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Crafting digital multimodal texts: an analysis of remix patterns

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Abstract

While multimodal literacy research is extensive, there is only a handful of studies that have examined how pre-service teachers remix semiotic resources to construct digital multimodal texts. Focusing on multimodal text making, this work examines the extent of remix and maps out the layout of the semiotic resources used in this process. This paper draws on 65 digital multimodal texts that a cohort of pre-service teachers created in the context of a digital media course. The multimodal data analysis indicated a broad spectrum of remix patterns. Two dominant remix patterns are identified, encapsulation and synthesis, and are illustrated using using two representative examples. The paper is concluded with a discussion of the findings and the potential of remix approaches for digital literacy.

Key words: remix, multimodal text-making, message structure, digital video, semiotic resources

Introduction

Contemporary communication landscapes are characterized by two facts. First, writing is not the dominant mode of communicating meanings. Second, literacy is heavily shaped by digital technology, both in terms of reading and in terms of writing.

Regarding the former, initially, the term literacy referred to someone who could read and write text. By definition, the notion of letters was integral to the definition of literacy. The traditional literacy approach involves dealing with print: reading fluency, reading comprehension, and writing. According to this approach, text (in the form of writing) is the core element in the process of conveying meaning. On the other hand, according to modern approaches to literacy writing is no longer the core literacy element in and of itself. In contemporary communicative practices visuals dominate and media messages are inherently multimodal. To fully understand literacy today, one would need to take a closer look at media culture and consider what modern-day writing involves. The new textual landscapes that have been formed are primarily screen-based rather than print-based. In these new landscapes, visuals prevail and writing as a mode is no longer dominant: current text-making practices draw heavily on visuals. Consequently, constructing a message today relies on using visual imagery, static and moving images. Hence, while traditional approaches to literacy are characterized by monomodal notions of writing, in contemporary textual landscapes, neither reading nor writing are monomodal any longer.

Regarding the latter, the impact of technology on literacy is profound, as digital technologies have come to redefine communicative and literacy practices (Manovich, 2013). Digital tools make additional modes readily available to text-makers. The implications of this fact cannot be understated. Digital media expand meaning-making potential, as they offer a new set of media through which meanings can be crafted. Additionally, new resources become available, opening up new ways of combining these resources to communicate meanings (Hull & Nelson, 2005; Ranker, 2008). Due to the fact that the

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different modes can be combined in several ways, the meaning making potential with digital media vastly expands (Kress, 2003; Hull & Nelson, 2005; Ranker, 2008). Consequently, the possibilities for meaning-making with digital media are multiplied (Kress, 2003; Hull & Nelson, 2005).

To date, the main research emphasis has been on how to combine modes to craft multimodal texts. In the context of multimodal literacy research, the processes through which students create digital multimodal texts have been systematically examined. In the course of the past two decades, several studies have looked at multimodal meaning making. As most studies originate in the field of multiliteracies, the focus is mostly on the processes through which the participants construct meanings by combining the new semiotic resources that have become available (e.g. Bruce, 2009; Smith & Dalton, 2016; Smith, Kiili & Kauppinen, 2016). In this context, scholarship has examined – among others – static images (Kress & van Leeuwen, 2005), moving images (Burn, 2003; 2013; van Leeuwen, 1996), color (Kress & van Leeuwen, 2002), and texture (Djonov & van Leeuwen, 2011).

Comparatively less attention has been devoted to how users structure these multimodal texts. This involves looking at how the semiotic resources are combined in order to create a text that conveys the indented meanings. Bezemer and Kress (2017) point out the need to develop a new meta-language that might account for the complexity that arises in meaning making in the new textual landscapes. The new digital texts that are composed involve multimodal designs that require familiarity with new semiotic resources (static images, moving images, sound, graphics), knowledge of the affordances of each resource, mastery of new ways of combining such resources, and an understanding of the digital tools (e.g. presentation and video editing software) and platforms (e.g. YouTube, Facebook, Instagram, TikTok) that can be used in text-making. Overall, as they put it, the complexity that characterizes the new multimodal text-making practices has not been accounted for. Broadly situated in this multiliteracies framework, the present work aims to provide an account of digital multimodal text-making by examining the texts created by a cohort of pre-service teachers (PST) in the context of a course on digital media. In particular, this study explores how PST used semiotic resources to craft digital multimodal texts in the form of digital videos.

Theoretical Framework

There are two possible routes through which modern-day text-makers can create multimodal texts. First, they can create the semiotic resources themselves, namely capture images and videos, record audio, create 2D and 3D graphics, and create typographic elements to mention a few. This is very demanding because the text-makers will need to master the new visual language, the hardware that is required to capture these resources and the software that is required to edit these resources in order to craft multimodal messages.

Second, young people can use existing semiotic resources. This involves re-using digital media of all types (images, videos, graphics, sounds etc) that are abundantly available on the internet. Unlike the first route, which is more demanding because the PST will need to familiarize themselves with hardware devices and software applications, the latter is far more appealing: there is no complexity and the PST can simply search for digital resources, download them on their systems, and use an appropriate software application such as a Non-Linear Editor (NLE) to craft their digital multimodal text in the form of a digital video. This latter route is faster and far more convenient for creating digital multimodal compositions.

In fact, this route is commonly referred to as remix and it involves the utilization of existing cultural artifacts for creating new ones (Lessig, 2008; Jensen, 2006). Contemporary text-makers re-use resources that are available, re-purposing them and adapting to suit their own communicative needs. Current participatory practices are characterized by creative media production, which involves remixing all sorts of media to create new media (Jensen, 2006; Jewitt, 2008; Ito et al., 2009; Knobel & Lankshear, 2008; Burwell, 2013; Edwards, 2016). Based on the extent to which people today deconstruct, rework, re-purpose, and re-engineer media, Kafai and Peppler (2011) argued that remix is at the heart of contemporary culture.

A handful of studies have explored remix practices though only tangentially (e.g. Albers, 2012; Gürsimsek, 2016; Katz & Shifman, 2017; Smith, 2017). We were able to locate only one study with a direct focus on remix. More specifically, Hafner (2015) examined the digital videos crated by 13 groups of undergraduates in the context of an English for science course. He identified a range of mixing practices and proposed a remix model. However, it should be pointed out that - in addition to using stock images and footage - the participants in Hafner's (2015) study were required to create their own resources (images, videos, typographic elements).

Considering the dearth of research on remixing resources for text making, this study examined how PST used semiotic resources to construct digital multimodal texts in the form of digital videos. In particular, the study objectives were (a) to examine the extent to which PST engage in decomposing original texts and remix them to create novel texts and (b) map out the layout of the semiotic resources used in the texts remixed. It should be noted that our interest was primarily in visual imagery, namely static images and moving images. The following research questions were addressed: In the process of composing digital multimodal texts:

#RQ1: What is the extent to which the PST remix semiotic resources?

#RQ2: What are the main patterns of semiotic resource structuring?

Method

Participants and Context

The study participants were 86 female student teachers from a pre-school education department in Greece. The participants attended a semester-long course on digital media. More specifically, the course involved a lightweight introduction to digital media and comprised two main components: technical and semiotic. The former constituted an introduction to multimodal text-making that aimed to familiarize the students with the semiotics of the grammar of moving images, light, and color. Particular emphasis was given to the semiotic dimensions of sculpting media in terms of time (montage), space (compositing), and form (video and audio effects). The latter involved familiarization with the software tools that allow the creation, processing, and remixing of digital media. Three main digital tools were covered for image, audio, and video processing respectively: GIMP, Audacity, Kdenlive. Throughout the semester the course involved two weekly sessions, 3 hours for lectures and 2 hours for lab work.

To demonstrate mastery of the concepts and tools, the students were required to create a short multimodal text in the form of a digital video (duration between 1-5 minutes). This multimodal text was the main course deliverable and amounted to 40% of the final grade. The explicit instruction given was to create a multimodal text what would communicate a message to a viewer. The topic of this message was not subject to any restrictions: the PSTs

could select any topic that was of interest to them. Moreover, no genre-related restrictions were imposed. The participants were completely free to pick any genre that they considered appropriate for communicating their messages, i.e. a video informing the viewer about the grave problem of marine pollution or a video parody of a specific person or event. Finally, the PSTs were allowed to re-use any semiotic resource that they deemed appropriate for composing their texts. More specifically, the default and recommended source of semiotic resources was the internet: the student teachers could remix any resource that was available on the internet: images, videos, animated GIFs, sounds, and music.

Data sources and Analysis

In total, 65 digital video projects were submitted as part of the final course assignment and were analyzed for the purposes of this study. Eight video projects were not included in the study data because the students captured images and videos themselves rather than remixing stock media. Finally, the remaining projects did not meet the assignment specifications and were also excluded from the study.

As there is no established method for analyzing digital text structures, we relied on artifact analysis (Willig, 2013) and loosely followed the multimodal analysis scheme advanced by Serafini and Reid (2019). The shot was the main unit of analysis used in this study (Smith, Kiili & Kauppinen, 2016; Hafner, 2015). We considered a shot to be any discrete semiotic resource that could be imported in the project bin and placed in the timeline of a video editor: image clip (static image), movie clip (moving image), and title clip. Every shot in each digital text was examined to determine the extent of remix (source clip, clip duration, number of cuts, and relation to other clips).

Results

The PSTs created digital multimodal texts that spanned a wide range of different genres, serving many different communicative objectives such as inform viewers on a topic (e.g. marine pollution), sensitize viewers to a social behavior (e.g. child abuse), educate the viewer on an issue (e.g. bullying), and entertain viewers (e.g. meme of a popular TV show). Regarding the first RQ, data analysis indicated that the extent to which the PST decomposed original texts, extracted chunks from them, and re-assembled the chunks into new texts varied considerably. A broad range of remix practices were identified, ranging from minimal to extensive. The former was characterized by the combination of a few semiotic resources without practically reworking them. The latter was characterized by extensive re-engineering of the semiotic resources: the PST engaged in substantial reworking of the resources.

Regarding the second RQ, two main patterns were identified. The first pattern was labeled encapsulation while the second labeled synthesis. A more detailed account of each pattern follows next.

Encapsulation: wrapping a core resource with other resources

At the one end of the spectrum, the pattern identified involved using a core semiotic resource and wrapping it with other resources. More specifically, the dominant part of the final text is derived from an existing text and is relatively intact. For instance, in a video project on bullying the student utilized a viral bullying video, isolated a large chunk of it, and incorporated it in her own text. This means that in her own final text, this large,

uninterrupted chunk (i.e. sequence of shots) taken from the original bullying video is the core resource that carries the weight of the argument. As a result, this portion of the message (semiotic resource in the form of movie clip) is the dominant one and carries more weight compared to the other semiotic resources used, whose functions are purely supplementary or auxiliary. The other resources used, image clips and title clips, are secondary in importance and they encapsulate the core resource. The primary function of these supplementary resources is to either enrich or support the core resource, which typically communicates the central argument or main idea of the digital text. These supplementary resources (image clips and title clips) serve various functions such as situate the main idea, frame it, provide a specific context for it, extent it further, repeat the main idea, and make it clearer. An illustration of this pattern can be seen in Figure 1 below.

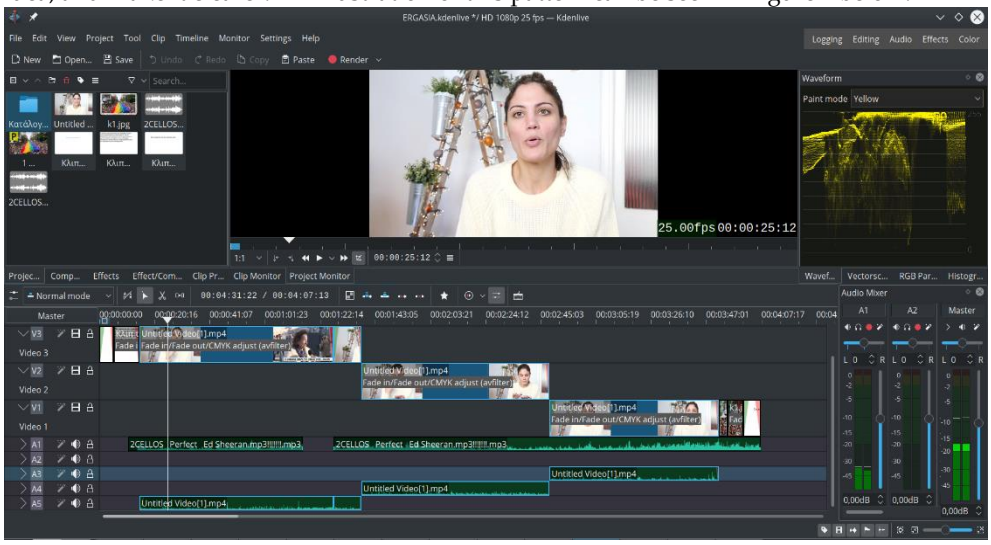

Figure 1: Screenshot from a video project illustrating encapsulation

As can be seen from figure 1, this student teacher remixed a few semiotic resources to craft her multimodal text. The final digital text submitted by the student was a 4′ minute long video on the topic of homosexuality. It should be noted that the main idea bearers in this text are four semiotic resources that come from an original digital text (video message) on homosexuality. The student incorporates four unedited portions of the original text in her message. The four clips from the original source video take up most of the time (starting at 15″ seconds and ending at 2′ 48″) and are used intact (i.e. unedited). These four resources are encapsulated with image clips (in particular title clips) in the beginning and the end of the digital text. The duration of the original digital text was 15′ 25″ and featured an interview with a famous Greek actress. While the student did not use the whole original message intact, it is obvious that her final text was practically derived from this original message: these video clips take up 3′35″ of the whole 4′ video. It is evident that the student deconstructed the original message and used the portions she deemed more apt for constructing her own text on this topic. While she did not use the original message in its entirety, she did use long, uninterrupted portions of it. Consequently, her final digital text reflects more the voice of the original text-maker rather than her own – a topic that will be addressed in more detail in the next section.

Synthesizing a text by drawing on multiple resources

At the other end of the spectrum, the pattern that has been identified was synthesis: it involved synthesizing a text by drawing on multiple semiotic resources rather than a single, dominant one. In this case no single semiotic resource (video clip) is utilized for constructing the message: the weight of the argument is jointly shared by several resources (image or movie clips) rather than a single one. All the semiotic resources used contribute to the shaping of the final text: no resource stands out in terms of of duration. As a rule, because multiple resources are combined, this pattern is generally defined by multiple edits.

More specifically, synthesis is characterized by a mix of image and video clips as the PSTs combine both resource types to construct their final texts. In some video projects the ratio of image clips to video clips can be 1:1, in others it can vary. On the other hand, the duration of the resources of the type of video clips used is short and the editing involved is rather heavy: multiple cuts are evident - even if the shots are extracted from the same original text (e.g. a bullying video) or even from the same shot or shot sequence. It appears that the PSTs have searched for the original text, studied it, identified the relevant bits, and extracted them for use in their own texts. This extraction process suggests that the PSTs have decomposed the original texts and utilized the parts that were more suitable for their communicative needs. An illustration of a student project that falls into this pattern is presented in figure 2 below.

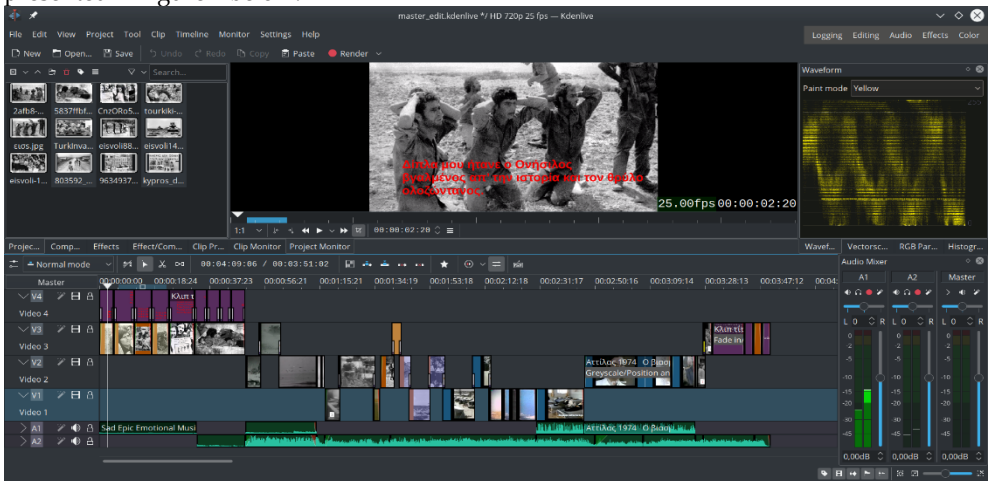

Figure 2: Screenshot from a video project illustrating synthesis

The duration of this digital text was 3'51" and its topic was related to the Turkish invasion in Cyprus. This student utilized several semiotic resources: 5 video clips, 12 image clips and 12 title clips. Unlike the former example, in this text it is hard to find a single resource that carries the central argument. This student teacher mixed both image and video clips, and it is obvious from the layout of the clips on the timeline that no specific resource is dominant. While there are 3 video clips of relatively longer duration, none of them bears the weight of the argument: all the visual resources used (still images, moving images, and title clips with writing) contributed to the overall message communicated through this text. The layout of the resources on the timeline also indicates that this digital text involved multiple cuts, as several distinct resources were assembled. Also, it is worth noting that the duration

of the image or video clips varies: the student modified the duration of some of the image clips and either trimmed the video clips used or extracted short segments from them (typically specific shots or shot sequences covering an idea or topic).

Overall, the analysis indicated that 30 of the digital texts were categorized under encapsulation (46%). On the other hand, 16 digital texts were categorized as synthesis (25%). Finally, the remaining 19 projects (29% of the texts) fell in between the two extremes.

Discussion

Burwell (2013) considers remix to be amongst the most significant contemporary cultural practices. Over the last two decades, remix practices have gained prominence in modern culture. This study has investigated how PST remix semiotic resources to craft digital multimodal texts. In particular, the present work mapped out how PST used semiotic resources in text-making and identified two dominant patterns. The data analysis of 65 digital multimodal texts in the form of digital videos indicated a broad spectrum of remix patterns, which ranged from encapsulation to synthesis.

As there is hardly any research on the topic, contextualizing the findings of this work is rather challenging. To some extent, the range of patterns that were identified parallel the findings of Hafner (2015) who also reported a broad range of remix practices in his study. Still, it should be noted that the two studies are not directly comparable as the participants in Hafner's work were required to create their own videos while this was not a requirement for the student teachers in this study.

Overall, data analysis suggests that in the case of encapsulation the students followed the logic of the core resource they incorporated in their text. This means that their starting point was an original text, upon which they built their own text. Thus, the PST started from a well-formed and well-crafted text and used it as a basis off of which they created a novel text. On the other hand, in the case of synthesis the PST started from scratch: there was no specific logic that was practically imposed by any of the resources used that they could follow. As the PST did not exclusively or mainly rely on an existing text, there was no specific lead that they could draw on to construct their own texts. Thus, in the case of synthesis the PST constructed a text from scratch rather than followed the lead of an existing resource. The PSTs assembled bits and pieces from different resources in order to create a new text.

This pattern of findings can be interpreted using Bakthin's (1996) dialogical framework. More specifically, encapsulation could be seen as the equivalent of using "quotes" from an authoritative source in constructing a written message. In this sense, encapsulation amounts to speaking using another "voice" (i.e. speaking consciousness) (Bakhtin, 1996). As we pointed out above, in the case of encapsulation a significant portion of the multimodal texts that the PST constructed was extracted from existing digital texts, using shots or shot sequences from existing videos. Thus, the final digital texts that the PST created suggest that in their texts an alien voice could be heard alongside their own. Quite often, this alien voice was far more prominent than their own voice.

On the other hand, synthesis suggests that the PST took the long road: they remixed several semiotic resources to create texts that essentially reflected their own viewpoint. Therefore, in the case of synthesis their own "voice" could be heard in their digital texts (Bakthin, 1996).

It should be pointed out that Hafner (2015) also used the notion of voice (broadly conceptualized after Bakhtin) in his analysis of remix practices. He concluded that the types of resources used by the students in their project could influence their respective voices in a

positive (empowering) or negative (dis-empowering) way. Still, the operational approach in the two studies was rather different, so this similarity should be interpreted with caution. Through the investigation of how PST remix semiotic resources to craft digital multimodal texts this study contributed to bridging the existing research gap. Future research will need to replicate these findings and provide thicker and more detailed descriptions of the patterns of texts that characterize PST digital multimodal compositions.

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