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THE PATHETIC DIMENSION OF HYBRID IMAGES IN ENVIRONMENTAL EDUCATION

Cesar Kauê de Lima Luz

Master in Environmental Sciences,
"Universidade Brasil" (UB), Brazil

João Adalberto Campato Junior

Professor of the Master in Environmental
Sciences, "Universidade Brasil" (UB), Brazil

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Abstract: Environmental Education is one of the most relevant domains for sustainable development and sustainability, as it encourages reflection on environmental issues, making people aware of the preservation of natural resources. The languages that make use of iconic signs, such as the photographic image, for example, are effective pedagogical instruments to be used by environmental education. Communication through images is universal, capturing people's attention, who are increasingly influenced by iconic signs. This capture of attention becomes more evident when the image contains pathetic elements, that is, elements that seek to persuade people through emotion. This research sought to reflect on the potential of the hybrid photographic image with an environmental theme and a pathetic content as a means of raising awareness of the environmental cause. The hybrid image themed "Queimada" was produced. Hybrid images are fusions of digital photographic images treated and edited to achieve the purpose of communication intensely, generating contents of high expressiveness. The research was qualitative, with the purpose of carrying out a bibliographic review of the critical fortune on the use of the hybrid image in environmental education. In addition to bibliographical and documental research, pre-production, photographic production and post-production technical procedures were developed and carried out for the design of a portfolio of hybrid images for educational use. It is concluded that hybrid images can be used to effectively attract people's attention - especially students - to the environmental issue, pathetically sensitizing them and persuading them about the pressing need for sustainable action.

Keywords: Environmental education; Photography; Hybrid Image; Visual Signs.

INTRODUCTION

The intervention of human beings in nature has assumed an uncontrolled proportion, as this process is characterized by the use of increasingly intense predatory and unsustainable practices, which act in the degradation of the environment and for which there does not seem to be a solution in the short or medium term. deadline. The distorted anthropocentric ethics is one of the main factors responsible for environmental degradation and impacts. This is because human beings place themselves at the center of the planet, seeking to dominate nature and use it in the way they deem convenient for their interests, especially those of an economic and political nature.

In this threatening scenario, environmental education reveals itself as a form of reflection and positive intervention in the sense of equating or alleviating the aforementioned environmental problem. It is a mediating action consisting of broad educational and cultural programs that begin before and go beyond the formal school, constituting a program for life.

The practice of environmental education is already properly regulated in Brazil by Law 9.795/1999 (BRAZIL, 1999), which declares, in its first and second articles, that Environmental Education is an essential and permanent element of national education at all levels and modalities.

Despite its recognized importance, attested even in the legal field, environmental education suffers from a lack of material and human resources to make it effectively present in schools, colleges, university centers and non-formal education spaces, according to what is regulated by law.

Such adversity is all the more explicit as there is a lack of more systematic, interdisciplinary and methodical projects with a view to teaching Environmental

Education that is universal, efficient and integrated with the teaching of other fields of knowledge. Furthermore, the teaching of environmental sciences suffers the consequences of conservative didactics and methodologies, incapable of approaching the subject with the dynamism that modern times demand.

In view of the above, it is possible to state that the photographic image constitutes an excellent pedagogical instrument with which the teaching and learning of environmental education could be developed in an attractive, playful and effective way. The image acts as a universal communication sign, which communicates with a high dose of transparency and speed, capturing the attention of students, who are increasingly influenced and attracted by images and digital language.

In other words, the images, because they are based on a relationship of similarity with the reality they represent, signify with sufficient clarity and dynamism. Between the image it represents and the referent represented, there is a relationship of similarity, an analogical process.

Faced with a photographic image of a car, it is difficult to imagine anyone who does not recognize the car as the reference of this photograph, whether in Brazil or abroad. However, if someone who does not know the English language listens to the word car, he will not know what referent – or object – it refers to. If the imagery sign is motivated by similarity, the linguistic sign is arbitrary, as there is no relationship between the referent car and the sound that names it, whether in Portuguese, English or any other language. Showing how to take advantage of this motivation for environmental education is one of the purposes of this investigation.

The theme of this research, therefore, lies in the use of the photographic image as a

way to make teachers and students – mainly, from elementary and high school – see how they can teach and learn in a more intense, attractive, modern and critical way. content related to the environment through the use of images.

Particularly, the images in this research are hybrid photographic images, digital phenomena manipulated by the action of software, such as *Photoshop*, through which they are transformed from an original photograph.

The image thus obtained reaches the particular purpose of communication with more intensity, playfulness, affectivity and expressiveness, generating specific contents to produce certain effects of meanings, which take advantage of the dialogue between reality and fiction. This capture of attention becomes more evident when the image contains pathetic elements, that is, elements that seek to persuade people through emotion and feeling.

As we will try to demonstrate, similar, very typical and peculiar meaning effects of hybrid images can be used, with great benefit, in the teaching and learning process of subjects related to environmental sciences.

The image has the power to make facts, people and events more present, creating in the viewer an effect of contact with the represented elements. In terms of the relationship between the sign (the image) and the thing signified (the referent), it is interesting to anticipate that the hybrid image uses effects of reality and fiction, which ends up impacting the spectator, who is impressed by a figure that it seems, at the same time, to be from the realm of reality and fantasy.

As far as it was possible to assess, studies on this topic are still quite limited. Research on Google Scholar¹ with the terms hybrid image and environment did not return any results

1. <https://scholar.google.com.br/>

that could be useful for this research. The same result was verified with a similar search in Scielo². However, it is necessary to record some bibliography found on the hybrid image, albeit quite limited. It is, for example, the Master's thesis entitled *The Hybrid Image: The Synthesis between the Photographic and Digital Universe*, by André Luis Favilla, defended at the State University of Campinas (Unicamp), in 1998.

In this same direction, it is worth mentioning the work carried out by the members of Grupo Luz³, advertising photographers Leonardo Luz and Kauê Luz. Both deal with the hybrid image both from a theoretical and practical perspective, disseminating their studies through courses and handouts both in Brazil and abroad. Particular mention must also be made of the book organized by Rachel Trajber and Larissa Barbosa da Costa, entitled **Evaluating Environmental Education: Audiovisual Materials** (2001). The work is made up of five chapters in which issues of production and use of audiovisual materials with an environmental theme, created for use in educational instances, are dealt with.

That said, in terms of the general objective, this article intends to examine how the pathetic use - that is, which appeals to the emotions - of hybrid photographs can make environmental education more effective and attractive in formal teaching situations, increasing student adherence. to the proposed environmental content.

With regard to specific or secondary objectives, it is possible to list the following purposes of this research:

a) Suggest the importance of a proposal for a portfolio of environmental photographic images – based on the hybrid image technique – for use by teachers in the field of environmental education;

2. <https://www.scielo.org/>

3. <https://www.grupoluz.com.br/>

b) Briefly describe the construction process of the hybrid images that will serve as the visual and digital pedagogical instruments;

c) Dimensioning the pedagogical potential of the hybrid photographic image with an environmental theme and a pathetic content as a means of raising students' awareness of the environmental cause.

THEORETICAL REFERENCE ENVIRONMENT AND ENVIRONMENTAL EDUCATION

The term “environment”, in the view of Veyret (2012), was used, from the beginning of the 20th century, meaning geographic environment, already associated with the idea of physical data and actions of society. Thus, environment defines “a system of relationships, physicochemical and biotic in interrelationship with social, economic and spatial dynamics” (VEYRET, 2012, p.212). The environment goes beyond those topics that for many would define the concept. This is because it is broader than flora and fauna. In this regard, elements of undeniable relevance for the environment are the articulations of “complex interdependence existing between nature and societies” (VEYRET, 2012, p.20).

In this socio-environmental articulation, men transform and are transformed by the environment. Nature distances itself from that idea of untouched nature, being seen more as “a field of interactions between culture, society and the physical and biological basis of vital processes”, in a broad process of mutual and dynamic modifications (CARVALHO, 2012, p.37).

With considerable speed, natural resources are becoming scarce, signaling a situation of lack of preservation, conservation and planning by man, who turns his back on sustainability issues. Deforestation, desertification,

pollution, attacks on biodiversity, climate change, lack of environmental control over water, soil and air are real risks. One of the ways to combat this situation is to promote environmental education.

In the opinion of Loureiro et al (2002), the purpose of environmental education consists of “building values, concepts, skills and attitudes that enable the understanding of the reality of life and the lucid and responsible performance of individual and collective social actors in the environment”, becoming a “strategic element in the formation of a broad critical awareness of the social and production relations that place human insertion in nature”. For critical awareness to actually occur, it is necessary not to lose the political dimension of environmental education, avoiding reducing it to issues of natural resources or exclusive to the natural area of a place.

Everything must be linked to the way men interact with the environment around them. Environmental education can only be processed with some practical sense if it seeks to be critical, understanding the modes of economic production, the symmetrical relations or not between men and the relations of power, competitiveness, consumption and domination between nations, formulating a transformative action and always seeking the suppression of dehumanizing practices (AGUIAR, 2018, p.288).

Basic education constitutes the stage in which the beginning of the formation of thought in environmental education takes place, which extends to higher education or even beyond, in an endless reflection. In addition, environmental education is present in all spheres of development in our lives and in any field of knowledge, both in the formal field and in the informal field. Precisely because it is of great significance and because it encompasses the entire development

of human beings, “we must politicize the environmental issue and, above all, environmental education. This is equivalent to postulating that the environmental education that seems most appropriate to develop in formal and informal spaces is precisely that of a critical tendency” (LOUREIRO; LAYRARGUES, 2013, p.67).

Adopting a critical stance in the field of environmental education is equivalent to seeking to preserve the environment, create a society that is as sustainable as possible and rationally share natural assets as a result of collective construction, not giving up a systemic, critical and ethical stance. that does not separate such environmental awareness from awareness by citizens of their historical, social and political conditions. For such a critical segment, it is insufficient to propose a renewal of the relationship between man and nature, if there is no fight, in equal measure, for a renewed society.

Environmental education needs to transform people, making them aware and emancipating them based on issues that concern their concrete reality. Environmental education is not the result of an individual and passive decision, isolated in the individualist and conservative thinking of “everyone does their part” (LOUREIRO; LAYRARGUES, 2013, p.65).

From what has been commented here, the important conception according to which environmental education cannot be limited to a pragmatic scheme (LOUREIRO; LAYRARGUES, 2013, p.66), whose sole or almost exclusive purpose is to educate citizens for sustainable consumption, adopting a philosophy environmentalist results and completely decontextualized, which would offer a compensation for the possible imperfections of the consumerist system.

IMAGE

Concept

Image, from the Latin *imago*, is conceptualized as a process of representation produced by someone, which indicates something and which refers to something, with which it maintains a relationship of analogy, appearance or similarity, which can vary in degree (JOLY, 2010).

The image constitutes a sign, because what one sees, for example, in a photograph of Avenida Paulista, in São Paulo, is not Avenida Paulista itself, but its representation, that is, its sign, which maintains relations of relationship with the referent. resemblance. Signs communicate, express ideas and produce meanings with their users. In the case of images, communication almost always occurs immediately and transparently due to the relationship of similarity. A photograph $\frac{3}{4}$ in a document attests to the identity of its bearer, since there is a relationship of similarity between the referent (the human being) and the sign that represents it (the image). In short: one looks like the other.

As recorded by Santaella and Noth (2010), images can be seen as iconic signs and as plastic signs. In the first case, there is a representation of aspects of the visible world, the figures, for example. In the second case, shapes, lines, colors and textures are observed. Thus, the final and global meaning of a visual message can only be obtained through the analysis of iconic signs and plastic signs (JOLY, 2010, p.92-93).

Functions

The image has the power to make present people, places, events and facts that are not effectively present in certain situations of interlocution. In a conversation, the photograph of an absent person somehow makes him more present in that conversation, as he can be more easily evoked or remembered.

As signs, the image constitutes a communication tool, acquiring the following functions, which must be analyzed not in terms of exclusivity of one or the other, but of predominance:

- Informative (referential or evocative): provides objective and direct information about reality. As an example: photojournalistic images and realism paintings.
- Epistemic function: instrument of knowledge. When observing an image, information is acquired about the things, people and situations represented, which can thus be better interpreted.
- Explanatory: explain the context of the information. As an example: the images of the drawings that explain the texts and the images of graphics that help to understand the results.
- Argumentative: seeks to persuade, influence and convince the receiver through stimuli that make him change his behavior. As an example, we mention advertising.
- Criticism: in addition to informing, it points out paths or processes that particularize the information through evaluative and critical evaluations on the subjects. For example: caricatures.
- Aesthetics: produces aesthetic pleasure and seduction in the viewer through beauty, valuing the shape, balance, alignment and contrast of the image. By this function, the style of artists who work with images is known. As an example: the images of works of art of realistic, impressionist, expressionist, surrealist painting, etc.
- Symbolic: they function as metaphors, being able to generate connotative meaning. As an example: the images of the flags, which represent nationalities; images of nature, symbolizing peace.

- Narrative: to tell happened actions, occurred scenes or historical facts. For example: fresco paintings, comics, photonovels
- Expressive: reveal emotions and feelings of the author of the image. As an example, we mention the photographic images that portray hunger, tragic and strongly affective situations. This function can be combined with the argumentative function, when the image producer plans to persuade through the emotions provoked by the image in the viewer.
- Ludic - it is fun and entertainment function. As an example: images from superhero movies, figurines for collection, among others.

Overall view of the image; from now on, we turn to the examination of the hybrid image.

The hybrid image

Concept

The issue of hybrid images concerns the influence of computer technologies on photography, based on the relationship between photographic and digital information. That is, the hybrid exists as a synthesis between analog and digital. When

talking about a hybrid image, one is referring to the result of the image produced by the camera and the subsequent editing carried out using *Photoshop* software, produced by Adobe System, or another editor through which images can be retouched, applied special styles, performed dialogues between images and verbal texts, make adjustments and improvements (LUZ; LUZ, 2017).

As Favilla (1998, p.19) understands, the hybrid image is “the image resulting from the digitalization process of photographic images, placing them in a latent state of formal reconstruction inside the computer”. In this context, the hybrid image presupposes the previous existence of an analogical image (for example, the photographic one). For illustrative purposes, see below part of the genesis process of a hybrid photograph, as recorded in the Grupo Luz course booklet (Luz; Luz, 2014).

When thinking about hybrid photography, it refers to the mixture of the technique of capturing light in order to transform, redesign and modify an image for a print that will not necessarily show only the objects, but may have a connotation beyond the raw reality, with an interpretation and manipulation of this truth (LUZ; LUZ, 2014).



Figure 1: Process of genesis of a hybrid photograph.

Source: Grupo Luz course handout (Luz; Luz, 2014).

In terms of production, one can understand the hybrid image as the synergy resulting from the efforts and techniques pre-established by the areas of pre-production, production and post-production of the image, through which the forms and ways of representations that are defined are defined. are mixed by media, from different captures, such as photographs, drawings, projections of images digitally generated by various software, such as Photoshop, Lightroom, Modo, Zbrush and Illustrator (LUZ; CAMPATO, 2019).

Photographs are increasingly essential in the planning, execution and monitoring of interpersonal communication. They make it possible to obtain signs, signals and media functions that allow a more visual, enlightening and personalized approach in communication.

Historic

In this brief history, chronologically, some relevant moments for the development of

the hybrid image throughout the history of photography will be presented below. Before that, it is useful to observe the message that follows in Figure 2.

1st) The fusion of techniques applied in the 15th century from the Camera Obscura, that is, optical techniques are merged with painting techniques, giving rise to the first hybrid element in photography; it was, therefore, the first hybrid artifact, since the presence of these embryonic photographic resources came to substantially modify the mimetic quality of what was represented.

2) From 1839, date of the official creation of Photography by Daguerre, many experiments came to add to the improvement of this in several parts of the world, but what seems to be worthy of the second indicator of hybridity would be the incorporation of Photography to newspapers of the time. Here, rather than adapting techniques, the most vigorous fusion in the entire history of communication took place. Today it is possible to evaluate the power of the printed word allied to the

Evolution of photography

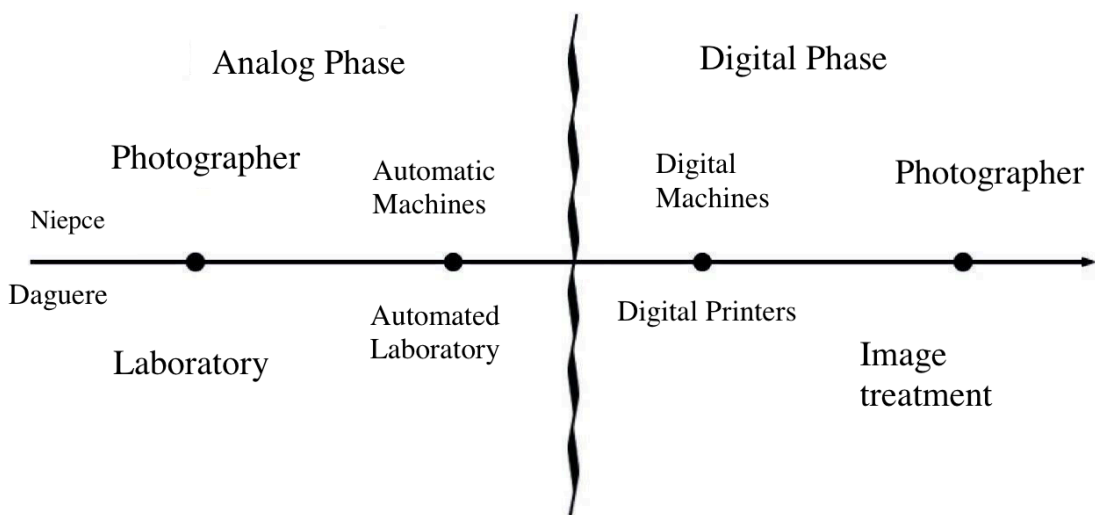


Figure 2: Evolution of Photography.

Source: Grupo Luz course handout (Luz; Luz, 2014).

power of the “real” printed image. The triad of democratization, speed and credibility of information was only possible through the integration of these two languages, textual and photographic imagery. Therefore, hybridity is present here as an “artifact and practice”, since everything that is printed is a portrait of the language adopted in a society.

3rd) Situating the vertiginous rise of Photography on the stage of mass communication, which took place from the Industrial Revolution onwards, the third hybrid moment is the one in which photography changes from a great donor to a potent assimilator: somewhat anthropophagic, eating and absorbing everything that it does not need. is common to its nature, a fact that occurred in the mid-twentieth century, after the post-war period. This characteristic began to be outlined in 1920, from the “analog collages” present in Cubist Photomontages, effectively practiced by the Russian Dadaists and Constructivist, who supposed they were absorbing it, but, in fact, they were being absorbed.

Then, the study of the power of the image is deepened, its research, reflection and experiment, which culminate in its own transformation. From this, a new photograph emerged that overlapped the vehicle itself, to the extent of its supremacy, constituting a phenomenon of a psychic-collective nature associated with the image.

On the other hand, the speed imposed in this segment and in the others generated the need for a device in communication of the same order, thus emerging Digital Photography. This incorporation of the numerical device to the production of images, replacing the chemical, promotes the transmutation of photography. This is a third moment of hybridization present in the history of photography, as it is a hybrid process of capturing and transforming an

image that is substantially different from Camera Obscura and Analog Photography. Here, the temporal imperatives of the new image mentioned above acquire a profile of a modern society; informatics and new communication technologies permeate this process and are elements of composition of this world. A new era opens. Photography, at this moment, is changeable, recyclable, transterritorial, in short, it “swallowed” everything and its own original support and is now dictating its new supports, in an evolutionary chain that excludes even man himself, who is no longer able to retain it in a single universal context.

4th) Finally, this is the last hybrid factor detectable from a macro view of the history of photography, but equally expressive. It refers to the detachment of the photographic image from two-dimensional planes to three-dimensional and fourth-dimensional planes.

This is due to a need to “touch” (supreme approximation) and also to materialize the imaginary. This need is not a natural fact, or an inevitable consequence of progress, but a construction that responds to a specific socio-political-economic project.

To this end, man creates the virtual image that becomes his partner, and in this creation, he also recreates himself. The body of this contemporary man will increasingly dispense with organic and material supports to cross times and spaces without restrictions. He will be computer compatible, a “post-organic” man.

The brain generates its own representation of the world, which is a form of virtual reality. Theoretical divergences arise at this point, of visions regarding the possible consequences of this new reality, of this generic self, in which historical time disappears in this new “real time”, which is a succession of instants without memory, which are lost in their own dispersion. In this world where everything

is confused with the image itself, there is no more room for interpretation: it is man who becomes the virtual reality of the machine in a critique of post-modernity.

The Hybrid Image is an expression that gained prominence and use since the exhibition “Passages de l’Image!”, presented in 1990, in Paris, at the Center George Pompidou. Laurentiz (2004, p.3) talks about new forms of representation, defined as hybrid images.

Operation

Hybrid photography is a digital image that is constructed based on the domains of pre-production, capture technique and the fusion of image post-production. The synergy between the three phases (Pre-production, Production and Post-production) generates a new connotation to the image, which, therefore, is not as realistic as most traditional photographs. It is a new imagery interpretation of fact and truth.

In other words, digital photographic images are technically treated to more intensely achieve their purpose of communication and other purposes, generating expected contents to produce certain sense effects in the viewer.

It is worth mentioning that the hybrid images have a prominent argumentation function, above all, from the pathetic angle, that is, from the emotional angle, in which one seeks to persuade the spectator through the affective side, touching his “heart”.

The term pathetic as used here comes from the Greek pathos, with the approximate meaning of passion. The term was widely used by Greek rhetoric – a systematic set of persuasion techniques through speech and dating back to the 5th century BC. – to refer to one of the three forms of persuasion. Rhetoric – when teaching to persuade – taught that people could be convinced by a logical persuasion of rational content and that it is directed to the mind; by an aesthetic

persuasion, aimed at taste, and finally by a pathetic persuasion, aimed at the heart. It is true that the three forms of persuasion are mixed in the same message, with, in each case, those that are protagonists and those that are nothing more than supporting characters.

METHODOLOGICAL DELINEATION

Initially, the present study made use of bibliographical research, through the reading of books, scientific articles and academic journals, mainly with the purpose of carrying out a bibliographical review regarding the critical fortune on the use of the hybrid image in environmental education. Likewise, bibliographical research was used to raise the main topics that are worked on in environmental education and about which hybrid images were sought for illustration.

In addition to bibliographical and documentary research, with the future objective of producing a portfolio of hybrid images for educational use, the following technical procedures were developed and carried out:

- In the pre-production area: guidelines for the construction of images, with discussion and interpretation of the photographic techniques employed. Search for elements and scenarios that were part of the final images;
- In the universe of production: the practical execution of the photographs captured in the studio under controlled conditions (laboratory), photographs in external locations and the use of an existing image bank;
- In the field of post-production: creating illustrations for use in overlay, modeling realistic photos using 3D software, managing images using Lightroom software, and processing images using Photoshop software.

With a view to conceptually supporting research with photography, signs and image, concepts and assumptions of general semiotics and visual semiotics were used.

RESULTS AND DISCUSSIONS

To illustrate this point, comments are presented on a hybrid image (figure 3), which draws the attention of observers in a special and lasting way, causing a great impact, as a result of which hybrid images can constitute an excellent means for education. environment, both for teachers and students.

The affective (pathetic) component is highly developed, seeking to move viewers with the image of the monkey on fire, with its paws moving, trying to escape from what seems to have no escape.

The choice of the monkey is not random for this campaign, as it is one of the animals that are most historically present in the Brazilian cultural and popular imagination, whether through folklore stories, popular anecdotes or even jokes. The fact is that Brazilian culture values monkeys for their intelligence, cunning and grace. Everything favors a projection movement of man in relation to the ape, not to mention the evolutionary issues, which bring the two species closer together. The result is that there is a marked tendency for man to sympathize with the pain of the monkey more than that of other wild animals.

One cannot forget that the pathetic element is also mixed with the rational; however, the former prevails. It is a forest monkey, whose image translates well the idea that, in



Figure 3: Robin Wood Campaign Image.

Source: Advertising agency Grabarz & Partner - Robin Wood, 2016. Inar Moreira Gomes.

nature, disasters do not only affect species or individual aspects. On the contrary, when a segment of the environment is at risk, the entire environment is also threatened.

In the details of the image, the figure of the man who destabilizes the natural environment appears occupying the body of the nature-monkey, with his heavy machines, carrying out an irrational deforestation with disastrous consequences.

When working with a hybrid image like the one presented here and with the students' attention already captured by the power of the image, the teacher's attitude may be to try to awaken the following reflections in the students:

- the notion of the environment as a whole (the interdependence of animals, plants, watercourses, man, etc.);
- the fragility of the environment, which

can be destroyed by common acts, such as throwing a lit cigarette in an inappropriate place;

- the immense suffering caused to living beings when nature is destroyed;
- the difficulty of recovery from the environment when it is hit.

The hybrid image, through its high and sophisticated technology, manages to harmoniously mix the documentary with the imaginative, capturing the attention of the audience, which this way, can give free rein to its imagination, remaining, however, with its feet planted on the ground of the reality. This is, by the way, a special form of realism to which the hybrid image very singularly gives rise.

Here is a new hybrid image, now produced by one of the authors of this article and entitled "The Burn".



Figure 4: Hybrid image entitled "The Burn".

Source: Own author (2019).

Again, we are facing an undisguised potential for emotion that the hybrid image can provoke in the spectator, in which the teacher must have already created prior expectations through the description of the activity they will perform. Likewise, a playful game is established between reality and dream, which gives the composition a slightly ghostly tone. It is that kind of special realism typical of hybrid images that was already mentioned.

One can try to characterize such a real effect as if it were that of a science fiction film, which, although being unreal, produces effects with a sense of reality.

Anyway, everything, therefore, acts in the sense of acting in the pathetic dimension of the receiver, which, in this case, will be the students:

- The ghostly tone of the atmosphere;
- The physical similarity between cigarettes and trees;
- The plastic sign represented by red, connoting a hellish and absolutely unhealthy space for humans;
- The similarities to war photos.

In opportunities where pathos is associated

with rationality, then, the impact becomes much greater. It is a disturbance that hybrid images especially can cause due to the particular way in which they deal with iconic signs, that is, with images,

Indeed, the cigarette butt – naturally so small – acquires the size corresponding to that of a tree, in a visual metaphor of its destructive power. On the other hand, it is possible to think of the trees that have decreased in size, in a show of their fragility.

In any case, from the consortium between *pathos* (emotion) and *logos* (reason) comes the reasoning that a minimal and routine act (putting out a cigarette without due care) can result in an ecological disaster of catastrophic and unimaginable proportions. Or, in other words, hell is closer than you think.

The atmosphere of desolation, destruction and commotion created by the hybrid images capture the students' attention, cultivating the ground for more systematic, didactic and methodical reflections by the teacher.

For a better understanding, one of the steps in the creation of the hybrid image commented above is presented:

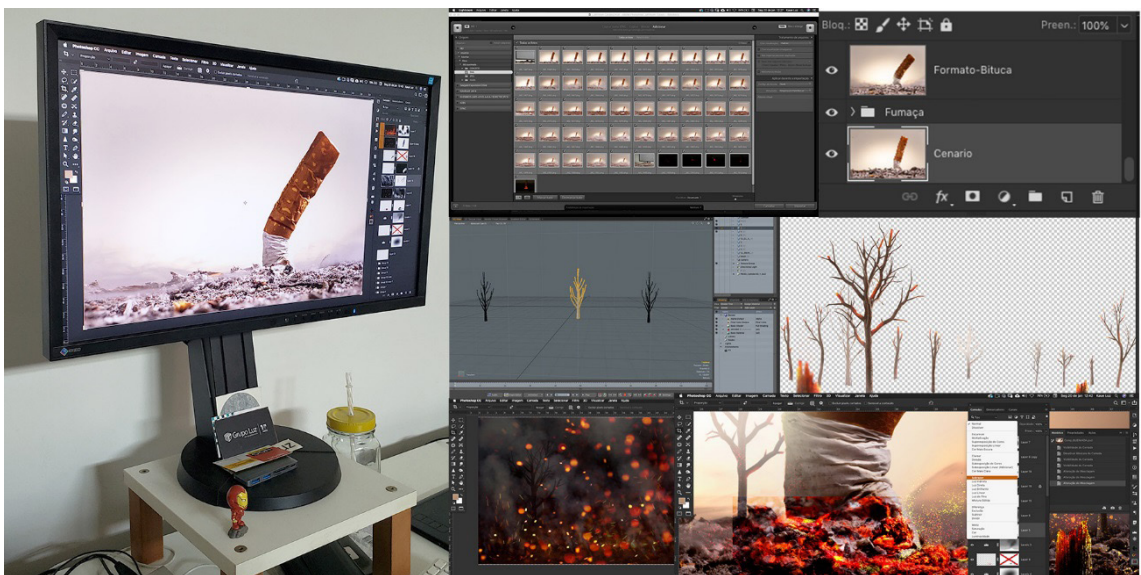


Figure 5: Burn image post-production process.

Source: Own author (2019).

CONCLUSIONS

Hybrid images are endowed with a specific visual language that can be used in a particular way in order to capture, with outstanding efficiency, the observer's attention, making him understand the environment and its problems in a concrete and palpable way, using references to reality and fiction. They have a very efficient synthetic communicative potential (they transmit a lot of information with a minimum of elements), which makes use of pathetic, rational and aesthetic elements, which, together, lead the observers to adhere to the ideas that are presented to them and to the solutions that are presented to them. are proposals.

For this reason, hybrid images have a wide potential use in formal and informal education, at all levels of education, especially in primary and secondary education. Attracted by hybrid images, students pay attention to what the images say and what their teachers say about such images.

In addition, hybrid images propose a new way of thinking about the construction of communication, specifically educational communication, with the generation of images of high aesthetic expressiveness and impactful visual content, which, in this article, were the subject of reflection, considering in its school use for teaching issues related to the environment and sustainability. This imagery pedagogical tool can be applied at different educational levels in order to facilitate the discussion and understanding of some environmental phenomena.

This communication proposal presents the possibility of thinking and building images in an educational plan, from the didactic material to the conclusion of a presentation. Creating hybrid images is not limited to the environmental sphere and the need for awareness and sustainable development. Obviously this process can be used by any

area of visual communication.

It is noteworthy that developing hybrid images without understanding some technical conceptions of communication can make the process incommunicable or full of noise. This way, the hybrid images are designed based on a specific methodology, mainly in semiology and photographic paradigms, created by professionals.

When an image is created respecting the pre-production, production and post-production paradigms, the visual construction process becomes more coherent and the photo more "realistic". If, from the photographic paradigms, the image manages to bring a "realistic" semiotics, the possibility of understanding and persuasion tends to become greater and greater.

The use of hybrid images can become an effective instrument for teachers who work with environmental education in their pedagogical practice. According to what was expressed in the previous topics, this imagery language manages to vigorously combine rational and pathetic elements, in addition to mixing elements of reality and fantasy, which create effects of meaning, acting in an impactful and continuous way on perception and student sensitivity.

Finally, it must be noted that the proposed hybrid figures provide teachers with the possibility of developing with their students critical-emancipatory environmental education, which seeks to understand the current environmental scenario as a negotiation of political and economic power relations, which needs to be transformed.

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