threat to the expertise of aspirational amateurs. Secondly, I will discuss how, with Polaroid’s obsolescence and the diffusion of digital photography, the emergence of a niche of aspirational amateurs devoted to instant photography brought with itself a re-articulation of the meaning of this distribution of competences. This re-articulation, developed in opposition to digital photography, made it possible for amateurs to circumvent the threat to their expertise posed by Polaroid technology. As a result, it provided a cultural basis for the resurgence of instant photography in the context of aspirational amateurism.

#### **4.1 Polaroid Materiality Between Rejection and Experimentation**

As widely acknowledged, Polaroid technology was a breakthrough innovation that reconfigured the relationship between technology and pho-

tographers by embedding most of the photographic processes into the camera itself (Hand 2012, 102-103). The reduction of picture-taking to the “one-step” of pointing and shooting had two noticeable effects on the practice of photography: first, it removed any requirement of training; second, it made darkroom work, film processing, and printing unnecessary, since these activities were now performed by technology. In this sense, Polaroid further continued the historical process of delegating actions to the camera that had started with the invention of the first Kodak camera in 1888, and that marked a change in photographic practice from the dominance of the professional to that of the amateur (Jenkins 1975a, 1975b; Latour 1991).

Yet, differently from Kodak, which had removed any requirement of competences and skills by providing professional photo-finishing services, Polaroid removed photo-processing and printing from the sphere of human activity entirely; by doing so, Polaroid reduced photography to its “degree zero” (Buse 2007). It was not by chance that newspaper writers adapted the famous Kodak slogan (“you press the button, we do the rest”) to greet the invention of Polaroid technology, with which, they declared, “you press the button and the camera does the rest” (Buse 2008, 229). The key point here is that while, on the one hand, Polaroid technology was a feasible tool for lay people to practice photography, on the other hand it represented a threat to the expertise of aspirational amateurs, those spontaneous yet expert photographers whose practice was characterized by the mastering of photo-processing and printing (Griffin 1987). Since Polaroid technology replaced some key actions previously operated by experts and did not even produce printable negatives, aspirational amateurs rejected it in great numbers (Buse 2008). Given the historical exclusion of Polaroid technology from the realm of aspirational photography, how did it come to be that in the last few years, despite the cease of production caused by Polaroid’s financial difficulties, instant photography has witnessed a resurgence of interest amongst aspirational practitioners?

Answering this question requires moving beyond considering the issue of the distribution of competences characterizing instant photography, and turning to the question of what kind of photographs instant photography materially produces. To overcome the gap between the exposure of film to light and the visualization of the final result, Polaroid developed a technology that instantly materializes photographs through the process previously described. As argued by Peter Buse (2010b), the outcome of this process is the production of photo-objects, which can be thought of as being a Polaroid’s medium specificity. In the analogue days, the fact that Polaroid photographs developed on the spot, in the form of images that could be looked at *and* touched, gave rise to distinctive socio-material practices. For instance, one such practice was the use of Polaroids as party cameras: “Taking a Polaroid is an event unto itself, contained within the party atmosphere... the picture does not commemorate

the past party, but participates in the party as it occurs” (Trotman 2002, 10). Due to its capability of producing photographs that could be instantly visualized and physically exchanged, Polaroids served in festive occasions as a sort of “social catalyst” with an “ice breaking” capacity (Buse 2010b, 10-12).

Polaroid technology also played a role in the development of private forms of pornography. It made it possible for people to photograph their own sexual activity without fearing that photo-laboratories and technicians would violate their privacy. Furthermore, it made co-marital sex possible on a large scale, as it became a means by which couples who wanted to swing could establish contact with each other. Since the physical exchange of Polaroid photographs ensured the anonymity of both sides to the transaction, instant photography became an intrinsic part of swinging itself. Curiously, Polaroid’s first low cost, popular model was named “The Swinger”, although the double meaning of the name was originally unintended by Polaroid Corporation (Edgley and Kiser 1982).

These few examples show how the production of photo-objects, which inherently characterizes instant photography, since it enables the visualization of photographs on the spot through their instant materialization, gave rise to a range of socio-material practices in the field of amateur photography. The automated production of photo-objects and the perception of instant photography as an unmediated way of producing photographs were both fundamental in the development of such practices. Yet, in the context of aspirational amateurism, the acceptance of Polaroid technology was more problematic, as it threatened the photographer’s role in controlling the whole process of photographic production. Aspirational amateurs could not follow the steps of the artist Andy Warhol, who, for instance, loved to use Polaroid cameras exactly because they “do the rest”, thus enabling the re-thinking of the artist’s subjectivity – in his own words: “I want to be a machine, and I feel that whatever I do and do machine-like is what I want to do” (Swenson 1963, 26).

However, although Polaroid technology did not fit aspirational amateurs’ aims and established culture, during the 70s the objectness of Polaroid photographs inspired new creative practices able to circumvent the simplicity of the camera. Such practices were based on the manipulation of the print, both during and after the development of the image, and on the combination of Polaroids with each other, and with other materials, to form composite artworks (Bonanos 2012, 95-98; Buse 2010b). These practices became ways of producing works that better fitted the aesthetic criteria and conventions of aspirational amateurism. In particular, the physical interventions and manipulations accomplished by photographers resulted in pictorial photographs that resonated with the already established amateur tradition of *pictorialism* (Griffin 1987; Schwartz 1986).

Hence, in the analogue era, the reception of instant photography in the field of aspirational amateurism was characterized by a tension between the material functioning of Polaroid technology, according to

which the production of photographs is assigned to the technology itself, and the material accomplishments through which photographers could reinstate their own authorship and circumvent the problem of loss of control over the process. Thus, on the one hand, Polaroid technical artefacts were rejected by the many who considered them as “toys”; on the other hand, Polaroid photo-objects were appreciated by the few who recognized the possibility of experimenting with the inherent physicality of Polaroids. I would argue that this tension resulted in an ambivalent perception of the materiality of instant photography. From this point of view, it may be interesting to consider how this ambivalence has been recently resolved by a new group of users, who significantly define themselves as “*polaroiders*” rather than merely “photographers”.

## 4.2 The Mutual Reconfiguration of Polaroid and its Users

Experimentations with Polaroid objectness started to diffuse in the 70s, after the introduction of the aforementioned SX-70 technology. In the context of aspirational amateurism, this practice of experimentation was less legitimate than that of traditional photography based on dark-room work, but it was nonetheless appreciated by a niche of amateurs. Significantly, researchers who conducted extensive ethnographies of amateur photo-clubs during the 80s, such as Griffin (1987) and Schwartz (1986), do not mention instant photography in their detailed accounts of aspirational amateurism. Ansel Adams, a famous photographer and consultant for Polaroid Corporation, whose influence was widespread in the world of amateurs, does not mention any creative technique based on physical intervention in the revised edition of his book on Polaroid photography (1978); he instead explains how to adapt SX-70 technology to satisfy the need for controlling the process of picture-taking. In contrast, the publication of a number of manuals dedicated to Polaroid manipulation attests an interest in this kind of practice (e.g. Sicilia 1977).

Resolving the ambivalence that had characterized the reception of instant photography in the field of aspirational amateurism required a change of both technology and its users. This change appears to have occurred after Polaroid’s announcement that it was abandoning film production. As the perceived obsolescence of instant photography reached its acme, both the new group identity of *polaroiders* and a new meaning attributed to the use of Polaroid cameras have emerged. Moreover, this process of mutual redefinition has been guided by a logic of opposition to digital photography<sup>2</sup>. In this sense, it can be described as a phenomenon

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<sup>2</sup> The case of polaroiders shows similarities with that of the TRS-80 users analysed by Lindsay (2003). In both cases, the obsolescence of technical artefacts (cameras and computers, respectively) stimulated a process of mutual reconfiguration of users and technology, guided by a logic of opposition to mainstream



that Kline and Pinch (1996) defined as *technological resistance* in order to address the processes of opposition to mainstream technologies through which users may become agents of technological change.

#### 4.2.1 The Emergence of Polaroiders

When, in February 2008, the financial and market difficulties faced by Polaroid Corporation led it to announce that it would be permanently discontinuing the manufacture of instant films, a strong claim to save instant photography from obsolescence emerged from those amateurs who had already adopted Polaroid technology, notwithstanding its simplicity and illegitimate status. Several photographers turned into activists in defence of the preservation of instant photography, thus creating websites such as *savepolaroid.com* and *savethepolaroid.com*, and subscribing petitions in order to either coax Polaroid into reversing its decision or find a buyer for Polaroid's machinery (Bonanos 2012, 164-165).

Resisting the seemingly inevitable extinction of instant photography, practitioners decided to "buy films, not megapixels" – to quote what today is a well-known slogan in the world of film enthusiasts. All the interviewees who were Polaroid users at the time of Polaroid's announcement reported that their early reaction had been to buy dozens of films, either new or expired ones; some of them bought hundreds; one did buy 1,200. Others started online business to sell Polaroid equipment and films<sup>3</sup>. An interviewee described how he started his business by chance and then recognized the existence of a solid niche market:

I had several vintage cameras, including some Polaroids. One day I decided to sell one of them, and put it up for auction for 1 euro. It was a Polaroid 1000, then a plastic camera, and it came to be sold for 60-70 euros. I had a fucking capital on the ground! Then I started to sell my cameras. At the time, you could find [Polaroids] at flea markets, hence I started to buy and resell them. The demand was strong, and I had to find other models abroad, in Germany, France, and mostly in America. Day-by-day... you know... it

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technologies. I am grateful to an anonymous reviewer for suggesting these similarities to me.

<sup>3</sup> Knowing where to buy equipment has become a fundamental part of analogue photography practices. Online shopping is common, but going to flea markets is also essential, since such markets offer the advantage of a less institutionalized *regime of value* than that one shared by professional sellers (see Appadurai 1986). Another competence relates to knowing what is the appropriate price to pay; according to interviewees, vintage cameras are categorized as follows, from the lowest price to the highest: "found" cameras which are sold "as is"; cameras tested with batteries; cameras tested with film; cameras refurbished by experts; Polaroids which have never been used stand on top of the ladder, although they are intended to be collected rather than used.

sometimes happened that cameras didn't work, thus I've learnt day-by-day how to fix the SX-70s, the most valuable ones.

Then I created my own camera, using the body of a Polaroid 1000. Basically, I created a pinhole Polaroid. I also had other good ideas, like that of producing properly sized camera bags. Some artisans helped me by sewing and assembling them (Edoardo, male, 44 years old).

During my research I also met Giorgio, 56 years old, a manager who has learned by himself how to repair cameras; in his spare time, he offers repairing services to other practitioners and provides refurbished cameras to specialized shops. The announced obsolescence of instant photography thus stimulated a change in the role of users: they turned into marketers, distributors, repairers, and even producers. This change could be interpreted as a transformation of technology appropriation path, which progressively moved from the sphere of consumption towards the more active sphere of production. The *creative appropriation* of Polaroid technology (Eglash 2004), once limited to physical interventions on prints which violated producer's intentions, came to include a broader range of activities developed by the users in order to counteract the market-driven production of Polaroid's obsolescence.

Most importantly, users not only rearticulated their own role in appropriating photographic technology, but they also redefined their identity as members of a distinctive social group: a group of practitioners devoted to use and perpetuate Polaroid technology, accordingly self-defined as "*polaroiders*". By connecting with each other, Polaroid enthusiasts amplified their voice and reorganized the circulation of instant cameras and films. Networking activities, such as the organization of a collective movement for the preservation of instant photography, as well as the creation of alternative systems of distribution, quickly transformed the formerly invisible, dispersed niche of Polaroid users into a *relevant social group* (Bijker 1995). This process shaped the perception that the market for instant photography was still remunerative, although limited. Moreover, it was an empty market, since Polaroid had abandoned it. In the course of a few months, a new actor entered the market to fulfil the request of saving instant photography. The new company, called "The Impossible Project" (TIP), acquired the former Polaroid production plant in Enschede, Netherlands, and hired a dozen former Polaroid employees in order to develop new formulas for producing instant films compatible with existing Polaroid cameras (Bonanos 2012).

Photographers' activism and the entry of a new producer have reversed the process of obsolescence of instant photography, at least temporarily. In the last few years, an increasing number of aspirational amateurs have switched from using high-end digital cameras to simple, automatic Polaroid cameras. The re-appropriation of instant photography originated from the attempt of a small group of users to renegotiate and

contrast Polaroid obsolescence. Indeed, with the digitalization of photography, analogue photography “was not being outpaced or becoming obsolescent, it had to be *made* obsolete, and its obsolescence had to be presented as inevitable” (Henning 2007, 53; italics in original). That the end of instant photography was a matter of power and dominance rather than an inevitable fate became somehow clear to Polaroid enthusiasts when they started to publicly discuss the issue of obsolescence. Why should they quit practising instant photography, if they still constituted a feasible market? How could they have replaced their experimentations on photographs’ objectness with a digital workflow within which photographs are visualized on screens?

#### 4.2.2 Polaroid 2.0: Resistance and Authenticity

Since its beginning, the debate about the imminent obsolescence of instant photography was characterized by the idea that the digitalization of photography was *forcing* Polaroid users to dismiss their practice as obsolete. Polaroid photographs began to be simulated by digital apps, such as “Poladroid” (released in 2008), and this remediation of the old technology by the new revealed even more clearly the attempt of producing obsolescence by substitution (Henning 2007). As part of their effort to counteract the deliberate, market-driven production of obsolescence, instant photographers reworked the meaning of their practice in an oppositional way. They not only wanted to affirm that obsolescence was less inevitable than it was perceived; they also wanted to state that instant photography had to be preserved because it was more *authentic* than digital photography. The discourse of authenticity provided a cultural basis to their action of technological resistance, which took the form of a voluntary rejection of digital cameras in favour of the exclusive adoption of Polaroid technology – as it is convincingly expressed by the slogan “buy films, not megapixels”, and reinforced by the fact that Polaroid users now define themselves as “polaroiders” and refuse to adopt the general term “photographers”.

Collected data suggest that the opposition between digital and instant photography is based on three main dichotomies: immateriality vs. materiality; control vs. unpredictability; photography as an impulsive act vs. photography as a reflective experience. Materiality, unpredictability, and reflectiveness, on which Polaroid’s authenticity is currently based, are linked to the two characteristics of instant photography described previously, its ingrained physicality and unbalanced distribution of competences. The meaning attributed to these characteristics, once controversial, has been culturally reworked to justify the resistance to the dominance of digital photography.

First of all, polaroiders believe that Polaroid’s material essence is a fundamental dimension of photography that is completely discarded with digital technologies. In the following quotation, for instance, an amateur

described this material essence as something that digital photography has “stolen” from the practice:

[Photography] was a ‘digital’ work, in the sense that you accomplished it with your fingers, with your hands. They have stolen this definition, too. That is, the ‘digital’ shifted from being something done with fingers to something done with pixels (Camillo, male, 42 years old).

Accordingly, polaroiders share the idea that photography should be practiced “with hands”. From this idea derive both their appreciation of manipulation and the great importance they attribute to Polaroid photo-objectness:

Above all I love manipulation... This is the reason why I love Polaroids so much. I like touching the film, boiling it, transferring the emulsion onto a canvas or cardboard. I love the fact that you do things with your hands (Alba, female, 43 years old).

Polaroiders have developed a broad range of techniques related to the physical intervention on photo-objects. These techniques partly reproduce those established at the time of Polaroid’s mass production, but new kinds of manipulation are also developed to explore the potentiality of new TIP films. Such interventions include, to cite just few of them: the “lift-off”, which consists in removing the emulsion layer from film and transferring it onto a different support; various techniques of surface painting; picture engraving by using heated tools such as the pyrograph; removing background layers and chemicals to obtain transparent photographs; “wounding” the film with nails and other tools. What these techniques have in common is that they presuppose the involvement of bodily sensorium. As a polaroider once told me, they make of instant photography a “photography of the senses”.

Secondly, Polaroid materiality has become more salient, for it is now perceived as adding a degree of unpredictability to the supposedly automatized photographic process. Jamie Bayliss, the creator of *savethepolaroid.com*, was one of the first to sum up the difference between instant and digital photography in these terms:

Polaroid represents what I love about art and photography. I believe experimentation, accidents, and unpredictability are important if not essential parts of the art making process. With Polaroid film you are guaranteed all three will occur at some point... It’s not that you cannot be experimental with digital photography: it’s just a lot more difficult. It’s difficult to make a mistake. Either that, or when you do experiment your results are predictable.<sup>4</sup>

This quotation makes it clear that the opposition between digital and instant photography is based upon the definition of the latter as a process

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<sup>4</sup> <http://www.savethepolaroid.com/polaroids/philosophy/> (Retrieved 10/08/15).

of discovery and experimentation. In this experimentation, accidents may occur, photographers get inspired by their own mistakes and the unpredictability of the analogue process can let them find new aesthetic solutions. Different from digital photography, which is seen as “predictable”, instant photography is perceived as a more authentic creative experience, since it is able to lead photographers to unexpected discoveries worthy of exploration. This opposition is also reinforced by TIP, the new producer of instant films, which emphasizes the unpredictability of the “analogue adventure” (Bonanos 2012, 168), and has adopted the innovative marketing strategy of selling defective batches of films as limited editions designed for the bravest experimenters.

It can be argued that this opposition between predictable and unpredictable photographic processes represents both a cultural shift within aspirational amateur photography, and a change of the meaning attributed to Polaroid’s distribution of competences. As a matter of fact, traditional aspirational amateur culture has always been characterized by the idea that photographers play a prominent role in the photographic process. Conventionally, this culture prescribes that they have to exercise control over the whole process of production, from the mental pre-visualization of the image to its physical or digital post-production (Griffin 1987). In this respect, it is worth noting that the re-evaluation of Polaroid technology in the context of aspirational amateurism represents a break with amateurism’s tradition. At the time of Polaroid’s mass popularity, the reduction of photography to the “one step” of framing and shooting had been considered an unacceptable limitation by the majority of aspirational amateurs (Buse 2008). In recent years, as the diffusion of digital photography threatened the existence of Polaroid technology, the lack of control over the process has begun instead to be acknowledged and positively valued. Moreover, this lack of control has been interpreted as part of a new form of authenticity, upon which an opposition between digital and instant photography is created and sustained.

The shift from a traditional culture based on control and predictability to a new one grounded on unpredictability can be also understood in terms of a re-articulation of the way in which human and non-human agencies are conceived and relationally bound. On the one hand, technological artefacts are no more seen as neutral tools which photographers entirely control, but as actants exerting agency in the process of photographic production. Polaroids have come to be *machines of uncertainty*, which shape the experience of photography. This re-evaluation of technological agency seems to be a common trait of contemporary film-based practices, as it is shared by other kinds of practitioners, e.g. the “lomographers”, who use simple, plastic toy cameras which also produce unpredictable effects (Mangano 2011).

Hence, the re-articulation of instant photography brought with itself awareness that practicing photography requires the balancing of technological and human agency. In this case, balance is reached by accepting

cameras that “do the rest” and by reinstating human agency through physical interventions on photo-objects, that is, by practicing photography “with hands”. Polaroid photographs can thus be understood as photo-objects embodying the hybrid authorship established through polaroiders’ practice. They are partly produced by the hands of photographer, partly by the technology itself. In the process of their production, both visibility and materiality are co-constituted, and put in continual dialogue, through the interaction between human and non-human actors. In fact, as non-human agency is now acknowledged and positively valued, accidents and imperfections are tolerated and sought-after:

Few years ago, a camera with a plastic lens that vignettes the borders of the image was something to be thrown away. Yet, my first plastic camera gave me great satisfaction... plastic lens, awesome vignetting... I love out-of-focus photographs, I love photography that is *dirty* (Pippo, male, 35 years old).



Fig. 1 – An exhibition of “wrong” Polaroids. (Photo by the author).

The re-evaluation of technical imperfections appears to be widespread amongst polaroiders, as well as amongst other analogue enthusiasts such as the lomographers, although it might be reduced in the future due to the constant improvement of TIP films. Nonetheless, while conducting my research I found several evidences supporting this issue. For instance, at a workshop on Polaroid manipulations, the teacher started his lessons with an introduction to the creative use of errors (“I will firstly illustrate errors, then techniques”). Even more convincingly, in 2015 a community I studied organized a collective exhibition entitled “Spare Instants”, which featured only “wrong” Polaroid photographs mounted on the wall without frames. Below the subtitle “At the edge of instant photo (and beyond)”, compositions of almost unrecognizable images underlined the subject matter (Fig. 1).

Polaroiders’ view of how human and non-human agencies are relationally bound within the practice of instant photography is further elaborated with the addition of a third element: the conception of photography as a reflective experience. The hybrid *dispositif* that emerged from the re-articulation of instant photography entails a form of consensual abandonment of subjects to the constraints of Polaroid materiality, which in turn stimulates the development of techniques through which polaroiders prepare themselves to “make things happen”. An interviewee called this attitude the “zen of photography”:

[Polaroid] taught me the *zen of photography*. It means that you wake up in the morning, having planned that you’ll be around photographing over the entire day, and then you feel... the *adrenaline!* You prepare your bag, take your bicycle and go out, far away. You arrive, and have to get there at the estimated time... I look at the map and estimate what time the sun will come... [what time] the sun will be as I like it to be. I estimate time, get there, and get *anxious*. Polaroids have parallax error, because of the viewfinder... the most difficult thing to do with Polaroid is photographing a tower and putting it at the centre of the image. In fact, I usually *shoot once*, never take more shots.

The zen means widening your legs a bit, aiming, taking a breath, holding your breath, not resting your arms on the chest, because heartbeat makes them move... thus you stand that way and aim straight... frame as you wish, then do this movement, move down a bit, a bit to the left... you have to learn this movement, shoot, and then you know you’ve got it right. Because now you’re experienced (Pippo, male, 35 years old).

These excerpts show that instant photography is perceived by the polaroiders themselves as a reflective experience: it articulates itself through a sort of meditation continuously threatened by technological constraints, such as the difficulty of framing, and by emotional states, such as excitement and anxiety; hence, instant photography is not reduced to the mere

act of pointing and shooting, but instead it is seen as an activity requiring a long preparation, as well as a learning of how to adapt the photographer's body to the camera. Experiencing photography appears to be more important to polaroiders than producing photographs. As stated above, shooting is perceived as just the reward of a long process of preparation and human and non-human interaction, to an extent that only a photograph can eventually be produced. This condensed practice is explicitly opposed to the "shooting mania" of digital photographers, that is, the impulsive production of large numbers of photographs which characterizes digital photography. An interviewee illustrated this point by reporting how he reproduced the supposedly unthoughtful digital workflow to publicly deprecate mainstream photography culture:

I stuck my iPhone to a train window. Then, while reading a book, I kept on shooting without aiming, ta-ta-ta-ta-ta-ta, over the whole trip. After returning I selected 10 photos. Then I went to a printer and asked him for the most beautiful paper. Then I went to a frame-maker for the cardboard frames. I paged the photos in a book, one metre long and forty centimetres high, entitled it "Boredom", wrote four lines of crap, and brought it to the Photoshow. And I received compliments from everyone. 'Brilliant', 'fantastic'. I said 'well, gentlemen, I haven't done anything except carrying around a phone and shooting randomly.' I selected 10 of 3,000 photos, you don't need to be a genius to do so. Thus I created a webpage, which is called 'I Shit Photo', to make people know what I think of this kind of work (Camillo, male, 42 years old).

I would argue that by linking the three elements described above – practicing photography "with hands", accepting the unpredictability of Polaroid technology, and valuing the reflective attuning of subjects to the experience of photography – polaroiders have defined a new kind of regime of authenticity, which is articulated in opposition to digital photography and which substantiates their action of technological resistance. A new distinction about what technical artefacts are appropriate for practicing aspirational amateurism has accordingly emerged. Following this distinction, analogue cameras are the "real" tools of amateurs, while digital ones can just pretend to be so by reproducing the physical structure of their predecessors, as the following excerpt from a conversation between polaroiders commenting on the latest state-of-the-art digital cameras suggests:

A: I have to admit that I appreciate the fact that [with Fuji X-Pro] you can again set the diaphragm by rotating the aperture ring on the lens, instead of pressing buttons and turning small rings on the body.

B: What about the latest craziness from Leica? That without screen... a digital camera without screen!

A: *It looks like a real camera!* The Fuji X-Pro, too... it looks like an old 6x9.



However, although polaroiders reject digital cameras in the context of aspirational amateurism, they nonetheless admit the use of such devices for other purposes, e.g. for utilitarian and mundane photography. I found that using digital devices in different contexts is often made coherent with the practice of instant photography. The simplest way to do so is by material arrangements, for instance by inserting smartphones into cases that reproduce the design of vintage Polaroid cameras (Fig. 2). However, what is more intriguing is the way polaroiders appropriate mobile apps designed to simulate analogue photography. It is obvious that using software that mimics Polaroid photography is proscribed. What I did not expect to find is that polaroiders distinguish between apps that are commonly considered similar.



Fig. 2 – An iPhone cased in a Polaroid-like shell. (Photo by the author).

In particular, during my multi-sited ethnography I found evidence that polaroiders clearly accord preference to Hipstamatic over Instagram. They both are popular apps that digitally simulate the appearance of analogue photography. As such, they are often considered as equivalent means for practicing nostalgic “digital retro-photography” (Bartholeyns 2014; Bull 2012; Caoduro 2014). Thus, why do polaroiders accord preference to the former over the latter? An interviewee puts it in these terms:

The concept is different, because with Instagram you shoot an ordinary photograph and then work on it, while with Hipstamatic you have a camera in your hands, and you shoot knowing that you’re producing a photograph that is what it is... it’s like you have a film loaded. You choose the camera, lens, and film... although

they are all simulated. This gives you the feeling and taste of analogue photography (Fabio, male, 43 years old).

According to him, his preference is motivated by the fact that Hipstamatic – in ANT terms (Akrich 1992) – configures the user through a *script* of actions that is perceived as coherent with the practice of analogue photography. While Instagram is recognized as “digital”, for it produces transient photographs that have to be post-processed, Hipstamatic has an “analogue taste”, since the photographs it produces “are what they are”. That is, they are seen as “real” outcomes of the interaction between photographer and technology, during which the former makes his choices and the latter “does the rest”. Although it is a simulation, the doings and distribution of competences are perceived as coherent to those of instant photography.

To summarize and conclude the first part of my argument, I would argue that, with the diffusion of digital photography, Polaroid’s increasing obsolescence opened up new opportunities for aspirational amateurs to reconfigure existing boundaries between mainstream and niche photographic practices. Those amateurs who, despite the cultural ambivalence of Polaroid technology (Buse 2008), had already adopted it, redefined three main elements mainly pertaining to its material dimension, in a dialectical opposition to digital photography. These elements (physical manipulation, process unpredictability, and the reflective attuning of subjects to technological constraints) have evolved together with a new form of authenticity that polaroiders feel should be preserved. In this process, former Polaroid users redefined their own identity as “polaroiders”, and became a relevant social group whose aims are to resist digital photography and to contrast the production of Polaroid’s obsolescence. Contemporary instant photography could thus be described as new practice. If I had to find a new label to distinguish it from its predecessor, it would be “Polaroid 2.0”, since it reflects both its newness and the self-identification of practitioners with their privileged old technology<sup>5</sup>.

## 5. The Double Logic of Remediation and the Digital Circulation of Polaroid Photographs

The transformation of instant photography into a niche practice that lives on the periphery of, and in opposition to, digital photography appears to be an opportunity to study the co-production of the visual and the material, since Polaroid’s ingrained physicality has inspired new visual practices and has taken on a new saliency by virtue of its threatened obso-

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<sup>5</sup> While I was writing this paper, I discovered that the label “Polaroid 2.0” had been already coined by Peter Buse in his new book on Polaroid photography, *The Camera Does the Rest* (2016).

lescence. This process of co-production has also shaped the social. In my study, this is made clear by the fact that geographically and socially dispersed individuals, by connecting to each other, and by collectively re-working the meaning of instant photography, came to constitute a relevant social group with the power of attracting a new producer of instant films (Bijker 1995).

Another way of understanding how this assemblage, or *photography complex* (Hevia 2009), works, is that of considering how a wide range of heterogeneous ingredients, relating to different dimensions (material, symbolic, and performative) are integrated into photographic practices (Hand 2012; Shove, Watson, Hand and Ingram 2007). In the case of contemporary instant photography, this process of integration can be thought of as the outcome of both the dis-integration of pre-existing practices and the re-integration of old elements, together with new ones, into a new practical entity. Out-of-production cameras, reinvented films, new forms of manipulations inspired by their old versions, an unprecedented acceptance of imperfections, online competitions and real-life “pola-parties”, digital and analogue technologies, all these elements are coherently integrated into a practical entity within which the old and the new are inextricably layered.

In my study, perhaps the most emblematic example of how the social, the material, and the visual are co-produced, and at the same time of how old and new ingredients are assembled-in-practice, is the digital reproduction and circulation of Polaroid photo-objects. The digital circulation of Polaroids is an essential part of instant photography practice. It lets photographers show their work and coordinate community activities, such as exhibitions and competitions, in a similar manner to that of digital amateurs (Grinter 2005). It also plays a prominent role in recruiting new practitioners, which is fundamental to the reproduction of practices (Shove, Pantzar and Hand 2007).

Digital circulation, for example, creates a pre-requisite for enrolment by making instant practice visible:

I believed that the film era was actually over. I didn't believe that films might still exist, like millions of people I still meet who ask me 'What? Do you shoot film? Where do you find them? Do they still exist?'. That is, I believed so, believed that everything was digital. But I was wrong. Because I'd never sought information about that... so I just didn't think films were available anymore, don't know why, due to a discourse about times, about ages. Thus, at the time I'd dedicated myself only to digital photography. But then I discovered that film does still exist! (Alba, female, 43 years old).

Reaching more visibility is thus important for contrasting the dominant perception of technical innovation as a break with the past. Digital circulation has also been crucial for both the emergence of a new Polaroid culture and the transformation of Polaroid users into a relevant social

group. At the beginning of the Polaroid re-appropriation movement, early adopters connected to each other by sharing their Polaroids on websites dedicated to the preservation of instant photography. TIP recruited several of those activists as “Testers” during the experimental stage of film production. The testers’ duty was to test newly produced films and ship the resulting photographs, together with a form compiled with technical data, back to TIP headquarters. However, the programme was likely intended to recruit allies (and future customers) within the networks already established by Polaroid users, rather than actually test films. An interviewee expressed his doubtfulness about both the programme and the new products:

I shipped my first photographs and commented: ‘Are you really going to sell this stuff?’ About three weeks later I got an email with their response: ‘Wow! Wonderful work!’ And there I thought: ‘Are they kidding me? That stuff has to be thrown away’ (Gabriele, male, 67 years old).

This quotation also reveals that technical imperfections were not tolerated at the beginning. Although still controversial, the acceptance of imperfections has increased over time with the re-articulation of instant photography – a few years later, for instance, the polaroider quoted above took part in the organization of the already mentioned “Spare Instants” exhibition. TIP also contributed to this change by distributing defective film batches. According to two interviewees, TIP furthermore exerted some form of control by expelling from the Tester programme those who publicly criticised its products (they both reported that this happened to themselves). Notwithstanding the bewilderment of some Testers, in 2010 TIP started publishing on its website a collection of photographs shot on its newly produced films, and this created a hype around Polaroid technology, attracting new practitioners<sup>6</sup>.

If we consider the importance polaroiders attribute to the concreteness of analogue photographs, the digital reproduction and circulation of such photographs raise questions about how practitioners maintain practical coherence between the meanings they give to Polaroid’s photo-objectness and its translation into digital form. Since polaroiders, who contrast and deprecate digital photography, eventually circulate their photographs digitally, how can they discard the physical substance of Polaroids without losing coherence with their own resistant identity?

Interestingly, the conversion of Polaroids into digital data files was a fundamental part of the way in which the Polaroid Corporation imagined instant photography’s unlikely future in an “image-dependent businesses” as early as in 1991 (Buse 2010a). Moreover, Polaroid’s research and de-

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<sup>6</sup> These early photographs marked the foundation of “The Impossible Collection”, which explicitly refers to the famous Polaroid Collection founded by Edwin H. Land.

velopment activities during the 1980s have been guided by an equally unlikely, strong sense that customers would also want instant prints in the digital age. This “ontological truth” led the company to invest in developing digital technologies which also produce instant prints on Polaroid films, and to fail in responding quickly to the market’s ongoing shift from analogue to digital imaging (Tripsas and Gavetti 2000). On the one hand, these considerations make the role of users even more significant, since it has been more effective than that of the producer in redefining the meaning of Polaroid’s objectness and finding a way to keep instant photography alive. On the other hand, they make questions about how the digital conversion of analogue prints may be coherently integrated into analogue photographic practices intriguing.

Clearly, in this regard, the digital scanning of instant photographs is a crucial and delicate process, as it transforms physical objects into two-dimensional images. Polaroiders have developed two main strategies to manage scanning. The first one consists in reproducing elements that pertain to the physical form of these photographs. This is well exemplified by the reproduction of the iconic frame within which images are contained. To give some numbers, in a sample of 600 Polaroids, recently published by members of the three communities I studied, 544 are scanned with their own frames. Thus, 90.7% of the sample is composed by photographs reproduced together with their physical support. This number increases if we consider that the remaining 9.3% often show other material elements, such as traces of physical interventions and mixed materials applied on the images’ surface.

It could be argued that this strategy aims to transform digital reproductions into meaningful carriers of analogue practice. As the objectness of instant photography has taken on a new saliency in opposition to digital immateriality, this oppositional meaning is preserved through visual inscriptions that remind of the socio-material production of photo-objects. In this sense, in the process of scanning, polaroiders try to not reduce photo-objects into two-dimensional images. Instead, they make visible the physical substance of the “analogue experience” by representing supports, manipulations, and imperfections, that is, the objects, doings, and meanings which constitute their practice. It could be said that, when translated by digital means, exposed instant films become even more “integral”, in the sense that they integrate all the fundamental elements of polaroiders’ practice.

The second strategy, which I define as “casual scanning”, consists in diminishing the visibility of the mediation of digital technology, either concretely or symbolically. This is mostly accomplished by avoiding to set digital software scanning parameters. So, regarding their scanning practice, the majority of interviewees reported that they “just put the photograph into the scanner and then push the scan button”. However, setting parameters is tolerated when it is limited to brightness/contrast; this is justified by the aim of ideally making what it is seen on the screen to “be

the same as the print”. Digital mediation is underplayed also by discursively devaluing technologies and competences, as it is exemplified by interviewees underlining that polaroiders are “digital illiterates”, and that their scanners are “poor”.

I own a very poor scanner that is also a printer. You can see that [resulting images] are askew... but it's ok. I like them as they are... as they come out from the camera, with their frame. Usually I don't correct anything. I know you can digitally correct whatever you want, but what's the point? In fact it makes no sense. I try to keep it as real and close to the original as possible. It's good as it is... a Polaroid without frame isn't a Polaroid at all, it's not itself anymore (Carla, female, 44 years old).

Besides the already addressed point about Polaroid's frame, this excerpt also reveals that polaroiders take care of reducing the transformative effect of digitization during scanning. To their eyes, digital technology “has no agency”, as far as they keep the whole process of digitization “real” by reproducing Polaroids “as close as possible to how they come out from the camera”. Digitization is thus a process during which practitioners express ontological assumptions on the nature of instant photography. These shared assumptions make a digitalized Polaroid an appropriate substitute for the original photo-object.<sup>7</sup>

From an emic perspective, the logic adopted during scanning is thus double: on the one hand, polaroiders visualize the material to materialize the visual by displaying the physical elements of their photographs; on the other hand, they deny the transformative effect of digitization, believing that this denial could preserve the original material essence of analogue photographs and thus not reducing it to the supposedly pure visuality of digital photography.

When considered together, these two strategies appear to correspond to the twin logics of *remediation*, the process by which media are multiplied, and at the same time all traces of mediation are erased (Bolter and Grusin 1999). Although digitalized Polaroids are clearly *hypermediated* contents, for they are digital versions of film-based photographs, the style of representation and the mode of production adopted by polaroiders express a desire for *immediacy*, which “dictates that the medium itself should disappear and leave us in the presence of the thing represented” (Bolter and Grusin 1999, 6). These logics, grounded on shared ontological assumptions about the status of the visual outcome, “make the viewer forget the presence of the medium” in the very act of multiplying media (Bolter and Grusin 1999, 272). The double logic of remediation can thus be used to describe how digitalized Polaroids can remain “real” photo-objects and retain their physical substance to the eyes of polaroiders.

By following the logic of remediation, polaroiders achieve practical

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<sup>7</sup> See Sassoon (2004) for a different point of view on this issue.

coherence: to them, digitalized Polaroids are not products of digital photography; they are “real”, since they are the same that photographers keep in their hands; their objectness is not discarded, instead it is reproduced in a way that expresses polaroiders’ shared assumptions, knowledge, and the oppositional meaning of instant photography practice. Digitization puts photo-objects in tension between mutability and immutability, and this tension is managed through performative strategies driven by the twin logics of remediation.

The twofold goal of digitization strategies is thus to mobilize photo-objects and at the same time attain a sort of immutability. When digital Polaroids circulate, practitioners do not perceive the tension between mutability and immutability. However, this tension becomes visible when non-practitioners participate in polaroiders’ communities. Since membership is usually open to participation, but new members are not yet enrolled – in the sense that they are not *carriers of the practice* (Shove, Pantzar and Hand 2007) – the status of photographs circulating online may be contested. In the following excerpt, a polaroider who manages an online community describes what happens when new members upload “fake” Polaroids created with digital software:

It happened, especially at the beginning, that someone uploaded fake Polaroids. It was funny that after we had pointed out their fakery, they kept arguing that they are true. I didn’t ever understand that. This is the reason why we’ve put a disclaimer in our homepage. Basically, the idea is that *you can upload only photographs that can be touched*. This is what the disclaimer says. Then, philosophical dissertations about digitization came out. It was bordering on the ridiculous... I’m very rude with *people who pass something that is not*. Our attitude is that of good faith, that is, I give you a chance to tell me if it’s true or not, and to delete it in case... Yet it usually happens like this: they get angry, do their philosophical dissertation on why and how, get offended, and leave. They get angry because it’s not fair, since with scanning it too becomes digital, etc. It’s simply a question of ethics... of giving things a name (Beatrice, female, 35 years old).

Thus, conflicts may emerge from two contrasting ontological assumptions: practitioners distinguish between “true” Polaroids, which, although digitalized, exist somewhere in a material form, and “fake” Polaroids, which exist only in a digital form; non-practitioners, instead, do not recognize the objectness of whatever photograph circulates on the web. Notwithstanding the non-practitioners’ argument that digitalized Polaroids are as transient and immaterial as digitally-produced photographs, their status of immutable photo-objects is taken for granted, produced through digitization strategies, and constantly defended by practitioners. Those who do not share this practical knowledge are excluded from the community. In this context, digitization and digital circulation are thus political acts by which social boundaries are traced and maintained.

## 6. Conclusions

With this article I attempted to show how the ongoing re-appropriation of analogue instant photography can be “thought beyond the visual”. I drew upon both STS literature highlighting the role of material artefacts and users, and upon “photo-materialist” scholars, who stressed the need of reorienting the research on photography in order to not reduce the object of study to fixed entities constituting the practice of photography, such as images, technical artefacts, or photographers. In developing my argument, I highlighted two processes through which the visual, the material, and the social are co-produced.

The first process relates to the dynamics of socio-technical change. At this regard, I discussed how the diffusion and dominance of digital photography stimulated a counter-action of technological resistance, which successfully reversed the process of obsolescence of instant photography. This phenomenon emerged from the mutual reconfiguration of Polaroid users and technology. Previously dispersed users connected with each other and emerged as a relevant social group with the power of attracting a new producer of instant films, redefining along this process their collective identity as “polaroiders”. On the other hand, the use of Polaroid technology acquired a new oppositional meaning, grounded on the definition of a new form of authenticity, based on an opposition polaroiders envision against the perceived lack of authenticity of digital photography. Contemporary instant photography could thus be described as a new practice, within which old and new elements are integrated together in a renewed configuration. If I had to find a new label to distinguish it from its predecessors, it would be “Polaroid 2.0”, since this definition reflects both the newness of the practice and the self-identification of practitioners with their privileged old technology.

The second process I focused on is the process of remediation of Polaroid photo-objects that takes shape through the digital circulation of Polaroids. Here I showed how the digitization of Polaroid photographs, a passage that is fundamental to the organization and reproduction of instant photography practice, can be understood in terms of a remediation process through which digital photo-objects are made coherent with their physical counterparts. I described two digitization strategies developed by polaroiders, that they believe can preserve Polaroid’s objectness into digital form. By adopting the logic of remediation polaroiders make of digitalized Polaroids appropriate substitutes for the original photo-objects. This lets them coherently integrate digitization into their analogue practice. Finally, I illustrated how the circulation of these “digital photo-objects” forces practitioners to constantly defend the boundaries and authenticity of their practice. Conflicts about the ontology of digital photographs between practitioners and non-practitioners may thus reveal how photography’s material status is socially (re)produced through circulation.



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