

Illustrating Educational Knowledge and Social Interactions; Analyzing Images in a Greek History Textbook

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Abstract

Visual representations are present in modern societies to such an extent that it wouldn't be an exaggeration to characterize the modern civilization as "Civilization of the Images". Facing this reality, the modern educational systems are obliged to upgrade their traditional methods by adapting practices and processes to multimodality and visual literacy. Based on M.A.K. Halliday's three metafunctions of non-verbal communication, Gunter Kress's and Theo van Leeuwen's *Grammar of Visual Design* could provide a very useful methodological tool in analyzing each textbook's visual material. The authors of this survey have focused on the relationship among the represented participants and the observer, by emphasizing on every representation's arrangement of structural elements, use of perspective and social distance. After analyzing each image, they make didactic proposals by exploiting a variety of techniques. The research was being conducted on the 6th grade's History textbook, which covers the historical period from 1453 to now. Regarding the ideological and didactical expectations of the illustration, the findings proved very useful.

Keywords: social semiotics, social interactions, image, teaching process

Defining and interpreting visual representations with Social Semiotics

Visual representations are present in many manifestations of modern societies to such an extent that it wouldn't be an exaggeration to characterize the modern civilization as "Civilization of the Images". The etymology of the word "image" leads us to the Latin verb "imitari" (= "to imitate"). The Greek word for "image" is "eikona" which comes from the ancient Greek verb "eiko" (= to resemble). Both etymologies refer to an imitation of reality.

In order to find a way of interpretation for the visual representations, Social Semiotics seems to offer us an interesting path. According to M.A.K. Halliday, Gunter Kress and Theo van Leeuwen, every visual representation is an occasion for communication between the artist and the observer. This communication is intentional and requires that all the participants choose easily decodable forms. The final message is understandable to all that are able to decode these forms and correspond to the artist's call. Kress and van Leeuwen have developed a methodological tool named *The Grammar of Visual Design*, which is based on Halliday's three metafunctions of non-linguistic communication (Halliday, 1978 & 2004· Kress & van Leeuwen, 2006): The *Ideational Metafunction*, which examines relations between the participants (the persons depicted) of an image and their position as well (Kress & van Leeuwen, 2006: 42). The *Textual Metafunction*, which combines all information to a unity, emphasizing on each structural element's position (Kress & van Leeuwen, 2006: 175-215).

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The *Interpersonal Metafunction*, which examines the interaction between the participants and the observer. It is both an internal individual process and an interaction as well. The way the structural elements of a visual representation are presented determines the kind of social relation between the artist and the observer. The basic parameters of this metafunction are the perspective and the social distance (Hall, 1966: 110-120· Halliday, 2004: 106-108· Kress & van Leeuwen, 2006: 116-119, 124-125, 130);

As to *perspective*, the arrangement of lines inside an image indicates the kind of relationship between the artist and the observer. The observer's engagement to what is represented depends on the viewing angle. The *horizontal frontal* angle enables a full engagement to the viewer. The *horizontal oblique* angle does not allow engagement or permits an indirect involvement. The *vertical high* angle gives to the observer a panoramic view and implies a dominant position of his. The *vertical equal* angle puts the observer to the same position with the participants and considers the relation between the two parts as equal. The *vertical low* angle subjects the observer to effortlessly accept what he sees (Arnheim, 1974: 182-190· Kress & van Leeuwen, 2006: 133-148).

As to *social distance*, the American anthropologist Edward Hall, in his book "The Hidden Dimension" (1966) claims that the natural distance between people defines their social relations. The distances he defines are: *close intimate* (showing the face-great intimacy), *far intimate* (showing the head-two persons can touch each other), *close personal* (revealing the shoulders-a person can grasp another), *far personal* (showing half body), *close social* (showing full body-two persons have impersonal business), *far social* (showing the background-impersonal relations), *close public* (showing more than one person-a person feels another presence close to him), *far public* (showing a group of people). Based on Hall's theory, Kress and van Leeuwen determined six corresponding fields of vision; condensing in one category the two phases of intimate and public distance (Kress & van Leeuwen, 2006). The dimensions of perspective and social distance make up the basic framework for the interpretation of images, in which we must add the element of *contact*; at some images, especially portraits, the observer is called by the depicted person to pay carefully attention or, in other cases, to act or to abstain from an action (e.g. at the well known "Uncle Sam" poster). To obtain this, the artist has chosen to depict an eye-to-eye contact engaging the observer into the representing actions. On the other hand, the avoidance of this contact delivers to the observer a message of abstention, advising him not to be involved in these actions (Halliday, 2004: 106-108· Kress & van Leeuwen, 2006: 116-125).

1. Visual representations in teaching

A strong element of the process of illustrating school textbooks is the development of the culture of images, as well as the enhancement of the qualities of photographs enriched by school textbooks (Pleios, 2005: 183 et seq., 278). However, since 1976, both the logic of the textbook texture and the influence of the choices of the images on the cultural, educational and ideological choices have been strongly reflected. Illustration is used to make educational knowledge more imaginative, connected with empirical data. The introduction of image and visual communication does not just mean the use of different semiotic systems for the presentation of new cognitive information to students nor it is simply a consequence of the image's dominance in the public sphere. It focuses much more on the presentation of the meaning and the way in which the meanings are produced in the school manual and in the understanding and estimation of facts, scientific truth and knowledge from students (Pleios, 2005: 282 et seq.). The image requires a different approach than written text. It requires individual reading, an ability that children socialized in the culture of image have developed, that is, to handle multimodality in a unique way (Green, Reid & Bigum, 1998).

The introduction of visual literacy and multimodal texts in modern textbooks gradually highlights the need for understanding visual representations; a young person who lives in the modern civilization of images should be able to understand an image's function, appreciate its beauty and express himself through art (Trend 1992· Avgerinou & Ericson, 1997· Chodolidou, 1999· Tsitsanoudi-Mallidi, 2008· Elkins, 2010).

This ability developed in children through their technology-based experience is transferred into school in order to understand multimodal texts, with which they have been in contact since early childhood (television) mainly

for recreational reasons (Meyrowitz, 1985; Nikolaou, 2016). Images help the students to practice in symbols and motifs, to personalize and to understand information. On the other hand, an educator who uses visual material can organize better the teaching procedure through a plethora of techniques such as demonstration, dialogue, discussion, questions and answers, brainstorming, work groups, role play, building conceptual maps, case study, etc (Chapman, 1978· Trilianos, 2004· Fykaris, 2015). Much more, at History lesson, visual representations are both a source and a teaching material as well. It would be, therefore, interesting to investigate the functionality of the Visual Design in modern textbooks, attempting to find the relations between the depicted persons and, in parallel, making didactic proposals about them.

2. The current survey; basic information and analysis example

The current survey has been conducted in the second half of 2014 and sets as basic goal the functionality of Visual Design's Interpersonal Metafunction at the history textbook which was introduced in 2013 at the 6th grade of Greek Primary Schools. The book's content covers the early modern and modern Greek History (1453- today), especially the 19th and the 20th century. The method followed combines the methodology of the Grammar of Visual Design with content analysis interpretative approach. The basic strategic line is first to analyze an image and, secondly, to make didactic proposals for it. The images of the textbook are 435 in total which is a very large number to be analyzed in a brief article; for this reason, we have chosen the most characteristic examples of them, in order to mark the analysis framework and explain our conclusion in the best way.

On page 89, at the chapter "The Greek War of Independence in Sterea Ellada (1821-1829)" there is an extended reference to the Greek warlord Athanasios Diakos. Diakos with a few men tried to stop the march of the Ottoman general Omer Vryonis at Alamana river, but was defeated and found death. At the end of the chapter there are three images. At the first, Diakos depicted at a far personal distance and equal perspective angle, avoids looking the viewer direct in the eyes; it is the viewer who must observe, to think about the chieftain's martyrdom and emotionally participate to it. At the center there is an image of Diakos's monument at the place of his death. It is photographed in equal angle and black & white colors to emotionally excite the viewer. At the last image, Omer Vryonis, the winner of the battle looks the viewer strait in the eye, reminding his victory. The close personal distance emphasizes on his personality and probably leads the viewer to study more about Vryonis.



Using these three images in the teaching procedure, the educator is able to approach this chapter starting from the visual material. A directed dialogue technique can be used to reveal what these portraits want to tell us. Then, divided in workgroups, the students can make a brief webquest on Athanasios Diakos, Omer Vryonis and the Battle at Alamana. A final discussion of how each student feels about this historical event can be used in role-playing game; a student can be a Greek or an Ottoman soldier, another one a Greek peasant who observes the battle, another Diakos or Vryonis, another a foreigner who learns about the result of the battle, etc.

In addition, the educator can also use geographical simulation software to observe the place of the battle as it is today. Finally, the students can make their own artistic creations having in mind all the above information; it would be interesting to review their creations (eg if they depict persons or battle highlights).

3. The survey findings; brief presentation and discussion

Reviewing the **use of Perspective**, from the 435 images of the textbook, a 56.1% shows an equal viewing level (vertical equal angle), a 35.9% puts the viewer to a dominant position (vertical high angle) and only the 8% puts him to a lower level (vertical lower angle). A 57.2% of the images involve him to the action depicted and a 42.8% limits him to the role of a mere observer.

Full engagement; the scenes that put the observer at a dominant position are basically action images (e.g. Fall of Constantinople, battles of the Greek War for the Independence, etc), group of moving people representations (e.g. Greek immigrants, terrified Vietnamese people, etc) and some panoramic views (e.g. Vienna, Florence, Athens, etc). On the other hand, the images which bring equality at the artist-observer connection are mainly static. This category is consisted by portraits, images of groups posing at the camera (e.g. Jews at concentration camps, relatives of missing Greek-Cypriots, etc) and some city views (e.g. Santorini, Thessaloniki, etc). The observer is put to a non-dominant position mainly at images that show monuments and buildings, revealing the creator's effort to inspire awe.

Indirect or non-engagement; the observer gets a higher position mostly in action images (e.g. battles and historical events) and groups either of officials (e.g. diplomats, noblemen, etc), or large crowds (e.g. protesters, refugees, etc). An equal line of observation is obtained at portraits that avoid an eye-to-eye contact and groups that live their own drama (e.g. Jews ready to board to a train with unknown destination, relatives of the executed from Nazis at Distomo, etc). In this case, the observer is not involved but sees action from an equal and non-safe position, therefore, this leads him to an empathic attitude. Finally, the cases of a low observation angle and indirect involvement are only a few buildings and monuments.

Use of perspective in 6th grade's Greek History textbook

ANGLE		HORIZONTAL				TOTAL	%
		FRONTAL	%	OBLIQUE	%		
VERTICAL	HIGHER	82	32,9	74	39,8	156	35,9
	EQUAL	151	60,6	93	50,0	244	56,1
	LOWER	16	6,4	19	10,2	35	8,0
	TOTAL	249	57,2	186	42,8	435	100,0

Reviewing the **Social Distance**, it has been examined entirely on the 132 textbook's portraits. These images, basically paintings and photographs, are the most populous theme of the book. They can be found in every unit (14 in the 1st, 39 in the 2nd, 47 in the 3rd, 8 in the 4th and 24 in the 5th); the ratio of appearance in these units reaches its largest value in Unit 4 ("Greece in 19th century", almost one portrait per page).

As to the depicted persons' *identity*, the greatest percentages of them (31.8%) are military men and scholars (23.5%). This bipolarity is amplified by adding alongside the military men all the portraits of politicians/diplomats (22%) and monarchs (6.8%), while, respectively, the intellectuals include clerics (6.8%). The largest amount of military portraits appears in the 3rd Unit ("The War for the Independence"), while the most intellectual men can be found on the 2nd Unit ("The Spiritual Awakening of the Greeks"). Therefore, it is easy to conclude that that the textbook's illustration places great emphasis on the faces of protagonists, probably connected to a formalistic view about leaders' and peoples' contribution to the development of History.

Regarding the *view* of the depicted persons, almost half of the portraits represent personalities in close/personal view, showing the head and the shoulders of the depicted person. This percentage can lead us to conclude that perhaps an intimate relation between the artist and the observer is sought; this could be proved true

considering the small percentage of social distance (25.8%). However, this clue is not enough; the percentage of a *direct eye contact* must be examined. Reviewing the data retrieved from this viewing angle, we realize a potential equilibrium; a direct contact can be confirmed only at 60 out of 132 portraits. Hence, adding these data, we can deduce that the illustration's intention is a *cautiously* close artist-observer connection. These portraits, in other words, could tell us " *watch me, don't only look at me!*"

Social distance in 6th grade's Greek History textbook portraits

VIEW/EYE CONTACT	UNIT					CATEG. TOTAL	%	FULL TOTAL	%
	1st	2nd	3rd	4th	5th				
INTIMATE/ DIR.*				1	1	2	1,5	5	3,8
INTIMATE/ INDIR.		2	1			3	2,3		
CLOSE PERSONAL/ DIR.	6	8	12	1	7	34	25,8	65	49,2
CLOSE PERSONAL/ INDIR.	2	6	13	3	7	31	23,5		
FAR PERSONAL/ DIR.	2	2	6		1	11	8,3	28	21,2
FAR PERSONAL/ INDIR.	2	5	7		3	17	12,9		
CLOSE SOCIAL/ DIR.		2			1	3	2,3	7	5,3
CLOSE SOCIAL/ INDIR.		3		1		4	3,0		
FAR SOCIAL/ DIR.		4	2	1		7	5,3	19	14,4
FAR SOCIAL/ INDIR.	1	6	3	1	1	12	9,1		
PUBLIC/ DIR.	1	1	1			3	2,3	8	6,1
PUBLIC/ INDIR.			2		3	5	3,8		
TOTAL	14	39	47	8	24	132	100,0	132	100,0

*DIR.=DIRECT, INDIR.=INDIRECT

4. Didactic conclusions

Reviewing the above finding, we can conclude that the Interpersonal Metafunction's methodology of the *Grammar of Visual Design* finds many applications in the survey's textbook. As to the examination of the historical events, the role of the leaders is emphasized largely. This consideration can be often used by the teacher to discuss with the children the percentage of the leaders' or the peoples' contribution to the course of historical events. Moreover, the dominant and the equal angle of perspective mean that the viewer is called to participate to the events, to carefully observe and to express him through these. Only in a few cases the viewer is submitted to them; this can be counted as a positive point for the textbook, regarding its use in everyday teaching. Finally, the use of directed dialogue along with the technology as key-practices in a self-acting framework could direct the teaching procedure to the development of critical and creative thinking. Finally, reviewing textbooks using the *Grammar of Visual Design* can lead us to useful conclusion about future textbook reviews.

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