

Visual Awareness and Other Consequences of Promoting Visual Literacy through Photography

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Abstract. This paper presents results of a research project aimed to understand and explore how photography develops visual literacy. Design students were asked to hand in visual reports after different activities such as watching audiovisual content. Assignments used were designed to develop visual literacy but research findings show that students also practiced a skill portrayed here as visual awareness, a perception mode in which a designer observes the world with different eyes, being able to identify and convey meaning to everyday objects using a photographic camera. This was visible thanks to both, the images generated as part of the class activities and group discussions based on handed in images by students in class. Finally, interviews were conducted to understand the students' process of developing images, and how the task at hand presented a different way to interact with the world visually. These findings frame an opportunity that explore other ways teachers can guide students to achieve visual awareness, visual literacy, and teaching tools to help them develop skills that can be associated with them.

Key words: visual literacy, visual thinking, visual awareness, design education

Visual Literacy has become a fundamental skill in the 21st century (NCREL & METIRI, 2003). Communication between clients, companies, and people, is now highly visual, thus every professional needs the skills in developing, interpreting and creating images. This scenario presents a double challenge to design students and visual communicators: not only do they need to develop this skill to perform according to the standards required in this century, but they must also perform at the expert level showing mastery of these skills. Nowadays, anyone can manipulate images thanks to computers and technological gadgets. Anyone with a smartphone can edit still and moving images, create shapes, alter color, manipulate sound, and a host of other things. A question that guided this research was how to promote developing skills associated to visual literacy through activities in the classroom. This research was planned, designed and implemented during a class, over the course of two years. As a result, several papers have been published about this research focusing on different aspects found while trying to develop visual literacy in design students as well as working with different photography or design software. Publications worth mentioning are, a literature review about the concept of visual literacy and its importance to design education (Lopez-Leon, 2015b); findings from motivating students through visual reports to reading texts about design theory (Lopez-Leon, 2015a). Most recent findings show that activities aimed to develop visual literacy also promoted critical thinking since students practiced analyzing, synthesizing, and gathering information through observation, and other skills related to critical thinking. The last publication (Lopez-Leon, 2017), focuses on these findings, specifically about an activity that implicated visual reports related to Marshall McLuhan's (1996) perspective on media.

This chapter focuses on visual awareness, an aspect that has been overlooked in the other publications. Activities designed for this research included having design students hand in visual reports after watching a movie, a documentary, a conference, or reading a chapter in a book, or an article in a journal, that would make students more aware of their visual surroundings. This awareness was noticed in two stages of the research: the first and the most evident was the actual photograph as a report, which showed a student-everyday-environment; the second one is an interview about each student's process; they expressed having suddenly become aware of their environment while looking around to find material for their visual report. This paper will present student's original visual reports and show how they became visually aware of their surroundings. These are unpublished findings fundamental to understand how promoting visual literacy in the context of design education could help students develop a professional skills set that may become an advantage in the real world even though there are several publications from the same research about visual literacy and design education. Reason why this paper represents a newer version of those published papers with a different focus on the findings, sharing a few excerpts with the previous publications, because it depicts from the same research.

The final goal of this research is to develop tools to help teachers design assignments that include visual literacy. This paper focuses on photography as a tool for developing students' visual literacy skills. The main findings showed that photography became a great visual reporting tool for students given easy access to smartphones every day. Even more, students feel comfortable taking pictures and complete their photographic report with objects available at home. After generating the visual reports, the students shared them in the class and discussed with the whole group.

Visual Discussions and Design Education

Seeing the world through camera lenses represents a different experience. The frame, the camera's point of view, and the focus among other aspects make it so. Technological evolution has made photography available to almost everyone. Today, it is so easy to take a picture and share, thanks to mobile communication and image generating tools with a more dramatic effect than ever before.

Photography has awakened new interests for what it has brought to the art world and the process of creating art (Durand, 2012). The power of photography's ability to transform ways of thinking has been pointed out by Coats (2014) who considers the "photographic act as an affective and affirmative encounter — a reflexive, embodied, and relational community engagement that may produce a rupture in our habitual modes of thinking" (p. 1). The author proposes to observe the camera as a nomadic weapon (Deleuze & Guattari, 1987) because it has the capacity to recompose "reality through creative forces" (Coats, 2014, p. 5). This practice of recomposing reality involves conveying meaning to objects, transforming both the object-context relation as well as the relation between the one that is taking the photograph and the object. The camera can become a reflexive apparatus if it is incorporated to the process of pedagogy (p.6). The camera becomes a tool that enables different ways of thinking, relating and interacting with the world. It represents a possibility to enhance the learning process enabling students to reflect upon abstract concepts while making them capable of constructing their own discourse.

Visual literacy has become a fundamental skill for the 21st century not only for designers and visual artists, but for other professions as well. The concept and its importance in design education is addressed deeply in other works (López-León, 2015a; 2015b). To be illiterate could have a broader meaning in the 21st century. Some authors (Bamford, 2006; Riddle, 2009; Stokes, 2002) declare that knowing how to read and write will not be enough, and that one needs to be literate in different areas to be able to perform in both personal and professional contexts. If an illiterate person is one that does not know how to read and write, there should also be a concept or term to define someone that does not know how to send an email, use a smartphone,

understand visual narratives, comprehend other cultures, among others that have nurtured the discourse of the importance of developing multiliteracies in schools (Kellner, 1998). There are new terms referring to literacy that reflect the concerns and reality of our world. For example, ecoliteracy (Stokes, 2002, p. 11; Center for Ecoliteracy, n.d.) is defined as the capacity to understand and develop practices from a sustainable perspective; media literacy, "conceived as a subset of multiliteracy, applicable to mass media forms in particular" (Burn & Duran, 2007, p. 5). So, it is important to discuss these new literacies in addition to visual literacy.

To understand the full scope of literacies and where and how visual literacy takes part, it is helpful to refer to *The North Central Regional Education Laboratory* report where four abilities are identified:

- Digital Age Literacy including visual and information literacies;
- Inventive Thinking integrating creativity and risk taking;
- Effective Communication involving interactive communication; and
- High Productivity, including effective use of real world tools (NCREL & METIRI, 2003, p. 15).

The Digital Age Literacy includes eight essential literacy categories that NCREL recommended to promote in higher education. Visual Literacy, as one of the categories, is defined as a capacity to interpret and create visual messages. In other words, visual literacy is seen as a professional capacity fundamental for the 21st century.

Secondly, it is important to note that written and verbal language has had a privileged place in education, relegating visual images (Kress & van Leeuwen, 2006). According to Arnheim (1969), the mistrust in visual images can be traced to the Greeks. The western world inherited the Greek's disdain for visual images and the senses because they are subject to different interpretations and represent illusions: Appearances can be deceiving. However, Arnheim declares that it is only through the senses that a human being can know the world such that "a child sees and recognizes before it can speak" (Berger, 1972, p. 7). So, it is fair to wonder if visual images could enhance the process of reflection and thinking, understanding the world, and a resource for reasoning in education. At the same time, it is important to consider if reading and understanding visual images requires specific training and the development of a specific set of abilities. If so, what are the best ways to develop them.

The coining of the term Visual Literacy is attributed to John Debes in 1969 (IVLA, 2015) referred to the author's original definition as follows:

Visual literacy refers to a group of vision-competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed, they enable a visually literate person to discriminate and interpret the visible actions, objects, symbols, natural or man-made, that he encounters in his environment. Through the creative use of these competencies, he is able to communicate with others. Through the appreciative use of these competencies, he is able to comprehend and enjoy the masterworks of visual communication.

It is clear that these "vision-competencies" are fundamental to graphic designers and visual communicators as well as to every profession encountering visual images on a daily basis, from scientific schemas to sketching technological innovations (Bleed, 2005). At the same time, this definition highlights the need to design specific tools and methods that help in developing these "vision-competencies." This research experimented with photography and other visual reporting

tools as a means to develop them. This enabled students to analyze the visual outcomes while promoting class discussions.

Participants and Methods

This research explored (Malhorta & Birks, 2000) and strived to obtain new knowledge on how visual literacy could be developed through class activities in order to design appropriate teaching tools. Participants were not considered as statistical representation instead they were selected to bring different attitudes, opinions, and feelings towards the process of generating visuals. In other words, this research focused on heterogeneous group of participants that would understand deeply the subjective aspects of their experiences (Kincheloe & McLaren, 2005; quoted in Martínez, 2015, p. S63). Qualitative research is a way of generating knowledge by comprehending, in a profound manner, how human beings interact and are affected by their own reality (Martínez, 2015, p. S59). This perspective, framed by experience, allowed the researcher to establish a “reflexive and self-critical” position (De la Cuesta & Otálvaro, 2015, p. S43) describing the phenomena in a more holistic and less fragmentary way. Moreover, the interpretative aspect of the researcher is inescapable of the qualitative approach (Martínez, 2015) and the emphasis that guides the results.

The qualitative research aimed to understand the students’ process for generating visual reports. The data was collected in three phases (see Figure. 1):

1. The construction of visual reports
2. The class discussion of visual reports
3. An interview with the participants

Nineteen students enrolled in the Advanced Advertising course of the Graphic Design Undergraduate Program at a public University in Mexico participated in this study. The participants completed the study as part of the work required in the course.

Three assignments provided opportunities to generate visual reports: 1) reading an assigned text, 2) watching a movie, and 3) watching a TED talk. The data collected consisted of over fifty images that students generated after completing the activities. The researcher used six images to illustrate the results generated after students completed one of the three activities, i.e., watching the movie SYRUP (Rappaport, 2013) shown in class. The movie was selected for this research because it presented the role of advertising clearly as a façade of actual products and it was necessary to make the students question their role as graphic designers in the advertising and consumer world.

Figure 1 illustrates the three research phases involving student-participants. In Phase I, students watched the movie SYRUP and then took photographs with a mobile phone or digital camera based on the ideas presented in the movie. Then, students uploaded the images to a website that collected all the images from the participants. These photographs served as data evidencing the process of synthesizing information, interpreting the ideas in the movie, and constructing their own opinion. The images were analysed considering how well the students expressed those features. In Phase II, students presented their visual reports individually and explained to the whole group what they were trying to say using visuals. The arguments that each student expressed were also collected as data and served to enhance the understanding and interpretation of the elements found in the images. In Phase III, when all the assignments involving visual reporting were finished and graded for the advertising course, in-depth interviews were conducted to facilitate the understanding of the students’ processes in generating visual reports including student perceptions from the lenses of graphic design. This technique helped to uncover hidden reasoning involved in the visual reporting process and the challenges students had to face while completing this activity. Some ideas expressed by students about the process often included

having gone out without knowing what they would find, observing carefully and thinking at the same time about the main concepts of the assignment. The intense observation done by the students is referred to as visual awareness in this chapter.

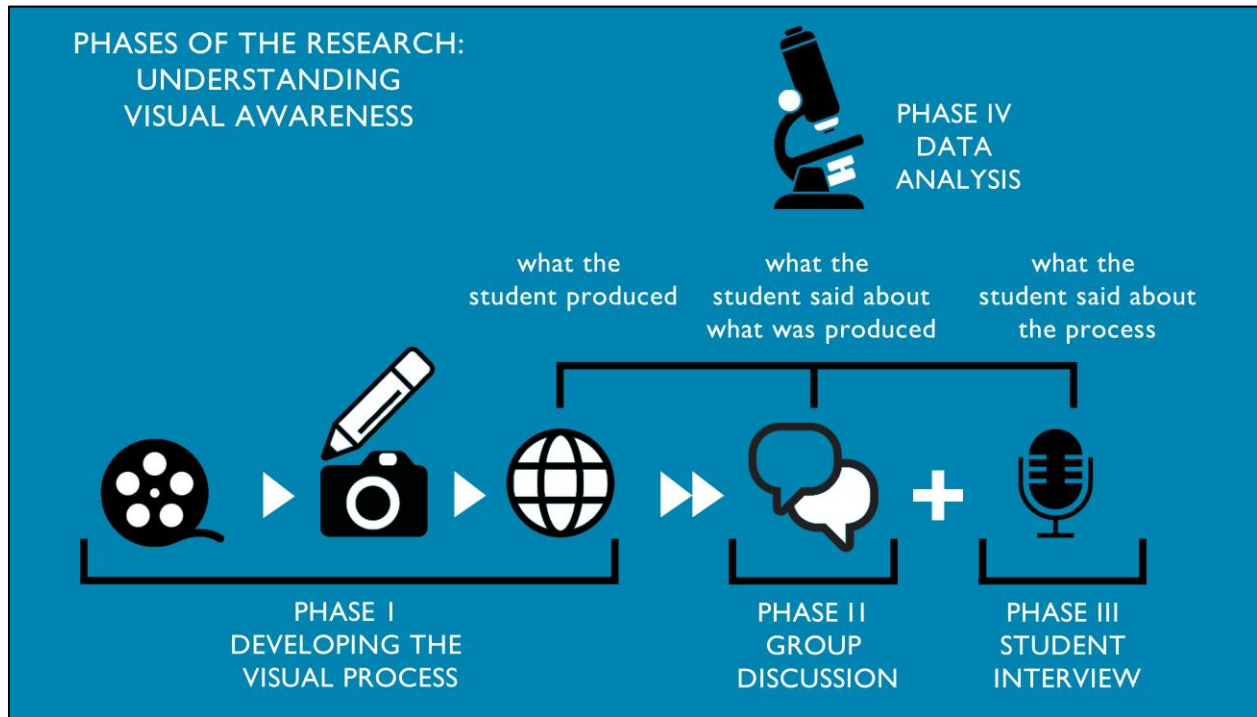


Figure. 1. Three phases of the research in which students participated in generating visual reports.

Analysis of Visual Reports

The researcher performed visual context analysis in the visuals generated after watching a movie as a group. Students had to take a photograph of something they found interesting about the movie. Participants agreed to be part of this research activity and gave consent for the use of their visual reports as data to be shown and published. The movie SYRUP (Rappaport, 2013) was shown because the role of advertising is clearly seen as a façade of actual products and a great example for students to see advertising strategies used to sell products and the roles they could play as graphic designers in this system. The image (see Figure 2) below belongs to one of the students' (Amador) visual report. By showing a peeled off label of a drinkable yogurt, Amador makes a statement:



Figure 2. Advertising as a skin by Amador. A visual report about SYRUP (the movie).

Advertising is like shells or skins. Ideas, design and narrative are the wrapper that makes us believe in a need of having objects that can give meaning to our lives. The movie focuses on the idea of concealing simplicity, taking it to a level of adoration.

Amador's image came as evidence of visual awareness --- an everyday product that the student had consumed. The fact that this was an ordinary object showed that the student began observing objects around her that were familiar in an unfamiliar way. By peeling off the label of the yogurt she realized a metaphor about advertising --- thinking of it as a skin not only for products but also for people and the products they wanted. Photography made her observed carefully in order to construct a visual argument so clear that everyone in the class could agree with. The main arguments shown in the movie became present outside of the classroom. This allowed her to see relationships with an everyday object that made it more a significant experience.

The next picture was taken in a supermarket by another student (Armas) showing a stereotypical family on the wall (see Figure 3). Armas stated that brands sometimes use idealized models that represented "status." For Armas, this strategy created an aspirational bond between the producer and consumer.

"Even though they represent a fake-perfect-family, by consuming the brand you can aspire to perfection."

In completing the assignment for the course, Armas went to the supermarket where he carefully observed every corner, shelf, aisle, poster, and stamp found along the way. In retelling his story, he was about to leave after feeling disappointed of not finding anything useful. His attention caught an image that he recognized as a pattern that he had seen in advertisements over and over again --- a stereotype of a family that seemed to project higher socioeconomic status or of foreign origins. Armas' report also made a statement by presenting the obvious (stereotypes in advertising) and pointed out that something was out of place in Mexican context. A white, blond, smiling family could probably not resemble the average features of many Mexican people. The image is an example that demonstrates visual awareness. The student had probably seen this stereotype in advertising repeatedly but the exposure to the movie and the assignment had made him visually aware of how close and common these stereotypes were and how distant they were from his everyday experiences.

"We marry brands" as Rodriguez expressed in her visual report. For the student's own wedding ring gained a different meaning when becoming visually aware. The wedding ring had become a common object for Rodriguez because she looked at it every day since she got married. In observing the ring carefully, she found in it an argument that could be related to the movie.



Figure 3. The perfect fake family by Armas. A visual report for SYRUP.

We marry brands, even though they are unreal and superficial, we are in love and seduced by them, because we are trying to belong to a social group or trying to be cool, and that is what they have made us believe.

For her visual report, Rodríguez had to make a compelling argument by showing her wedding ring juxtaposed (see Figure 5) to an image of a brand that could fully communicate loyalty such as Apple.

Martínez went to a mall (see Figure 6) to find something for the assignment.

I went to the shopping mall, to see what I could find in the stores, and by walking around, I realized that the shopping mall as a brand needs advertising as well, it needs to sell itself beyond products and services that we may find in it. There are more shopping malls in our city and through marketing they need to send a clear message that connects with people in such a way, that they would prefer to go to one this mall instead of others. It is all about creating an experience that stands out. Plaza San Marcos: it amuses you, it delights you.

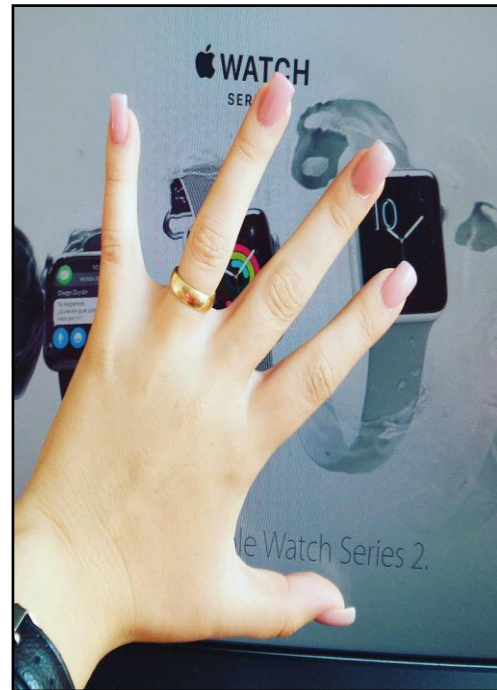


Figure 5. Marrying brands by Rodríguez. A visual report for SYRUP.

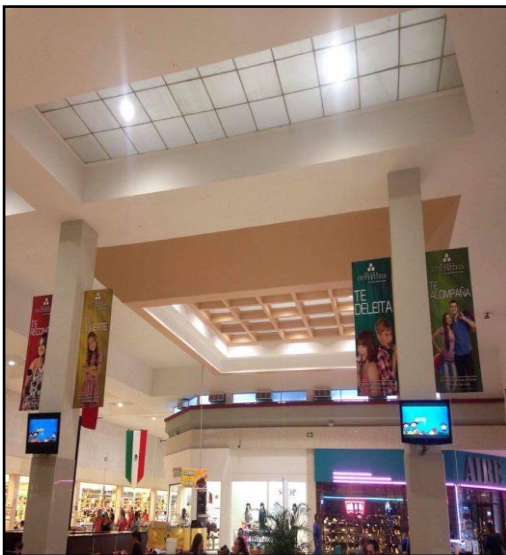


Figure 6. Selling experiences by Martínez. A visual report on SYRUP.

Using a camera, she went to there with a different pair of eyes. The camera allowed her to see things differently that led to seeing a new world. By sharing this image with the rest of the class, she made this new world available to her classmates.

Looking inside a magazine seemed to be a great way in finding something related to advertising because of all of the ads in them. However, it is not an easy task to look for an image that could represent a concept from the film. Flores took a magazine and began flipping through the pages with different eyes in looking for images that would fit the assignment.

Flores constructed a metaphor of the attributes of a woman in advertising for her visual report (see Figure 7). The student showed an image of cosmetics advertising but the ad is not the element that carries meaning in her

visual report. By looking at the ad, Flores found that the figure of a woman could represent concepts discussed in the movie. This meant that any picture depicting a woman in the magazine could be useful for her visual report. This was probably not the first woman she had seen when reading a magazine but through the classroom experience she identified the concepts of advertising and reflected on them.

I think that they related advertising to a woman because advertising seduces you, it makes you fall in love, it is beautiful and sometimes you have a blind love for it, it could sometimes be platonic and aspirational, because you want to have the brand's attributes. Advertising wants to have a captive audience and knows what the audience wants, and because of this, they can take advantage of them.



Figure 7. Advertising is a woman by Flores. A visual report for SYRUP.



Figure 8. Advertising Distorts Reality by Velazquez. A visual report for SYRUP.

The next image is not particularly an evidence of visual awareness but rather the manipulation of elements to construct a meaning. This example is closer to art and design practice which was also seen in several students' visual reports. Instead of looking for something that could represent a concept from the film, Velazquez gathered objects to manipulate and construct such concept. She wrote the word "REALIDAD" (translates to reality) on a piece of paper and took a picture of it through a glass which distorted the image of the text (see Figure 8).

"Sometimes advertising transforms reality so much in order to draw attention and sell a product, that reality is hidden, it goes to a distorted dimension and so, the brand becomes a representation of new meanings with little relation to the product. In the end, the consumer is "deceived" by that transformation and perceives only the distorted reality".

Representing scenes or objects from the movie was a common practice. This student represented a mirror that appeared in the film only a few seconds but by incorporating it in the poster, it emphasized the concept of reflection in a holographic way. Velazquez stated, "the mirror reflects what they [the characters in the movie] are not".

Analysis of Student Interviews

Students created their visual reports after watching a movie that were analyzed. Also, the author conducted in depth interviews of the students to know better how the assignment challenged them

as well as provide a better understanding of the processes taken in constructing the visual reports. The use of qualitative research methods assisted in finding out if the assignment, as an educational experience, challenged the students and promoted critical thinking. The student interviews facilitated knowing more if the experience promoted visual awareness. The verbal responses collected helped frame a broader sense on how students became visually aware while performing visual reporting tasks.

Students shared their opinions about the process of creating visual reports. The author encouraged spontaneity and openness as necessary conditions in successful data collection. Efforts were made to create a relaxing environment where students can describe and discuss their experiences. The narratives below are examples extracted from student interviews about the experience:

- *Photography needs to be more spontaneous, you look around and you need to ponder if there is something related to the information; you observe, something catches your eye, you capture it and relate it [to a concept].*
- *Taking a picture is faster, but it needs an open mind, it demands more creativity than redesigning a poster.*

Another important part of the activity was discussing the visuals presented in class. Students' opinions seem to indicate that the activity helped in discussing the main concepts addressed in the movie. The students expressed interests in finding out how their classmates resolved the challenge and what new ideas they could bring into the discussion.

- *It is really cool to present the images to the group and discuss with them because we can see different ways to understand the movie.*
- *It demands a lot from us, it enhances our creativity.*
- *There are parts that my classmates represented visually that I did not notice and it is like going over the main ideas again and again.*

Conclusions

In retrospect, discussing visuals instead of written reports allowed everyone to have an opinion. Group discussions were more dynamic because students were able to express themselves more easily. On the surface, it would seem that the group was discussing visuals but deep down they were also discussing abstract concepts or interesting ideas picked out from documentary or film. Promoting visual literacy as a capacity to interpret and construct meaning through images is a must-have skill among graphic designers. The use of photography and visual reporting enables students to develop their abilities, motivates and keeps them engaged.

Bringing visual literacy into the classroom becomes a fundamental strategy in the students' learning process as developing professional designers. Specific assignments that aim to promote visual literacy need to part of daily tasks for design teachers for two main reasons. First, because generating images is the main professional performance that society needs from designers. Second, because by developing visual literacy, other skills are also addressed and will help in developing a holistic professional suitable to face the challenges in a rapidly changing society. Among these lateral skills is visual awareness proposed here as a perception mode in which a designer observes the world with different eyes depending on the project. As a person who changes lenses on a camera, or sunglasses with different shades and colors, designers need to

change their perceptions and enhance their sensibility in understanding the world from different points of view of their stakeholders such as clients and users to name a few.

Visual awareness is still an incipient concept, so there are more opportunities to understand it fully. The challenge is to design tools for teachers that they can implement in their classes and promote the development of visual literacy. Also, findings show the potential of the camera as a reflexive apparatus that needs more exploration on how to incorporate it actively into the classroom. Even though this research only involved working with design students, using the camera to develop images and convey new meaning to everyday objects is a process which individuals from different professions and educational levels could benefit. Technology, such as cameras, are part of students' everyday life in the 21st century, and schools should take advantage of it.



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