

“THE VISUAL CODE”: EDUCATING IN AN AGE OF VISUAL CULTURE

Noam Topelberg¹, & Jonathan Ventura²

¹*Teaching Certificate Program, Faculty of Education, Bar-Ilan University (Israel)*

²*Design and Technology, Shenkar - Engineering. Design. Art. (Israel)*

Abstract

Over the past two decades, we have been witnessing a veritable revolution in the ever-expanding visual and material culture studies. As a result of technological advances, visual texts have become the most common carriers of information and meaning as well as shapers of people's perception of reality throughout the world. To keep up with these current and future changes, new tools of visual literacy and critical thinking are needed for teachers and educators. We argue that implementation of such tools in teacher training programs, across all disciplines, is extremely important and can be used as catalyst to foster critical thinking processes and promote active and relevant teaching and learning. Moreover, with our unique approach, we offer a much-needed innovative perspective towards new and expanding visuo-material disciplines ranging from the myriad venues of design, through architecture to visual communication.

Our study presents a tool developed for Design and Visual Culture curriculum taught in more than 250 high schools in Israel. This tool, we call "The Visual Code" aims to cultivate skills of deciphering visual codes through diverse visual texts. Our approach surpasses the classic and somewhat redundant focus on Art History and allows a much broader understanding of our visuo-material surroundings, ranging from smartwatches, through buildings and urban settings, to websites, apps, and digital service platforms. We suggest observing this rich world through three prisms, suitable for different types of training: semiotic observation, suitable for teaching an training students, teachers (on and pre-service) and pupils of all disciplines; hermeneutic understanding, triggering deeper observation, suitable for those specifically engaged in visual studies, such as art and design; and in-depth phenomenological interpretation suitable for practitioners, experts, and researchers in the various fields of art and design. During our research, qualitative questionnaires, and activity, as well as visual content analyses will be used in classrooms, teachers' development courses as well as some academic courses to evaluate the impact of this tool on classroom discourse and learning processes.

Keywords: *Visual literacy, education, art, design, interpretation, meaning-making.*

1. Introduction

In our current reality, visual information exceeds its textual counterpart in quantity and sometimes even in complexity. In this fast, ever-changing reality, through all platforms of information, we are surrounded by countless visual representations. Thus, viewers and end-users (or design partners in contemporary parlance) must make an effort to decipher and understand cultural products in order to identify concepts, messages, logos, limited edition products, apps, digital services, graphic changes in user interfaces caused by software updates, and so on.

This reality corresponds directly with what Roey Tzezana calls the "Revolution of Personal Production", a revolution in which "each person receives the power to create outputs, products, and objects, which in the past required an entire factory to produce, for his own use" (Tzezana, 2013, p. 13). This revolution stems from technological developments, which have changed our ways of thinking and creating. Computers, the Web, Smartphones, 3D printers and scanners, and now Artificial Intelligence (AI), are constantly advancing this revolution. In the past two decades, these means have become accessible to everyone, as early as childhood, and their use requires little or no learning. Combined with social networks, which allow for the rapid distribution and consumption of each person's visual information, this "Revolution of Personal Production" led to far-reaching changes during the first two decades of the 21st century.

As part of these changes, visual texts are created, distributed, and consumed, both by professionals and amateurs, across a variety of media and their modes of interpretation are changing as well. These deep processes are leading toward the establishment of a visual culture that increasingly pushes the written word in favor of the image and the video. But although the reality described above is

known to everyone, the various calls for adaptations of the education systems to the 21st century, such as the learning compass, presented by the OECD in "Education 2030", hardly consider the fact that reality is mediated mainly through visual texts. Moreover, the degree to which these visual texts allow for the emotional manipulation of the lay viewer is hardly discussed.

We claim that visual literacy skills that will help today's students, develop critical thinking and reflective abilities are bound by reality. Our study presents a tool we call "The Visual Code" which aims to cultivate skills in deciphering visual codes through diverse visual texts. Our approach surpasses the classic and somewhat redundant focus on Art History and allows a much broader understanding of our visual-material surroundings, ranging from smartwatches, through buildings and urban settings, to websites, apps, and digital service platforms

2. The Evolution / revolution of Visual Culture

Whether as an emotional or utilitarian expression, Visual Culture has been an integral part of humanity from the beginning of time. "Man's first expression, like his first dream, was an aesthetic expression," writes Newman in his iconic essay (Newman, 1947, p. 59). But references to Visual Culture as an actual revolution appears towards the end of the 20th century. Mirzoeff claims that Visual Culture is not merely a part of our lives, but life itself, expressed by visual events that provide meaning, pleasure, or information to viewers. According to him, these events make use of "visual technologies", that is, devices that allow one to create, distribute, and consume (Mirzoeff, 1999, p.3). This definition, which encompasses all the elements of what we term the "visual culture process" i.e. the making of the visual text, its circulation, consumption, and interpretation, points to a process of bridging the inherent gap, introduced by Marcel Duchamp celebrated 'Art Coefficient', between the work of art or the object and the mediating ways of the viewing experience (Duchamp, 1975, p. 139).

Among contemporary thinkers, we can increasingly find the idea that opposed to the classic Art History discourse, in which boundaries can be clearly defined, visual culture discourse involves every visual representation around us. An example can be found in the words of visual culture researcher W.J.T. Mitchell in an interview he gave with Margaret Dikovitskaya: "Art History – at least in its traditional formations (and this is changing today) – is not enough by itself for the study of visual culture because it is grounded in a distinction between (for instance) mass media, mass culture, kitsch, commercial art, and 'fine art' proper. Art History is not concerned with ordinary everyday practices of seeing, what I call 'vernacular visibility', all the social constructions of the visual field that lie outside image-making, and artistic image-making. Before people make images, much fewer works of art, they look at each other and look at the world. Visual culture, I think, is the study of that aspect as well as the visual arts" (Dikovitskaya, 2005, p. 240).

Even though our discussion focuses on the contemporary zeitgeist, its roots can be traced back to earlier modern thinkers such as Husserl and Heidegger, who challenged and reframed modernist values and truths. Husserl, for example, calls for returning "back to the things themselves", avoiding, as much as possible, preliminary assumptions (Husserl, 2012, p. 168). Furthermore, common to all five characteristics of modernity described by Heidegger was the Modernist idea that the very concept of "Truth" should be explored by experience and experiment rather than by a-priori beliefs (Heidegger, 1977, pp. 71-72). By challenging values of objectivity and absolute truth, Heidegger, Husserl, and other thinkers outlined the foundations for later philosophical ideas such as phenomenology, existentialism, and deconstruction, all teachings that challenge the modernist concepts of truth and theorize the origins of postmodern subjectiveness through which we, as thinking beings, decipher the world around us.

Important to our discussion is Heidegger's idea that "World picture ... does not mean a picture of the world, but the world conceived and grasped as a picture" (Ibid, p. 129). This statement accurately predicts many of the characteristics of the visual culture revolution we are experiencing in the second decade of the 21st century, following the development of smartphones and image-based social networks such as Instagram, TikTok, and others. In this late "post" culture, the boundaries between reality and its visual representations are increasingly blurred. It is an experience of returning to an animistic, pre-Socratic worldview, in which visual texts are not simply representations, but become truths *in and for* their own right.

3. Praxis of the visual culture revolution

In recent years, design and art schools across the world have been offering more courses that focus on visual and material culture than on Art History. Underlined by the argument that design is the actual source of visual representation, this trend places Art History within both the visual and material culture and incorporates theories from communication, social and cognitive psychology, history, technology studies, STS, anthropology, anthropology, sociology, and more (Segal & Ventura, 2019).

Unlike the history of Art, which is based on a closed and professional body of knowledge, we interpret, understand, and produce visual and material culture every day, endlessly and almost without paying attention. Starting with the design of a presentation, through writing a prompt for OpenAI. It is no longer a matter of professional tools, but a natural way in which we are expressing ourselves. Almost every component of the everyday world that surrounds us consists of visual components, some are material (3D), others just visual (2D), and an increasing number of them are virtual. We are so used to thinking visually that we have almost stopped thinking about reality verbally - we communicate using emojis, send gifs and memes, and live the news around us through streaming and social networks that are updated almost every minute.

The visual culture revolution, therefore, is not merely manifested in how much we use visual texts, but also in numerous new ways in which we experience products and events that might have not been experienced visually before, even in disciplines that are not visual by nature, such as medical diagnoses and music.

Based on the challenges described above, we propose critical thinking processes which can assist in observing and reasoning intuitive meanings derived from a set of visual components packaged in any visual text.

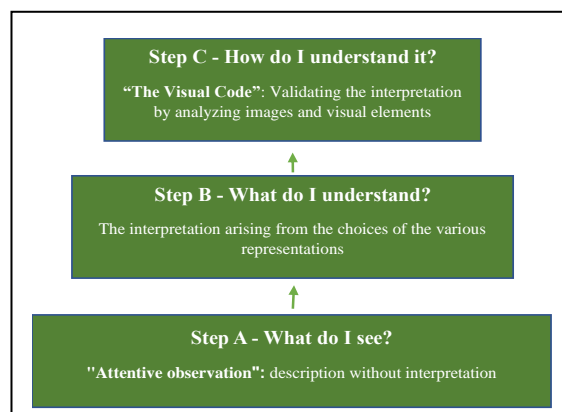
4. Definition and operation model of the “Visual Code”

The term “Visual Code” is proposed here as a tool for critical reading of the visual text. A tool through which, by focusing on an "attentive observation" process, we seek the nurturing of visual literacy, reflected in a critical, interpretive, and in-depth reading of the visual text - whether it is a work of art, a documentary photograph, advertisement poster, a car, or a pair of sneakers.

This term relates to a system of cultural conventions expressed in the choices of representation, and especially the way they work in the visual text on different levels, from the basic elements of the language to choices of iconography. We call it a code because these are cultural conventions, encoding a message or intention in the visual text, and deciphered in the minds of us all. These codes intuitively work on us. Usually, it is so obvious, we don't even stop to think about it. It just makes sense. Codes, which are the choices and descriptions of images made by the creator, allow the viewer, unconsciously and automatically, to experience a wide range of emotions and associations, so that interpretations can take place in the contexts of culture, zeitgeist, and personal experience. All visual creators use these conventions to communicate their desired meanings and ideas. Successful creators that have a deeper understanding of the visual codes' powers make sophisticated use of these conventions in order to convey and convince. Exposing these codes, and especially discussing the ways in which they affect us, is exactly the kind of critical thinking that we all require.

This concept relies on a long-standing tradition of post-structuralist criticism associated with thinkers such as Foucault, Deleuze, Derrida, Lacan, and mainly Roland Barthes, which sanctifies the connotation and negates denotation as a central tool for conveying a message and meaning. According to Barthes, although people feel that their interpretations of the photograph originate from their personal feelings, it is actually based on a system of cultural symbols (Barthes, 1977). This is one of the foundations of the Visual Code concept - the viewers feel a certain sensation whose origin they usually do not seek to understand. We stress that this feeling is motivated by the use that the creator of the visual text makes of those cultural conventions and symbols. An analysis of the visual code will focus, therefore, on defining and reasoning of that personal feeling, based on an "attentive observation". The following taxonomic operation model describes the process we propose to integrate into teacher training and classrooms:

Figure 1. Visual Code taxonomic operation model.



The three steps of our model stem from each other taxonomically. In step A, the student establishes the “facts” of the visual text i.e., what is actually shown in the text, through an “attentive observation” process, devoid of interpretation. Only then can one move to step B and explain what one deduced or concluded from the visual facts investigated in the first step. Finally, step C allows one to validate and prove one's insights (presented and discussed in Step B) through a more in-depth analysis of the visual text's various modes of representation.

Each step requires a specific skill set, at an increasing level of complexity. Step A requires habits of "attentive observation", depicting all the minute details visible in the visual text. Developing this skill may lead to two main challenges: The first is neutralizing the common habit of projecting the viewer's inner world and experience onto the visual text without in-depth observation. The second is converting the visual text into a verbal one. Dealing with these challenges involves long-term training and the continuous, regular use of a fixed pattern description, question asking, and discussion using methods like VTS (Visual Thinking Strategies) and various thinking games, many of which can be found in Project Zero of Harvard University for example and implementing these in the classroom.

Step B requires actively applying an interpretive reference to the text, after observing its “facts”. In this step, the students are expected to fuse their inner world with the discussed visual text, but only after a thorough investigation of the details presented in step A. This is also a dual challenge: on the student's part, the combination of subjective and objective observation, and the avoidance of a return to old habits and intuitive beliefs in order to create a synergy between the subject and the object of investigation. On the teacher's part, offering openness, and legitimacy for a plethora of diverse opinions, devoid of judgment. As with the previous step, long-term training, and the cultivation of continuous discourse in the classroom are required, to further legitimize and encourage the students to express their insights, based on "attentive observation", in a safe environment.

In step C, the most complex of the three, students are asked to justify their interpretations, presented in step B. The required skills for this step can be divided into two levels of analysis: The first is suitable for all teachers and students, from all disciplines and is based on the images shown in the text, their spatial organization, and the relationship between them. The second requires an analysis of visual elements such as composition, configuration, color, space, materials, texture, lines, and shapes, using professional terminology, thus suitable for teachers and students of visual disciplines such as design, branding, art, etc. The main challenges of step C are the development of critical thinking habits, and a willingness to withdraw from earlier conclusions if they turn out to be wrong, and for the ones dealing with visual disciplines, also the learning of various concepts and their correct use.

5. Conclusion

As a result of the "visual culture revolution", integration and assimilation of visual literacy skills have become essential for education systems that aim to equip students with the skills needed for independent and critical observation and thinking. Based on Paul Virilio (1994) and Bernard Stiegler (2017) studies, dealing with the influence of screen-based media on the way in which youth interpret reality, Jagodzinski claims that our starting point must be that: “The dromospheric generation of the 21st century is easily captured by the seductions of the videogame image forcing visual pedagogy to recognize its dangers. Is the machinic turn toward the manipulation of sensibility eating our young?” (Jagodzinski, 2023, xviii). According to Strigler (2017), this "mediated by screens" reality leads to the "proletarianization of sensibility", that is, converting activism into passive consumption (Ibid). We have suggested that this reality, calls for impartation of visual literacy tools.

The "Visual Code" model presented is part of a curriculum developed by Noam Topelberg for Israeli high school students of "design arts" subject. It is implemented among diverse populations in more than 250 high schools. The model is taught and practiced through the first year of studies (10th grade), fostering visual literacy and critical reading of the visual text, basic skills for those about to engage in any visual field. In order for us to research the significance of our model we conducted two stages of qualitative research. The first included a qualitative questionnaire distributed to education students during their training; the second was a series of qualitative interviews focusing on experienced teachers and their dialogue inside their classrooms while using our model. Following are examples of how some experienced teachers describe the ways the use of model changes discourse in their classroom:

Roni Gur, (Highschool Teacher, professional instructor, teaches art and visual culture, 23 years, Reut arts, Haifa, Israel): *“The students learn to look deeply into the visual text, formulate their thoughts and opinions in an orderly and organized manner and know how to justify their claims well. The language in the classroom becomes richer, the sentences students say become longer, and the discussions in general become more fascinating ... An 11th grade student excitedly described how she analyzed a work of art she had never seen before, in front of a large audience, during a guided city tour ... The group guide was amazed at the depth of her knowledge and the richness of her language. She told her that she*

had never heard such a wonderful explanation about this statue, and that she was absolutely right in her analysis. 'This is thanks to you Roni, said the student. You taught me to observe what is in front of me, how to think about what I see and how to express what I feel, Think, and see.' I told her that this is exactly the goal of our curriculum, and my personal goal as a teacher. My students should neither recite me nor any textbook, rather walk the world confidently, knowing how to observe, think and articulate their thoughts independently and professionally”.

Dganit Plishti, (Highschool Teacher, school leader, teaches history, civics, art and visual culture and Hebrew, 28 years, Gymnasia, Jerusalem, Israel): “I see the use of the visual code in the classroom, first and foremost, as a tool that enables my students to experience success. Every answer is correct as long as it is reasoned in the context of what I see and how I see it. The students can express themselves without judgment from the teacher or other students, therefore active listening is created, the other students can either agree or disagree with what is said as long as they justify their thoughts relying on a deep observation of the visual text”.

Orly Zimmerman, (Highschool Teacher, school leader and Profession coordinator, teaches art and visual culture, 23 years, Herzog high school, Gezer and Begin High school, Ramat-Gan, Israel): “The discussions about culture in general and the visual code in particular, helps my students gain a deeper understanding of the forces acting on them and shaping their perceptions and reaction to reality. They learn to be critical observers and do not take any visual representation for granted. Discussions in class deepens and cover wider fields than before, according to the student's interests. In one case, when climate activists broke into a museum and vandalized a masterpiece, an interesting discussion was held regarding art's role in society and norms of behavior and protest. In a concluding conversation, a student said that she is thankful for finally understanding, through our discussion, what critical thinking means, an understanding that was missing in her studying years so far”.

In the past five years, the "visual code operation model" has mostly been adopted by teachers, students, and pupils involved in visual culture, including Visual Communication, Cinema, Photography, Art, and Design. Since visual literacy is deeply understood in this audience as a critical thinking skill, new methods of assimilation are always welcome. The quotes presented indicate that teachers who have used this method report deeper discussions and arousal of curiosity in their lessons. Currently, the model is not being institutionalized outside the educational framework described above. Assimilation among teachers and students from other, non-visual disciplines, has occurred several times during the past year as part of teacher training and academic courses given by the authors. With its taxonomic structure, the model allows differential training based on the needs of each discipline. More importantly, assimilation of critical discussion using visual texts on a regular basis will undoubtedly contribute greatly to improving classroom discourse and student's involvement within the subjects discussed. Though it is early to assess the success of this process, we believe that assimilation of such skills is essential in all fields, in order to form the basis for observation and critical reading of the reality for which schools prepare the students of the present-the teachers and citizens of tomorrow.

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