

***Professional Photographers of Instagram: The Meaning of Visual Communication
Through Modern Photography in Digital Society***

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Abstract

The purpose of this paper is to study the modern forms of visual communication of people, through Instagram. In order to study the way in which the visual message is transmitted between individuals, and then how this transmission of information affects its final content, determining the creation of aesthetic experience and perception in the individual, the study of online portraits was divided in three parts: a) the poses that prevail in online portraits, b) the structure of the photographic/cinematic frame, and finally, c) the color and color harmony of the portraits. To study this, two types of research were conducted. First of all, primary data were collected regarding the most popular Instagram portrait photographers and their photographic portraits that received the most reactions with likes. Then, an experiment was conducted with participation of the students of a university department and the content included the most popular portraits, professional Instagram photographers and the official names of online photography and photography poses. The result of the experiment shows that, despite the fact that the portraits of each photographer are separated and the participants are not informed about the owner of each photograph, the only four portraits supported by the same number of people, both for being worth a "like" and for the attractiveness of their colors, were four of the five portraits of the same photographer. This means that only one photographer managed to make a strong impression on the participants through his technique.

Keywords: Instagram, Visual Communication, Photographic Portraits, Color Harmony

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Introduction

In this day and age, observing the evolution of ideas, notions and practices that people in a social group develop is facilitated by the fact that a large amount of them occur on the worldwide web. The internet functions as a channel of expression, as well as an information source for the modern person. According to Solomon Negash (as he is quoted by Isaris & Pourkos, 2015), social reality and thus political and cultural structures are reflected through art and perhaps nowadays through the internet, too.

The social medium “Instagram” began its operations on 6th October 2010 with twenty-five thousand (25,000) users registering on the platform on its first day alone. Instagram is a free application where users post photographs and videos. Today it is available in twenty-five languages, has one billion users and more than five hundred million posts per day. Instagram is one of the most popular social media platforms worldwide, which, in addition to its nature as a medium that in turn is almost entirely based on visual content via pictures (either static or animated), renders its contribution to the way people are trained to interpret and react to pictures and their messages (Instagram - Instagram Data Center) particularly important.

The purpose of this research is to analyze the way that people receive and approach visual messages from the art of photography on Instagram. Therefore, the factors of these approaches have been determined as follows: a) poses online, b) the photographic/cinematic frame, and c) the color and color harmony of photographic portraits based on photos that have been posted on Instagram by professional photographers.

Literature review

Characteristics under study: poses, frame, color and color harmony

A portrait in photography refers to the depiction of facial characteristics - according to the definition of the term - and is perhaps the most popular type of photograph, especially the artistic type, either professional or amateur. The concept of the portrait suddenly came into people’s lives after the emergence of photography, since the resulting product was particularly realistic, cheaper and more time-efficient than the portrait painting that most people used until then. When taking a photograph two living factors are in the works: the model (the person in the photograph) and the photographer.

The most popular type of photograph that has emerged through the use of social media and has been mostly favored in them, is the “selfie” or “the portrait of the photographer” or “self-portrait”. It involves the photograph taken by the person depicted in it. In our day they are taken primarily with a mobile phone, which even led to the addition of the front camera, and more rarely with a camera, where the selfie originally started.

The selfie as a trend reached its peak in popularity through Instagram, while it was used on Facebook and Twitter as well. In 2013 the word “selfie” was declared “word of the year” by the Oxford English Dictionary, while in August 2014 the word was added in the well-known board game “Scrabble”. Despite the fact that the selfie does

not inherently pose a threat, like all new technology does not, the removal of the mediator in the photography procedure led to excessive practice of it. People often cannot comprehend they are being led to overuse, because their desire for approval outweighs the negatives, which causes the overexposure of one's life resulting in coming close to narcissism. In the US, pharmaceutical companies are already talking about "selfie syndrome" (Simos, 2017). Gradually the selfie started to evolve, resulting now to the birth of several derivative aspects and other recognizable poses in the online portrait, as will be demonstrated in detail below:

1. Telfie: Tongue-out + selfie. This type is a selfie in which the person takes a photo of themselves demonstrating their tongue.
2. The body as the limit and a platform: This refers to the case when the person risks their safety in order to successfully shift the focus to their impressive or extreme environment.
3. Reverse Photo-bombing: The term photo-bombing describes the interference of an element (person, animal or item) in the photo, which usually grants a comical effect to it and invades either in front of or behind the main element of the photo. In the case of Reverse Photo-bombing these roles are reversed, meaning the comical element that the person wants to capture is photographed after they have set themselves to the role of the unnecessary element so as to have a picture with it.
4. Foreground Photo-bombing: This type of Photo-bombing refers to the unnecessary element entering the frame of the photo in front of its main subject.
5. Background Photo-bombing: In this case the Photo-bombing happens behind the main subject of the photo.
6. Nelfie: Nails + Selfie. With this term we describe photos which depict the nails of a person and they are the ones having taken it.
7. Lefie: Legs + Selfie. This type refers to the capture of the person's legs by themselves.
8. Melfie: Mirror + Selfie. This is a photo of the reflection of a person in the mirror. The capturing of the photo happens by the depicted person themselves.
9. Followmeto: This kind of photo includes a person with their back to the camera and the photographer behind the lens holding their hand, with only the photographer's hand in frame.
10. Felfie: Funeral + Selfie. This term describes selfies during a funeral.
11. Duck selfie: This type of photo is a selfie where the person has the "duck face" expression, meaning puckering their lips to make a kissing face.
12. Delfie: Dog + Selfie. This is a selfie with a dog.
13. Deictic arms: In this case, the photo includes the person's arms at the bottom of the frame; they create mental arrows that point to the subject of the photo, meaning the person.
14. Composition: This type refers to a group selfie.
15. Athletic reflexivity: In this selfie the person's stance demonstrates their fitness and flexibility.
16. Alfie: Animal + Selfie. This term includes all selfies in which a person poses with an animal (Di Sia1; Forsh, 2015).

The concept of the frame originates from the cinema and refers to the projected rectangular frame of the cinematographer, which is determined by the proportions of width to length required for each scene, so as to achieve the ideal structure of visual information for the best delivery of meaning (Kalampakas & Kyriakoulakos, 2015).

us the types and compositions of the frames will be analyzed, in order for us to understand the reasoning behind the framing selections.

The kinds of frame can be categorized in seven general categories:

- i) Very general - From far away: This is a frame taken from a long distance whose goal is showing the place in its entirety, either that is natural or man-made, with people or without.
- ii) General - From far away: This type is more specific than the Very General one, as it is closer to the unfolding scene so that the people or items are visible.
- iii) Middle: In this case the entirety of the person/people or the item/items are in frame, though without outshining the information of the background.
- iv) American: This type originated from western films and frames people from the knees up to the head.
- v) Close-Up (Rapproché): This type frames the person from the middle of the chest so as to put emphasis on the face, but without missing hand movements and information from the background.
- vi) Close-Up (Gros Plan): This type frames from the head to the shoulders or is a close-up of another part of the body.
- vii) Big Close-Up (Très Gros Plan): This type focuses on a specific part of the face (i.e. framing the eye), the body or the item to make use of it (Kalampakas & Kyriakoulakos, 2015).

Considering that color is part of one of the five human senses caused by the sensitivity of our retinas to light, we can draw the conclusion that it is a subjective experience. The importance of color for the knowledge, traditions and experiences of a person can be easily noted based on the number of stimuli and information that the average person gets visually. In order to describe and recreate color, people coded and organized it mathematically, resulting in creating color models/systems and color spaces. Color models relate to precise descriptions of colors using natural illustrations and numerals in order to make their processing in digital media possible. As a result, all the pixels forming a picture were homogenized. The color spaces refer to a (sub)group of colors which can be described based on a color system. Every color space describes the environment of one, two or three dimensions whose components represent intensity values. In this environment colors are represented, classified, compared or calculated. These spaces are often represented visually in the form of solid objects like cones, cubes, etc. A color space is created from the colors of the (color) range that is described based on a color model. Color spaces are classified in five categories:

1. Grey: The colors in this category are a tone scale from black to white and are differentiated based on lightness. Their use is restricted to black-and-white depictions and printed works.
2. Device dependent: This category includes the color spaces RGB and CMYK and refers to colors which might appear different on different devices, like for example on screen and printed out.
3. Device independent: This category refers to the graticule of colors in order for them to appear the same on every device. The color space CIE LAB belongs in this category, as it's used primarily in order to compare or alter color.
4. Named color spaces: This category refers to colors which are perceived to have equal distance between them and are mentioned in a catalog without corresponding to

numeral values. Designers and graphic artists select colors from the sample book and printing companies recreate with precision the specifically chosen color.

5. HiFi: This category refers to spaces that are applied to newer printing procedures, where more than the four aforementioned inks are used, in order to extend the color range that can be used in a printing work. In these printing works, red, orange, green, blue, gold and silver inks are used. An example of this kind of color space is the hexachrome system PANTONE, which provides six inks (modified versions of CMYK inks and two new inks, orange and green) for the production of a broader color range.

Finally, color harmony is defined as the evaluation of the simultaneous effect of two or more colors, so that a “pleasant” result is produced, which demonstrates the subjectivity of the term (Sougioultzi as mentioned in the Lamprou, 2015). Despite the fact that the basic terms of color harmony were formulated by artists, from a scientific point of view and from the standpoint of modern color and light perception the color harmony theory dates back to Newton's era, who explored the color spectrum at the end of the 1660s (Gage as mentioned in Odabaşioğlu, & Olguntürk, 2015).

Methodology

In order to study the way in which the visual message is transmitted between individuals and then, how this transmission of information affects its final content, determining the creation of aesthetic experience and perception in the individual, three sectors of study of portraits of online photography were separated. These sectors concern: a) the poses that prevail in online portraits, b) the structure of the photographic/cinematic frame and finally, c) the color and color harmony of the portraits. To study this, two types of research were conducted. First of all, primary data were collected regarding the most popular Instagram portrait photographers and their photographic portraits that received the most reactions with likes. Then, an experiment was conducted, with participation of the students of a University department and the most popular portraits, professional Instagram photographers and the official names of online photography and photography poses as content.

The first research refers to the first hypothesis and is performed through the collection of primary data. During the conduct of the research, initially the professional union “Professional Photographers of America” (PPA) (<https://www.instagram.com/ourppa>) was selected, so that the ten most popular (based on followers) professional portrait photographers with a public account for the promotion of their works on Instagram were found. The collection of data was conducted in the time period 04/11/2018 to 11/11/2018. Photography studio owners that did not practice photography, people who did not mention they were professional photographers in their account bio and did not run a blog or site, and photographers that had posted less than 5 portraits among their 500 most recent posts on Instagram were rejected. Then, the 5 portraits with the most likes from each of these accounts were collected. Mass posts (Carousel), collages and cases of double posting were rejected. In the next stage, these portraits were downloaded via the page <http://insta-downloader.net/download> and then, the 10 most dominant colors were determined in HEX code as well as the percentage in which they appear in the photo, using the tool http://www.coolphptools.com/color_extract. In the next stage, the colors were converted from HEX to RGB through the page

design/hex-to-rgb/ and then were classified with the percentage in which they appear in the photo, in order to be visualized in the form of a doughnut chart. Afterwards, the equivalent procedure followed so as to create the same chart for the visualization of the percentage of appearance of every color among the most popular photographic portraits of each account. Finally, using the tool <https://color.adobe.com/create> a color harmony scheme for each portrait was created, in order to be able to place them in the correct type of color harmony, having the selection of color range of each photographer as a dependent variable.

Finally, an experiment was conducted using a questionnaire where students of the Digital and Communication Media department of the Ionian University participated. A set of photographs was provided to them and they had to match the frame or pose with the term that described it and then, state if they have ever used a frame or pose like that in their own photos. The participants were sixty-one (61), but the valid answers that the results and percentages were based on were thirty-eight (38).

Below follow the results of the first research.

In figure 1, the relation between the followers of the professional accounts taken into account and the amount of their posts. It is worth noting that a connection between these two variables does not seem to exist.

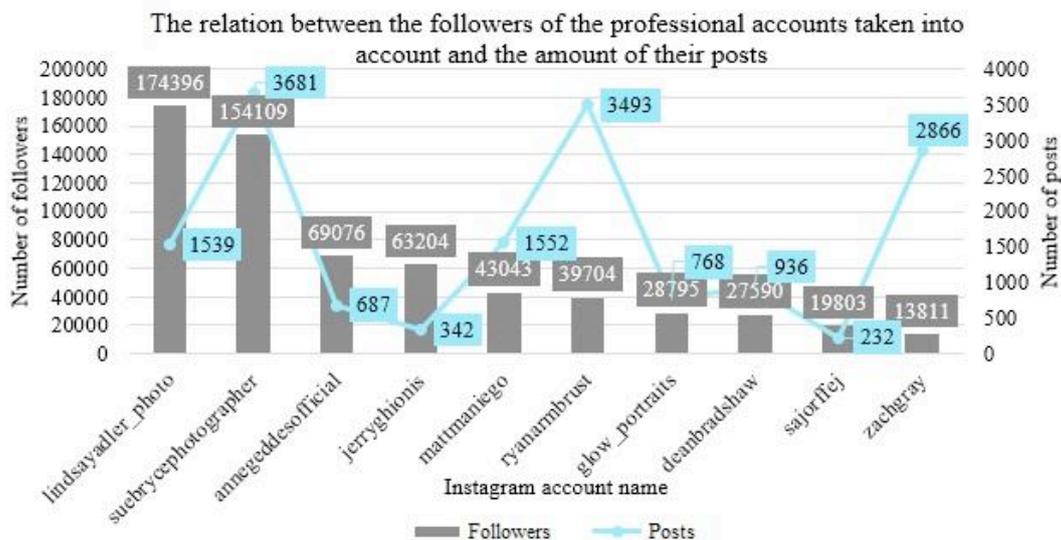


Figure 1: The relation between the followers of the professional accounts taken into account and the amount of their posts

In figure 2, we can see the analogy between the followers of each photographer and the percentage of use of a uniform color harmony scheme.

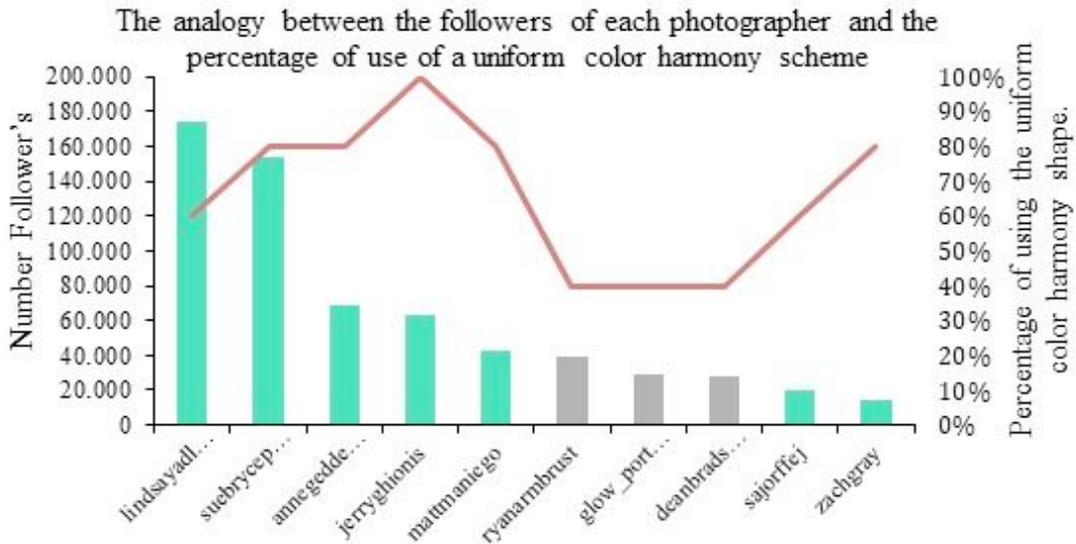


Figure 2: The analogy between the followers of each photographer and the percentage of use of a uniform color harmony scheme

The conclusion drawn from the first research is that seven out of ten photographers use a specific color harmony scheme in the majority of their most popular portraits of their accounts. Despite the fact that there does not seem to be a correlation between this percentage and the number of followers of an account, we can note a decline in followers where the percentage of a specific scheme is low, as is depicted in the following graph.

In Figure 3, we can see the percentage of use of each color harmony scheme among the 50 portraits.

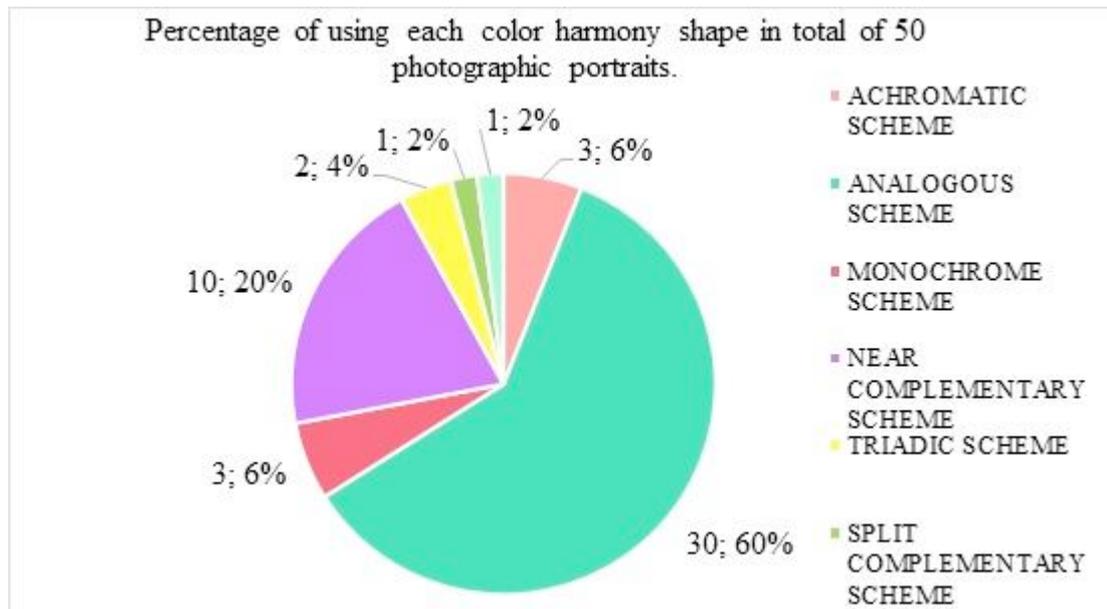


Figure 3: Percentage of using each color harmony shape in total of 50 photographic portraits

More specifically, the color harmony scheme that was most used among photographers is the analogous one, which appears in 30 out of the 50 portraits.

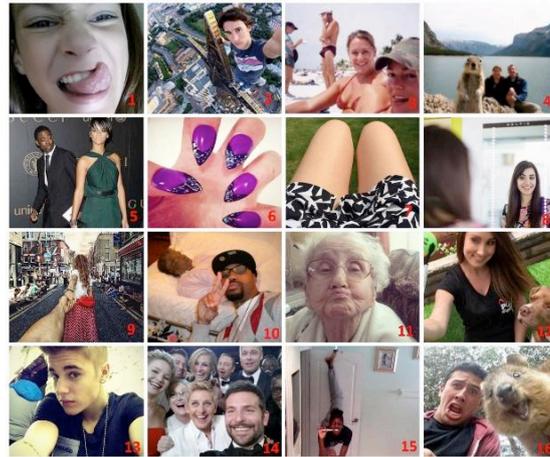
The analogous scheme refers to the use of neighboring colors in the color disk, which usually occupy one fourth of it, as we can see in Picture 4. The colors of this scheme cause little contrast and can be considered the same with the color combinations of nature. This is why it exudes feelings of comfort and harmony.



As for the questionnaire research, 66% of the participants were female, 31% were male and 3% stated "another/do not wish to specify". Out of the participants, 31% were born in 1998, 24% in 1997, 10% in 1999, while 16% were born before 1990. The majority of the participants (39%) were in the third semester of their studies, while 29% were in the fifth, 24% in the seventh and 8% in the ninth. During their high school studies most participants lived in Athens (16%) and in Kefalonia (16%), while the next highest percentage can be found in Piraeus (8%) and Thessaloniki and Patras follow with 5% each. Furthermore, all valid answers refer to people that had stated they filled the questionnaire with honesty. Finally, 63% of people that participated claimed their monthly personal income, regardless of origin, was in the range of 100€ to 680€.

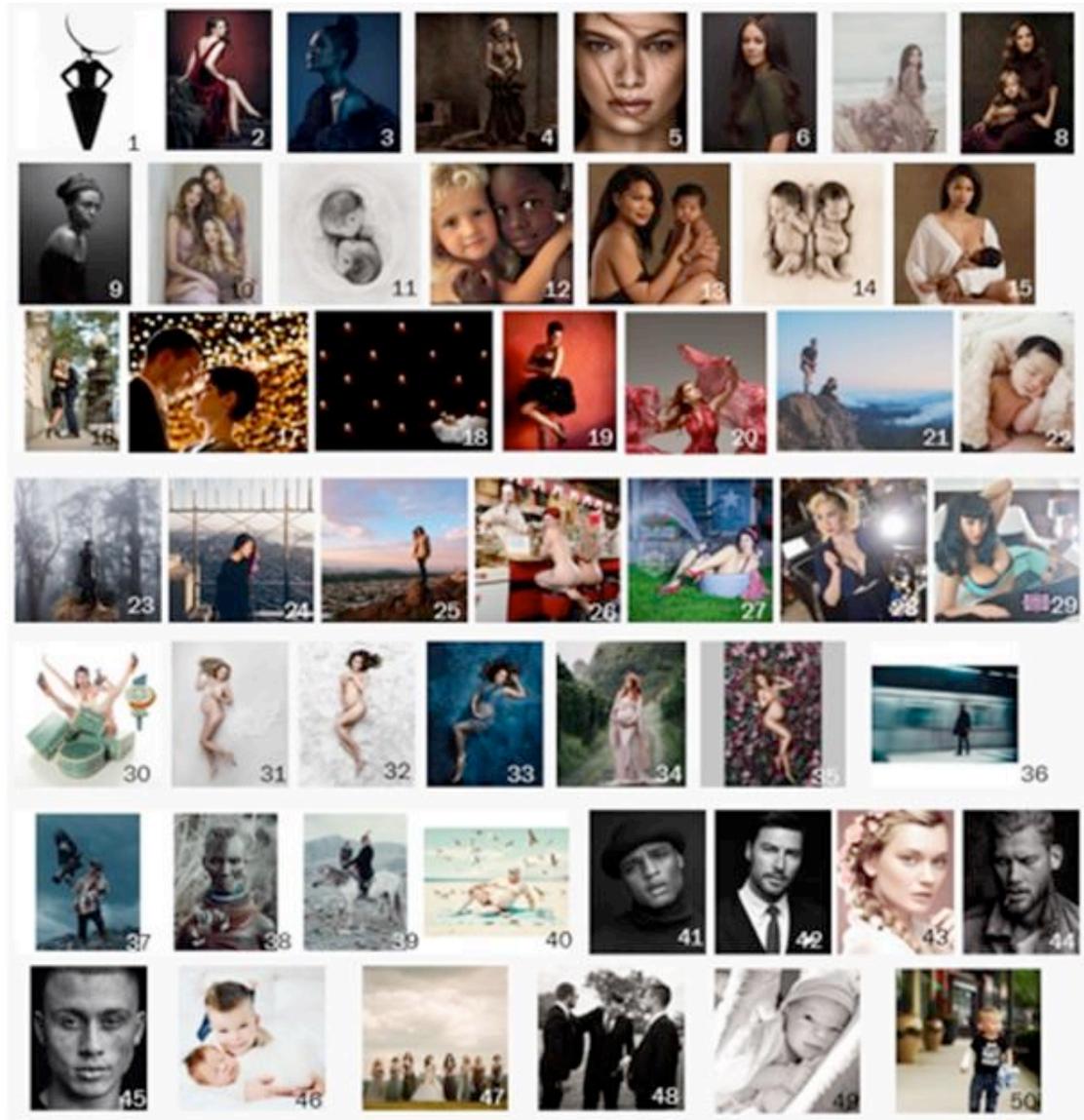
This research is divided in two thematic units. The first thematic unit referred to the investigation of possible use of modern poses and photographic/cinematic frames in the portraits of the chosen Instagram users, mostly without knowing their formal name.

From this research, we have drawn the conclusion that the majority of participants (79%) in the experiment recognized and had used the poses of the photographs through the respective photographs provided (Figure 5). This proves their familiarity with their visual recreation, while just 33% of answers about the formal names of poses were correct. Respectively in the case of photographic/cinematic frames, 71% of participants stated they know and have used these frames, while just 49% of them matched the photos (Figure 6) correctly to their formal names, even though the terms are quite self-descriptive.

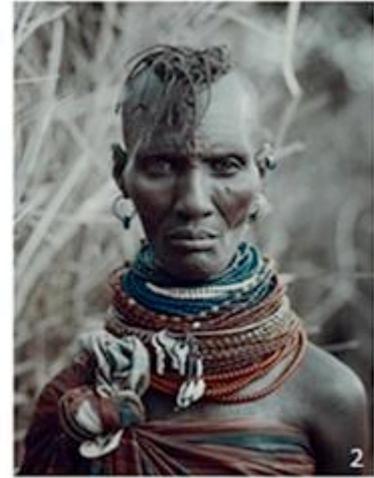


In the second and last part of the research, the participants were called to choose 10 out of the 50 most popular portraits by the most popular Instagram photographers, first based on whether they would react with a like on Instagram and then on whose colors they found most attractive. The result from this research was that only four of the portraits maintained the same amount of likes for both scenarios, which proves that 92% of portraits were not chosen by the same amount of people in both scenarios; therefore, we can confirm the lack of conscious attraction to color that results in users 'liking' the post. At this stage, it would be worth mentioning that all four portraits belonged to the same photographer, which the participants were not aware of, since the photos were set in random order in both scenarios.

Below you can see the 50 photographic portraits (Figure 7) and the four photographs that maintained the same amount of choices (Figure 8).



More specifically the first portrait was chosen in both scenarios by 15 people, the



second one by 10 people, the third one by 7 and the fourth one by 6.

Conclusion

According to the analysis of the colors of the fifty most popular photographic portraits of professional photographers on Instagram, it is concluded that Instagram users are attracted, in a percentage of 60%, to portraits that use an analogous scheme of color harmony. According to the scheme theory, the analogous scheme pertains to the use of neighboring colors, which derive from the blending of the previous color to the next one.

For example, every color that exists between blue and green contains in different percentages both colors in its composition. By mixing different hues of one color to the other, a new “relation” is created between each color, which tends to increase when these colors are combined together. It is usually three colors of the same intensity, which compose at least 1/4th of the color wheel. Despite the fact that the analogous scheme shows similarities with the monochromatic, it offers a wider range of hues from the latter, and as a result, it doesn't contain any distinctive contrasts. The specific scheme emits harmony and creates positive feelings to a person. Additionally, it belongs to the color schemes that prevail in nature, a fact that justifies the familiarity that the human eye feels.

It is important to mention the fact that, the next preferable color scheme that follows, at a percentage of 20%, is the almost complementary scheme of color harmony, which, in contrast with the analogous, is characterized by the existence of contrasts. Despite the fact that it might very easily induce, due to wrong use, unpleasant feelings, in this case, it resulted in being the second, in preference, color scheme. It refers to the coexistence of warm and cold colors, and more specifically, in the supplementation of the central color with the color that exists one position left or right from its supplementary one. According to Drew and Meyer (Raftopoulos, 2012; Lamprou, 2017), this specific combination is mismatched and is usually characterized by minimum or even no harmony at all, and is applied mostly to the asymmetric design, where the colors seem more vibrant.

In the third position of preference stand the monochromatic and achromatic schemes, with a percentage of 6% each. These two models, along with the analogous, don't contain any specific contrasts, and lead to a soothing, balanced and attractive, since it is clear and defined, result. At this point, it is important to mention that both these schemes can be implemented in black and white photographs. The achromatic scheme, on the one hand, because it refers to shadows and tints of white, black and grey, and on the other hand, the monochromatic, since it may contain a very dark hue (for example, a very dark blue or bordeaux) that the human eye might mistake it for black. In all of the fifty portraits, only three out of the ten color harmony schemes don't appear. The analogous and complementary, the double complementary, and the square scheme. A commonality of these three models is the use of hues of four colors, with one of them poised as the primary color so that it prevails in quantity and the other three function as ancillary.

Common difficulty in all three of these schemes is the prioritization of the percentage of the color use so that peace can be endured. In conclusion, the hypothesis that the most popular photographic portraits of the most famous professional photographers on Instagram use -intentionally or not- a specific/uniform color harmony scheme proves to be true, since 7 out of 10 adopt - in the majority of their most popular portraits - a uniform scheme of color harmony. The scheme, in 6 out of 7 cases, was the analogous scheme of color harmony. This proves that the human eye is attracted by color combinations that are most familiar to it, through its environment, and by extension its optical experience.

Additionally, by a psychological view, the selection of this particular model from the users, proves their preference in soothing, without too much intensity, color combinations, that exhume tranquility, harmony, and pleasure. Regarding the range of the hues, the colors that were used in the majority of the portraits pertain to dark and dull hues, reduce the contrast to each other, and according to the psychology of the colors, they create unpleasant feelings.

As a result, from this experiment, despite the fact that 79% of the participating students state that they use the poses of the online photographs that were shown above, only 33% of the whole seem to know the official name of these poses. This fact proves the hypothesis of the unawareness of the official name of the poses that are used by people in their photographs. Which means that these poses have accelerated their use solely through their optical representation, that unconsciously, is

recorded to the memory of these people and take shape by them the moment they are in similar condition.

In other words, the human eye can memorize the way other people pose in their portraits on the internet, and the moment of the shot of their own portrait, imitates the same pose, according to the sociocognitive theory, as Albert Bandura mentions, that defines an interactive relationship between the human and the society they are confined in, resulting in a mutual influence.

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Images 1, 2 & 3: Made on MS Excel

Image 4: Made on Adobe Color (<https://color.adobe.com/create/color-wheel>)

Image 5: Di Sia1, P. (2017). The "selfie" phenomenon between psychology, normality and extremisms, Free University of Bolzano-Bozen. [Online] Available at:
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Image 6: Kalampakas, V. & Kyriakoulakos, P., (2015). I Optikoakoustiki kataskevi. [Online] Available at: https://repository.kallipos.gr/pdfviewer/web/viewer.html?file=/bitstream/11419/5712/3/02_chapter_2.pdf [Recovery dates: 08/01/2020] &

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Image 7:

1-5: lindsayadler_photo (https://www.instagram.com/lindsayadler_photo/)
26-30: ryanarmbrust (<https://www.instagram.com/ryanarmbrust/>)
6-10: suebrycephotographer (<https://www.instagram.com/suebrycephotographer/>)
31-35: glow_portraits (https://www.instagram.com/glow_portraits/)
11-15: annegeddesofficial (<https://www.instagram.com/annegeddesofficial/>)
36-40: deanbradshaw (<https://www.instagram.com/deanbradshaw/>)
16-20: jerryghionis (<https://www.instagram.com/jerryghionis/>)
41-45: sajorffej (<https://www.instagram.com/sajorffej/>)
21-25: mattmaniego (<https://www.instagram.com/mattmaniego/>)
46-50: zachgray (<https://www.instagram.com/zachgray/>)

Image 8: Photoshoot by deanbradshaw. Available at: <https://www.instagram.com/deanbradshaw/>

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