

3. ALTERNATIVE FORMS OF ARTISTIC RESEARCH IN THE ACADEMIC CONTEXT

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Abstract: *The distinction between different forms of research is a subject of interest for a large part of theoreticians, philosophers, professors in universities, but also for contemporary artists. The current text proposes an alternative approach to artistic research, resulting from working with technology, associated with pictorial practice. The image, understood as the main resource of the visual medium, became in the case of the present research, a tool of analysis for the 3A application, a software developed (in the academic research context of the National University of the Arts in Bucharest) to issue, structure and elaborate a series of objective technical parameters in image classification. The present paper describes a way of assimilating the results of the research carried out in an academic context in artistic practice, the works produces being the consequence of the experience of working with the 3A application software and the way in which the technology had an impact on the personal artistic discourse.*

Key words: *artistic research, image, technology, artistic practice, academic education*

1. Introduction - Artistic research in an interdisciplinary context

The distinction between different forms of research is a subject of interest for a large part of theoreticians, philosophers, professors in universities, but also for contemporary artists. The current text proposes an alternative approach to artistic research, resulting from working with technology, associated with pictorial practice. The image, understood as the main resource of the visual medium, became in the case of the present research, a tool of analysis for the 3A application, a software developed (in the academic research context of the National University of the Arts in Bucharest) to issue, structure and elaborate a series of objective technical parameters in image classification.

The present paper describes a way of assimilating the results of the research carried out in an academic context in artistic practice, the works produces being the consequence of the experience of working with the 3A application software and the way in which the technology had an impact on the personal artistic discourse. This type of research is determined by two essential dimensions. On the one hand, is the investigation of aspects of visual construction and composition is delimited, on the other hand, the evaluation, analysis of distortions arising through the digital reproduction of works of art that are part of the used image database.

The reason why I dwelled on this historical period, is the fact that the 60s constituted for artistic production a period of consolidation of new social, cultural and artistic paradigms that forever changed the subsequent history of art. In addition to the rise and affirmation of conceptualism in art during this period, the recognition of photography as an artistic medium would lay the foundations for the distinction between traditional and new artistic mediums²²⁰.

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²²⁰ Edward Lucie Smith, *Movements in Art Since 1945*, Thames and Hudson, London, 2020, pp. 78-89

² David A. Petit, *Art Education, The Object as Subject in 20th Century American Art*, Published by: National Art Education Association, Vol. 43, No. 2, 1990, p. 36-41

2. Discussions

The research approach on the image started from the hypothesis that image archives constitute a main source in the elaboration of studies on previous artistic productions. There are situations where image databases are perceived and used as the image itself and not as a string or stack of multiple images regardless of their distinct meanings and semantics. Although the textual dimension of the research is made up of the result of the association of several directions of study: the theoretical one, the working one with the 3A application and the practical one, they work simultaneously and support the research framework as a whole²²¹.

The second part of the research process involved the actual analysis of the images, images that were selected and systematically organized in two registers, that of the relevant examples from Pop-Art painting, respectively that of the artistic photographs from the second half of the 20th century. The image database developed in this way is made up of 1894 images, the archive itself, which is a study vehicle for the digital image archive and effectively involves the structuring of sub-archives specific to the study interests, starting from the initial and reconfiguring it in relation to the analyzes developed along the way. In this sense, it can be said that “in fact, the image database is an archive of archives”.

Due to the need to frame the analyzes performed on the image archive thus obtained, my approach aimed to cover as many dimensions of the image study as possible. In this sense, the problematization of the different relationships between the image databases that are the subject of the research, brings in the form of a hybrid of ideas and hypotheses to the same place, theories and theoretical interpretations coming from different perspectives and periods. Concerned with the models and methods of working with the archive and the image, especially in the case of the significant artistic practices of the two analyzed mediums from the second half of the 20th century, namely Pop-Art painting and artistic photography, an important component of my approach was the realization of a series of practical works, in which the principles of developing and signifying the image, according to the two mediums specified previously, underpin their own artistic practice.

In this context, we would consider it necessary to describe the historical, social, cultural, political and economic condition of the second half of the last century, in order to build the framework for a deeper understanding on the one hand, as it was born and the impact that Pop art had in the era, on the other hand, of the overwhelming role that artistic photography replaced in the same period. Although it emerged in the mid-1950s in Britain and the late 1950s in America, Pop art reached its peak in the 1960s. Beginning as a movement of revolt against dominant approaches to art and culture, but also traditional views about what art should represent, the young artists of the time felt that what they were taught in schools and what they saw in museums had nothing to do with their lives or the things they saw around them in every day²²². Instead, they turned to sources for their artistic practices such as Hollywood films, advertising, product packaging, pop music, and comic books as the source of the imaginary. In 1957, Pop artist Richard Hamilton

²²¹ Lev Manovich, *The Language of New Media*, MIT Press: Boston, 1999, p. 21-33

²²² Stephen Bann, *Pop Art and Genre*, *New Literary History*, Vol. 24, No. 1, Culture and Everyday Life (Winter, 1993), pp. 115-124, Published By: The Johns Hopkins University Press, <https://www.jstor.org/stable/469274>

listed the “characteristics of Pop Art” in a letter to his architect friends Peter and Alison Smithson, noting that “Pop-Art is: popular (designed for a mass audience), transient (term solution short), expandable (easy to forget), low cost, mass produced, young (aimed at young people), witty, sexy, quirky, glamorous, a big deal”²²³.

Although the artists of the two dimensions of Pop art were inspired by similar subjects, British Pop is often seen as distinct from American Pop. Early British Pop Art was fueled by American popular culture viewed from afar, while American artists were inspired by what they saw and worked with while living within that culture²²⁴. In the United States, the style proposed by pop productions represented a return to representational art (art that depicted the visual world in a way that made it recognizable), to the use of framing and rigid forms along with the waning of interest in pictorial abstract expressionism. By using generic, banal imagery, Pop artists also wanted to move away from the emphasis on personal feelings and personal symbolism that characterized Abstract Expressionism. During this time, in Britain, the movement took a somewhat more academic approach. While he used irony and parody, he focused more on what the American popular imaginary represented and its power in manipulating people's lifestyles. The art group established in 1950, The Independent Group (IG), has been considered the forerunner of the British Pop Art movement²²⁵.

The creation of free universities represented a major process towards a change in the perception of reality, laying, among other things, the foundations of the new radicalism of the left, and facilitating the transition from the outside to the inside brought to the fore a method of self-examination and an inner consciousness that they made the estranged man of the 60s aware of the meaning of the famous statement “one man, one soul”²²⁶. The intentional mechanical reproduction of goods and, in a certain form, feelings, emotions, contributed to a kind of process of dehumanization of society. The youth's call for change was the most effective “wake-up call” for an inert generation of visual consumers.

The counter-culture thus meant a social revolution that determined a new way of thinking about reality, a new way of communicating with people, a new way of self-perception and self-awareness. As Roszak noted, the counter-culture assumed “a youthful opposition, a fresh and lively experience, a cultural revolution that enlightened the outdated and indoctrinated technocratic regime”⁸. Without such fresh experience, self-relevance would not have found expression in a world dominated by conformity and depersonalization. What took place in the 1960s was a rejection of Western rationality and a reliance on genuine emotions, intuitions, feelings. Young Americans began to say “I feel” rather than “I think”, creating an alternative to the dictation formula: “I think, therefore I am” (“Cogito, ergo sum”).

Further, my research involves presenting the concepts, principles and methodology of working with the 3A application, as well as the types of reports studied. In this sense, the personal artistic project was carried out in the context of the practical research resulting from the logic of the image theory arguments

²²³ Bradford R. Collins, *Pop Art*, Phaidon, 2012, pp. 57-60

²²⁴ Edward Lucie-Smith, *Movements in Art Since 1945*, Thames and Hudson, London, 2020, pp. 78-89

²²⁵ www.tate.org.uk/art/art-terms/p/pop-art.

²²⁶ Theodor Roszak, *The Making of a Counter Culture: Reflections on the Technocratic Society and Its Youthful Opposition*, 1969

obtained by working with the image archive and the 3A application, a fact that I seek to resume through a comparative analysis exercise similar to the applied to the whole database of images, later oriented on own works. Through this, I seek to highlight the significant influence, contribution and artistic potential that working with technology (3A application software) has in contemporary art practice. I find this type of research organization cursive and significant for understanding both overall and detailed current art research.

The artistic challenge consisted of internalizing the results of the elaborated analysis and constructing a series of personal works, which included identifying and essentializing the thinking of pop artists, as well as their medial preference for experiment, collage and assemblage. The artists whose works are the subject of the image database worked during the rise and development of the Pop movement, but more than that, they have practices that created a common context for the pictorial and photographic medium. The selection of artists we reviewed includes William Egglestone, Lee Friedlander, Roy Lichtenstein, Stephen Shore, Jasper Johns, Frank Stella, Keith Haring, Allan D'arcangelo, Robert Indiana, Eduardo Paolozzi, Andy Warhol, Robert Rauschenberg, Tom Wesselmann, Martin Parr.

Among the most relevant and significant concepts with a constant presence in the elaboration of the research, is that of the archive, which I decided to study from the perspective of the digital medium, a fact for which the texts of Lev Manovich and his theories had a considerable contribution, and understanding the archive in the context of the circulation of images presupposed the formulation of ideas around its cultural and artistic importance, focusing especially on the definitions of Boris Groys.

3. Results

An essential feature of the way the 3A application software works is that distortions arising from the reproduction of images by photography or scanning, and which are part of the image database, are reduced, or even annihilated. The entire process of working with the image database and the application itself was demonstrated, presented and argued extensively in the doctoral thesis entitled “Comparative compositional principles between pop-art painting and artistic photography of the second half of the 20th century”, research which was published for general public reading under the title “Source Image”, Ed. Pim, 2023.

Focusing on the main interest of the research, it consists in establishing the quantitative ratios (color ratios, gray ratios, black and white ratios) in the imaging production of pop art, artistic photography in the second half of the 20th century, as well as of the discursive tools used. This analysis aims to demonstrate the ways of expression of the specific artistic language and assumed the composition of three large clusters. The first of these is the cluster of 1175/1894 images, open dominant (represents more than 60% of the presence of white pixels in the entire database), the cluster of 433/1894 images, with dark dominant (represents more than 22% of the area covered by black pixels), and the third cluster is made up of 286/1894 images and represents a balanced ratio of over 15%.

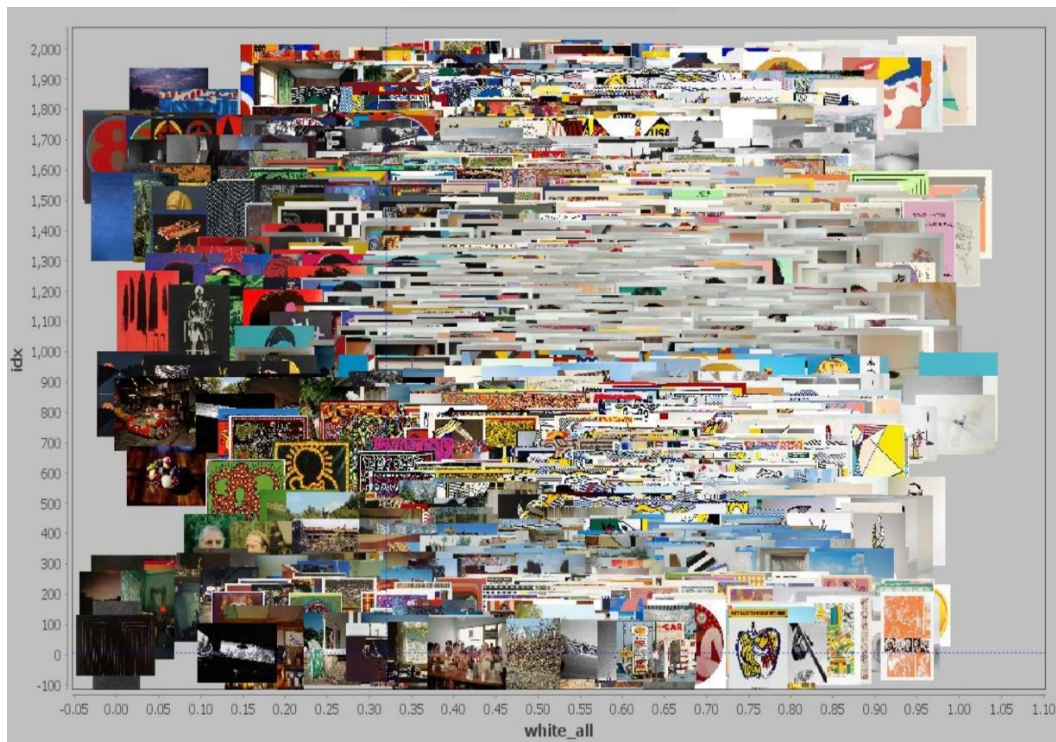


Image obtained using the 3A software, by applying the Ratios Scatter Plots filter
White/ all/ 2 levels (1894 images)

Part of the work methodology involved organizing the quantitative reports resulting from working with the 3A application, subsequently formulating the conclusions of these investigations. Thus, an important working preference represented the chromatic ordering according to the chosen expressive direction and the use of chromatic contrasts as a possibility of control over the chords between the tones, but also outside the complementary harmonic norm. This stage is based on the actual analysis of the images, images that have been selected and systematically organized on two registers, that of the relevant examples of Pop-Art painting, respectively that of artistic photographs from the second half of the 20th century.

The analysis process started from tracking the variables resulting from the ratio of white/black/2 levels since this is the ratio that provides the conclusions most easily identified in the associations within the clusters. Following this analysis, a valid conclusion can be reaffirmed for all analyzes performed on all 3 value levels 2, 4 and 6, which demonstrates and argues that the database of 1894 images is dominated by light tones, since both the selected images from Pop-Art painting and those from artistic photography from the second half of the 20th century show relevant similarities on an expressive and grammatical level. The statistics of the presence of the 2 grays in the images from the database of 1894 images are presented in the developed tables, from which we can draw the following conclusions:

- a) Both grays are found in a balanced proportion (over 60%) both in the 1044 images of the Pop-Art painting database and, by comparison with the 850 artistic photographs from the second half of the 20th century.
- b) A more consistent presence of gray amounts² can be noted, a fact that confirms and justifies the composition of the 3 clusters that take into account the ratio white/black/2 levels, since the largest cluster is the one in which white dominates in a significant proportion of over 60% (1175/1894 images).

Applying the same rules regarding the value of quantitative ratios (<0.1; <0.2; <0.3; <0.4...) to white/all/4-level and black/all/4-level ratios, I intend to identify

some expression variables correlated with those of gray1/all and gray2/all ratios. In the case of the analysis of the values of the 4 ratios of dividing the image into 4 tonal levels, we drew the following conclusions. In artistic photography from the second half of the 20th century, we identify larger amounts of grays than in Pop-Art painting (at values between 0.1 and 0.5 of the ratios in the tables, which also generates a more stable balance of grays in those images. Between the ratios white/all/4 levels and black/all/4 levels, we find a greater presence of light tones (white) at a percentage level than that of black, illustrative of the 2 tonal steps analysis. In the case of the ratios white/ all/ 4 levels and black/ all/ 4 levels we find a higher percentage in the case of the database of 1044 images from the Pop-Art painting, than in the case of the 850 images from the 20th century photography, a fact that underlines an inverse situation with the percentage-quantitative situation of the two grays.

Thanks to these observations, it becomes possible to question the variables of proportion between the two grays, for which the analyzes demonstrate values of the ratio that generate clusters of 97% of the images, up to clusters in which 19.7% and 9.5% are present, respectively. Similarities were identified in the two archives, the most relevant results being those that indicate the percentage values of each cluster depending on the selected gray1/grey2 ratio and the database from which the images come. It is notable that in the analyzed columns we find significantly higher values in the case of the database of 1044 images from the Pop-Art painting. Thus, we can conclude with the idea that the balance at the level of the two grays resulting from the 4-level image reduction is associated with an equivalent division of the two tonal values at a division on 2 value steps, since the balance of grays in the images is also contained in some balance between white and black.

Following the formulated analyses, it can be observed that the values of the variables that dominate the surface in a proportion of more than 60% are open tones at a 2-level black/white ratio performed on the entire database of 1894 images. So, both in the case of Pop-Art painting and photography from the second half of the 20th century, there are similarities and constants of expression in the construction of the compositional space, since in the analyzed visual contexts, the image is delimited by registers, often symmetrical, be they vertical or horizontal, and the relationship of medians, vertical and horizontal axes with sections of thirds or quarters of the frame are the basis of the geometric structure of the image.

Following the analysis, I was able to state the following observations: in both cases, both Pop-Art painting and artistic photographs made in the second part of the 20th century are dominated by white. The black/all and white/all/4 and 6 level ratios, illustrated by the presence of gradual amounts of black or white pixels in the images, from values of 10% to 100%, indicate that the analyzed images tend to be dominated by white, since their number increases when the scale of amounts of white or black moves towards lighter values and decreases when it moves towards more black.

Having as a starting point the similarities between the achieved black and white ratios, we were able to identify the evolution of the amounts of all white and all black. The examples used demonstrate balanced relationships between the analyzed grammatical categories, confirming the analysis model used in this stage of the research. The group of 1894 images that was subjected to quantitative analysis is dominated by white and gray 2 (intermediate gray), resulting in a balanced ratio,

both in Pop-Art painting and in artistic photography from the second half of the 20th century.



Black/White ratio > 0.5 = 1632/1894 images (2-level reduction, cluster 18/1632 images)

Once the three clusters of images were created, the questioning of the quantitative constants involved following the syntactic parameters of their organization, both in the case of reducing the image to 4 and 6 levels, as well as in the case of the analysis of the geometric structures of the images in the database. Due to the fact that parts of the analysis of the 3 groups of images were used and related to the whole analysis of geometric constants, at this stage I will detail the investigation of a cluster derived from the one of 1175/1894 images (with open dominant), which represents more than 60% from database images.

Derived from it is the cluster 641/1894 images, since it demonstrates in a considerable proportion syntactic parameters coming mostly from the analysis of the grammatical constants of Pop-Art painting, but also from the artistic photography of the second half of the 20th century. Concluding on this stage of the research, the use of musical ratios in the elaboration of visual compositions made both in the pictorial and in the photographic medium, specific to the second half of the 20th century, demonstrates a constant concern of the artists for the balance and premeditation of the images.

The working method used in the elaboration of this research meant for me to acquire in my artistic practice, the operating principles of the 3A application. In this vein, following the construction of the image database, the selection of relevant images and practices for my research, but also after performing related analyzes such as those related to the reduction of images to 2, 4 or 6 levels, the structure constants geometric and expressive or chromatic, I tried to take the principles of image analysis and recontextualize them in my practice.

Since the researched period is that of Pop Art, the initial stage of building my practical projects consisted in identifying and essentializing the thinking of Pop artists in their preference for experiment, collage and assemblages, which I thought could be capitalized in the works mine, through an medium analysis. Although painting is the basis of my practical concerns, in these series of works I have integrated materials, textures, surfaces, sometimes objects that expand my artistic approach, but which are also a reference to the appropriation of Pop-Art practices.

Later, at the level of conceptualizing the content of the constructed images, I worked in an experimental way with chromatic relations, exploring the expressive potential of saturated colors, but also of their meanings. An example of this is the series of works with small dimensions, but which together cover a monumental

surface, creating over 600 such fragments. My intention was to transpose into an analogical, physical dimension, an essential element of the digital image, with which I worked during my doctoral research, namely that of pixels. For this reason, the pixels I make are representations of the main elements of visual language and references to essential geometric shapes.

4. Conclusions

From an medium perspective, there are a number of works that explore the language of abstract expressionism, questioning the representational condition of painting itself. But common to all constructed images are overlays, layering and overwriting techniques, as well as the intentionality to take over and transform the functions of the 3A software into my practice and artistic research approach.

The fact that it is common for the two media to communicate through the two-dimensionality of their surfaces or the rectangular delimitation of the supports, the analyzes through which the images from the database were subjected demonstrate that including at the formal, grammatical, compositional, chromatic and value levels, as well as conceptually, syntactically, of content, the achievements of the two mediums coincide, being able to state that the thinking of the painter meets that of the photographer in a considerable number of situations and on more levels than we initially anticipated.

Pop Art creates a zone of uncertainty between mass, mechanical and high art reproduction. The metaphor of repetition becomes a visual pretext, and the effects of Pop art consist in re-evaluating the role of art, due to the fact that there is no cultural hierarchy and that art can borrow notions from any source, which was otherwise one of the most influential characteristics of Pop art and moreover, the foundation of these series of works produced during the research period.

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