The Development of a Visual Literacy Course in Higher Education

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1. The aims and scope of this study

The Aristotle University of Thessaloniki in Greece has provided a curriculum for the post-graduate programme titled ‘Italian Language and Culture’. We have contributed to this curriculum by designing an innovative course titled Visual Literacy in Language Teaching and Learning for the students that have chosen the specialization ‘Applied Linguistics’. We have followed the ‘new pedagogies of multiliteracies’ to shift from the dominant print text and examine how literacy can be practised when analysing video, as a new form of multimodal text, in the new millennium. By employing this new concept of pedagogy, we aim to introduce a framework consisting of two elements, a systemic functional (SF) approach and multimodal discourse analysis (MDA) to describe the activities of individuals as they identify, read and create new texts using a variety of semiotic codes. The reason for introducing this approach to literacy in a university setting was a response to the call for higher education to adopt a strong commitment to visual literacy that would be socially pertinent.

While the contemporary curriculum of the programme offers a variety of courses to improve students’ language skills for this specialization, its focus has remained relatively narrow. It is now apparent that

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1 New London Group, 1996
2 Bleed, 2005
changes primarily brought about by the use of video as teaching material in the language classroom have created new opportunities for video as a tool to promote and enhance the study of non-verbal semiotic modes of communication in multimodal texts.

The starting point for the development of the course was the realization that we had to design an introductory course that would meet students’ basic requirements for them to understand visual communication. We had to balance between two conflicting aspects: firstly, there was the time constraint, since the course had to be completed in twelve lessons of three instructional hours each, and secondly, given the fact that visual literacy is a wide-ranging subject, we had to be very limited in scope and particularly focused. For that reason, we decided to use only one type of multimodal text, namely video, by adopting established theoretical concepts and teaching methods and tools.

This paper reports briefly on the first intake of the course. Since we are still in the cyclical process of designing the course, applying it, reflecting on it and modifying it, we now present an overall evaluation, with the intention of making the necessary amendments for a future version.

2. The pedagogic potential of the visual

According to Turner\(^3\), we could analyse image composition and sequencing in ways similar to the vocabulary and syntax of verbal language. Such an analysis, we argue, could be expanded by substituting ‘language’ for all ‘semiotic modes of communication’ which may have a structured form (e.g. images, colour, music, graphics). Bearing this in mind, we aim to demonstrate possible ways of analysing the video as a multimodal text\(^4\) in order to find out which semiotic resources of representation have been exploited to favour one viewpoint and render all other irrelevant.

\(^3\) Turner, 1994  
\(^4\) Hocks, 2003
Our starting point has been the work of Iedema\textsuperscript{5}, Jewitt and Oyama\textsuperscript{6}, and Tseng\textsuperscript{7}, who used a number of social and visual research methods\textsuperscript{8}. We followed Iedema’s work to analyse a documentary by employing a social semiotic analysis of tele-film based on the hypothesis that all meaning-making resources perform three overarching functions, or metafunctions\textsuperscript{9}, that is, the ‘representational’, ‘interpersonal/interactional’ and ‘compositional’. The teachers that understand these three meanings of images would be able to choose or create the right images and use them to teach English language skills and sub-skills.

By adopting Jewitt and Oyama’s visual social semiotics approach as a tool for use in critical research, we aimed to help students identify and analyse possible relations between the verbal and visual elements of a multimodal text, and to bring to light contradictions that are not evident at first sight. The work of Tseng\textsuperscript{10} on the interaction of co-occurring modalities and how they combine and cohere to create meanings became a method for the students to investigate how meaning creation takes place. In addition, according to Mayer\textsuperscript{11} and Jin and Boling\textsuperscript{12}, teaching that integrates both verbal and non-verbal semiotic modes demonstrates better outcomes than does teaching with verbal-only or non-verbal visual modes.

Similarly to many researchers worldwide, we investigate two key questions, using the video as a data-multimodal-text: first, if the processes involved in watching videos develop different cognitive abilities than those required for reading and writing traditional print-

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\textsuperscript{5} Iedema, 2001  
\textsuperscript{6} Jewitt and Oyama, 2001  
\textsuperscript{7} Tseng, 2008  
\textsuperscript{8} Rose, 2007  
\textsuperscript{9} Kress and Van Leeuwen, 1996  
\textsuperscript{10} Tseng, 2008  
\textsuperscript{11} Mayer, 2003  
\textsuperscript{12} Jin and Boling, 2010
based texts, and second, if these new modes of communication merely require traditional literacy skills to be applied to new types of texts.

Curriculum documents and assessment requirements for reading and writing are based on established theories on the reading and writing of print-based texts. These theories have determined specific approaches and strategies for teaching reading and writing to assist learners at all stages of learning. Yet, ongoing research is required to theorize the interactions that occur as learners read and process various visual, aural, spatial and textual modes, separately or simultaneously, in multimodal texts.

Although the backbone of the course was the visual, we aspired to develop a classroom learning experience that would be appropriate for all forms of literacy. For that reason, we needed to examine how new semiotic modes can be integral to classroom communication. For example, teaching English as a foreign/second language involves four skills: listening, speaking, reading and writing. If we were to consider visual literacy as an additional aspect of language teaching, then ‘viewing’ could be added as a skill in the future. Moreover, this visual aspect is relevant to students and teachers alike.

3. Defining visual literacy

A very broad definition of visual literacy could be ‘the ability to understand and use visual images, including the ability to think, learn and express oneself by means of visual images’. Such a definition, or similar, has become such common knowledge that it might even be accepted in academia to the extent that references are omitted. However, the definition of literacy is still in flux. This is so because there are multiple levels and kinds of literacy, where no single level of skill or knowledge could qualify someone as being literate. This does not mean that the term visual literacy is a completely new one. It was first used by Debes\textsuperscript{13}, a pioneer in the field who contributed to the

\textsuperscript{13} Debes, 1968
systematic understanding of visual literacy skills from a theoretical perspective.

The term ‘visual literacy’ originated from a variety of disciplines, with many conflicting definitions developed. According to Hortin\textsuperscript{14}, ‘[d]isciplines such as art, education, English, linguistics, philosophy and psychology have contributed to our knowledge and understanding of visual literacy’. Another factor that contributed to this status quo has been the fact that visual skills have been thus far acquired through experience\textsuperscript{15} rather than formally taught.

After a series of experimental studies, Avgerinou\textsuperscript{16} concluded that ‘in the context of human, intentional visual communication, visual literacy refers to a group of largely acquired abilities, i.e., the abilities to understand (read), and to use (write) images, as well as to think and learn in terms of images’. The design of this course and the empirical work conducted is also seen as a continuation of these series of studies aiming at refining and validating the definition of ‘visual literacy’.

As there are many definitions of visual literacy, each visual medium has its own characteristics, producing different visual literacies and requiring different skills. For the purposes of our course, we define visual literacy as

the ability to understand and produce visual messages…a group of competencies that an individual can develop by seeing and at the same time having and integrating other sensory experiences…and the ability to interpret messages as well as generate images for ideas and concepts.\textsuperscript{17}

4. The need for visual literacy in the language classroom

\textsuperscript{14} Hortin, 1994: 21
\textsuperscript{15} Moore, 2003
\textsuperscript{16} Avgerinou, 2003: 36
\textsuperscript{17} Bleed, 2005: 5
Well before the 21st century, we were flooded with visual messages of all types in a wide range of media, mainly the Internet and television, both in personal and private spaces. The ability to decode visual expressions and to consider them critically has become an essential skill for researchers and teachers in education. We think it is high time to pass this skill on to students as a powerful learning tool in the development of creative, critical and independent thinking. We do not imply that teachers and researchers have fully mastered this visual literacy skill. On the contrary, we strongly believe that imparting this body of knowledge to students will better enable teachers and researchers to reflect on their practices and to propel the field of visual literacy one step forward.

Bernhardt\textsuperscript{18} argues that ‘[r]eaders of on-screen text interact physically with the text. Through the mouse, the cursor, the touch screen, or voice activation, the text becomes a dynamic object, capable of being physically manipulated and transformed’. Bernhardt goes on to stress that we must begin using visual literacy in the composition class because our students are interacting more and more with these ‘dynamic’ texts in school and on the job. Following these arguments, rather than merely viewing the video, our students were instructed to use it in a more interactive mode to convey ideas and to solve problems.

Nevertheless, the inclusion of visual literacy-based activities in the language classroom should be done with great caution. For example, in the First-year Writing Program at Virginia Tech, teaching visual literacy was believed to be just too much for the level of first-year composition.\textsuperscript{19} This concern was voiced because the addition of lessons to cover visual literacy moved the academic essay to more electronic or visual formats. Therefore, since the core writing requirements shifted, then first-year composition would have to shift to match the change.

\textsuperscript{18} Bernhardt, 1986: 154
\textsuperscript{19} Brizee, 2003
In the field of foreign language teaching, visually literate teachers that are capable of choosing or creating visual images could use them to enhance the students’ achievement in learning. In addition to teaching visual literacy skills to language learners per se, the integration of a visual component in some of, or all, the stages of the teaching and learning processes, might foster the teaching of the four traditional English language skills: listening, speaking, reading and writing. Visual literacy may also help teachers to design more attractive teaching and learning processes that could better engage students in learning activities. Studies have consistently revealed that teaching with words and visuals has more favourable results than teaching using only words or only visuals\(^{20}\).

However, language and image should not be separated as this would create an unnatural boundary. In the visual and verbal dyad, one is not higher than the other; in fact, they complement each other. This is pertinent to McKim’s\(^{21}\) argument that ‘the thinker who has a broad command of graphic languages…can find more complete expression for his thinking’.

Thus, recognizing the value of the theories surrounding visual thinking and visual language (and their pedagogical implications), composition instructors are now applying elements of visual literacy in writing classrooms.

5. The structure of the course

Although initially designed for language purposes, the course turned out to have a flexible design so as to be adapted appropriately across the curriculum. An example of such an approach is mirrored in the anthropology course taught at Mesa Community College, where a research paper in the form of a print assignment was replaced with the creation of digital movies by the students\(^{22}\). In our course, the students

\(^{20}\) Jin and Boling, 2010

\(^{21}\) 1980: 124

\(^{22}\) Bleed, 2005
were given electronic assignments, in the form of slideshows consisting of visuals, audio and short written commentaries, to demonstrate the application of relevant theoretical concepts. Table 1 provides an overview of the course.

Table 1 An overview of the structure of the course

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The course was structured around a basic pedagogical framework: orientation, research and evaluation. First, the students were introduced to the study, then they put the new knowledge gained to practice, and finally they went through a process of evaluation. Given the limitations mentioned above, we divided the course into twelve lessons, each consisting of three academic hours.
The course is structured around the SF-MDA model\textsuperscript{23}, where communication does not take place in a vacuum but is embedded in social practice. It is also possible to investigate meaning arising from the integrated use of multiple semiotic resources. The creation of meaning could be explored through three metafunctions: representational (narrative and conceptual structures), interpersonal (visual acts, social distance and perspective) and compositional (information roles, salience and modality), all potentially valid and necessary. These metafunctions are filtered through the elements of MDA examination: content, design, production, expression, distribution and discourse. Given the limitation of this paper, it is not possible to analyse in depth the relevant theories.

Overall, the course introduces the grammar and expressive potential of visual forms. It applies methods developed by social sciences and humanities for the study of perception and interpretation of the visual world. It requires students to be creators as well as interpreters through the production of visual statements, such as visual essays, and expressions using new media. Finally, it prepares students to view and understand information presented in modes used in a variety of disciplines and areas.

5.1 Pre-measurement

In this first stage, we tried to assess students’ visual literacy skills by means of a questionnaire and a focus group discussion. At the moment, we argue that there are still no established methodological tools to assess visual literacy skills. For that reason, we narrowed down this stage by presenting only its practical considerations, leaving theoretical input for later stages of this research.

First, we used a semi-structured questionnaire which we divided into four sections. These sections consisted of a set of questions corresponding roughly to the three stages of the SF-MDA model and to a fourth stage called ‘the intertextuality of the video’. The

\textsuperscript{23} O’Halloran, 2008
questionnaire was accompanied by a print-out of fifty selected still frames extracted from the video. The interview was semi-structured and conducted immediately after the students had seen the video. It was structured around our analysis, but we were flexible enough to allow the discussion to expand in other areas as well. We decided to give no help to the students about how to answer the questions so as to find out the extent to which these questions are helpful without any kind of support.

We chose a short video (eight minutes long) from the military field, for its provocative content was expected to stimulate students to answer spontaneously, for example, either by arousing their curiosity or by raising anti-war feelings. It was produced in the middle 70s and presents Stinger a man-portable, shoulder-launched, guided, missile air-defence system, in a documentary-like style.24

Due to the limited space here, we provide only a summary of the students’ answers. As it concerns the representational metafunction, half of the students divided the video into three stages, roughly speaking, ‘00:00-00:30’ (introduction), ‘00:31-08:30’ (main part) and ‘08:30-08:40’ (conclusion), without justifying their answers. These time periods coincide (almost) with our four-part split of the video based on the different music motifs. Interestingly, one student divided the video deductively from the outcome, through a reverse course of action. Occasionally, there were sincere efforts to support their choices with references made to particular frames. For example, a couple of students identified triangles or squares formed by various participants that make a group of people.

In the interpersonal metafunction, the sound element played a key role. The music’s intention, according to the students, was to attract the viewer’s attention, either by producing negative emotions or by creating excitement. Additionally, it was identified, but without giving more information, that the intonation of the narrator’s voice differed throughout the video.

24 See also Christodoulou and Damaskinis, 2011
Data on the third metafunction is limited because the students ran out of time, thus failing to provide an answer or answering very briefly. Of particular interest are answers of the type ‘the rigidness of the participants’ bodies attracts attention’ or ‘the lack of colour gives to the video a sense of robustness and solidity’.

The few students who managed to complete the fourth stage related the video intertextually to the genre of the historical collection and documentary. In the focus group interview that followed, some students said that the particular questions were designed to guide their thinking, but they could not tell in which direction. Also, the number of attached video frames was, according to the students, small for the purposes of the activity.

At the end, a demonstration of the video and audio editor program Windows MovieMaker was provided using the video clip of a popular song. The students were introduced to the basic functions of this program so as to be able to edit visual and audio elements of videos. The program was chosen because it is available on every computer that runs on a Windows operating system.

5.2 Contact with the visual

The students were given a basic bibliography in visual literacy including international and Greek sources, and they were asked to locate additional Greek sources only. At the same time, they were introduced to the SF-MDA model. This introduction consisted of basic principles of visual literacy, systemic functional linguistics and multimodal discourse analysis. For three consecutive lessons, a full lesson was devoted to each metafunction, consisting of a brief lecture followed by a practical application to a video advertisement about the Porsche 911.\textsuperscript{25} Bearing in mind that multimodal analysis is time-consuming, its short duration (3.5 minutes) allows for in-depth

\textsuperscript{25} \url{http://www.youtube.com/watch?v=Z-lVDfb5PTI}
analysis of the whole video, and as an advertisement it is ‘most suitable for analysing the interplay of verbal and visual elements’.\textsuperscript{26}

In the lectures, we used actual images from magazines and textbooks rather than pictures projected on slideshows. We did this in order to engage the students in discussion with the rest of the students and the instructors in an active, ‘tangible way’, rather than just having them passively watch slideshows. The application of the three metafunctions involved discussion around short extracts from the video, static frames and audio elements (sound/music/dialogue) extracted from the video.

We encountered three problems in this phase. First, the students lacked the necessary theoretical foundations of the visual, in general, and of systemic functional linguistics, though it is difficult to establish what entails a basic theoretical introduction to visual theory. Second, the students found it difficult to use the ‘technical’ (according to their own statement) terminology related to describing visual material. Third, all students struggled to locate relevant Greek references for these metafunctions. Despite these difficulties, the students responded positively and demonstrated a willingness to participate in the lessons.

5.3 Increasing Visual Awareness

A core strategy was to give students the opportunity to explore visual literacy by preparing a short literature review of a limited number of relevant sources from the Greek bibliography. Thereby, they would assume responsibility for their own learning, while at the same time honing their general research skills.

The students were asked to comment on some of the references they had found in the previous phase and to determine the extent to which the three metafunctions were covered in the Greek literature. In order to achieve a holistic application of SF-MDA, we used the same video as in the previous stage because it would be easier for them to follow

\textsuperscript{26} Torresi, 2008: 66
the complex discussion. However, some students became bored with watching the same video again and again, while some were ‘depressed’ by repeatedly listening to the accompanying music.

5.4 Consolidating Visual Literacy

In this stage, the floor was given almost exclusively to the students. They had to choose a short video (about 6 to 8 minutes long) and apply the SF-MDA model. They could choose to apply the entire model, or a particular section, to short extracts from the video, static frames and audio elements. Although they were free to choose their own way of preparing their slideshows, all students followed the model we used in our presentations. The subjects of the videos ranged from advertisements and movie trailers to environmental and social messages found on the internet. Most of the students chose a video whose subject was relevant to their potential dissertations or professional background. Additionally, the students submitted a Greek literature review in visual literacy as a written assignment.

5.5 Post-measurement

We repeated Stage 1, the ‘pre-assessment’ stage, in exactly the same experimental conditions, to find out the differences in students’ answers before and after their introduction to visual literacy skills. We did not aim to examine the extent to which the course was remedial in increasing their skills in visual literacy, but simply to explore its effect on students in order to improve the subsequent versions of the course. All things considered, we believe that it would be premature to establish generic criteria of what constitutes a visually literate person.

On the whole, at this stage the students provided more extensive answers and were generally more willing to elaborate on them, however without being very critical. Most noticeably, this is illustrated in the association of the various sounds (e.g. narrator’s intonation, music and missiles launching) to create different effects, such as attracting the audience’s attention, denoting solemnity or connoting triumphal tones. A couple of students related the scientist’s
white shirt with a sense of formality, scientism and research. But where the music and the narrator’s intonation were concerned, the students felt as if they were watching a film. On the other hand, a couple of students ignored all sound elements and paid attention only to the moving pictures. Another instance that indicates an awareness of the interpersonal metafunction is the human silhouettes’ ‘rigidness’ as an attention-attracting device. Several students pointed to the lack of diegetic sounds such as dialogues, moving vehicles and lab activity.

If the students had to remake the video today, they would prefer electronic music, a narration with a different intonation and more frames/shots of the missile rather than humans since the purpose is to present technology. Finally, some students answered simply by giving the number of a frame.

5.6 Self-evaluation

First, as homework, the students had to compare and contrast their answers in the pre-assessment and post-measurement phases. Second, we conducted a critical analysis of all aspects of the course through a focus group interview with the students in the classroom. Of particular interest is the students’ acknowledgement that in the post-measurement phase their answers were affected because they tried to relate them to the theories and practical applications of the course.

The fact that they had already seen the video gave them the opportunity to be more attentive this time. Also, some difficulties regarding the understanding of semi-specialized vocabulary in pre-assessment had been solved by then. All students felt somewhat uncomfortable discussing non-verbal elements, which probably stems from a lack of contact with visual literacy. Some students said that although the video is in fact a documentary, the music made them feel as if watching a film, and they described this contradiction as a conflict between the ideational and interpersonal metafunctions.
Finally, the students said that if they had known in advance that there would have been a post-measurement stage, their answers in the second questionnaire would have been biased.

6. Conclusion

In this paper, we presented the design, application and evaluation of a post-graduate course in visual literacy. Despite certain limitations in terms of the number of instructional hours and students’ lack of formal learning in visual literary, we had the opportunity to reach some very interesting conclusions. Perhaps one of the most interesting findings was our difficulty to explain two important aspects of visual literacy: why we need visual literacy skills, both as individuals and foreign language teachers, and the concept of video as an autonomous type of (multimodal) text that is to be viewed, edited and analysed for pedagogical purposes.

Frequently, we had to resort to parallelisms with other more traditional methods of teaching and learning in order to demonstrate this need. For example, the identification of the participants in a video was compared to the characters of the novel, or the different frames, shots, scenes and sequences to the unfolding of the plot.

The SF-MDA model provides an effective tool for teaching visual literacy skills. Yet, it is dependent on background knowledge and theoretical concepts of the visual as a semiotic mode of communication, including systemic functional theories and verbal-visual associations. Additionally, the set of questions asked and the different stages were taken as they were, rather than being modified after taking into account the video as a channel of communication, or its particular subject. This reinforces the need to refine the model by developing different questions, and even stages, for different types of multimodal texts.

The students were generally troubled at the beginning as to the overall purpose of analysing visual material for teaching language skills. The literature review they prepared was poor in the number of Greek
Nonetheless, bearing in mind their limited background in visual literacy, they were relatively eager to identify possible areas of application for the SF-MDA model. They soon became excited about being free to choose their own videos to present their application of the model in the classroom. Most of these presentations showed an understanding of multimodal principles, as demonstrated in the classroom, without however going into in-depth critical analyses. Their choice of video shows an understanding of selecting the most appropriate video-text for their own teaching practices.

Our initial intention was to provide a very specific, though sharply defined, point of view in visual literacy, namely that of the SF-MDA model applied to the analysis of a video. Hopefully, this approach will be supplemented by other approaches in verbal-visual education. The findings reported here point to the need for further research towards gaining an understanding of how to aid the development of teachers and students’ visual skills in language teaching and learning.

Finally, we are faced with the dilemma of whether to offer this course again to post-graduate students or whether to design a modified one for undergraduates. Although we have not decided yet, we are inclined towards the second option because we consider students who lack formal education in visual literacy ill-equipped to be introduced to the SF-MDA model.

References


