Modern English Education, Vol. 18, No. 2, Summer 2017
http://dx.doi.org/10.18095/meeso.2017.18.2.01

Construction of Meaning in Students' Multimodal Hypertext Writing

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Lee, Sangmin. (2017). Construction of meaning in students' multimodal hypertext writing. *Modern English Education, 18*(2), 1-24.

The current study investigates multimodal literacy in the English as a Foreign Language (EFL) university classroom. In a media-saturated society, meaning-making is becoming increasingly multimodal. However, school literacy is too often restricted to traditional paper-based practices and thus alienates students from their everyday literary experiences. This situation is worse with EFL students because they frequently learn the language in a decontextualized manner. The purpose of this study is to explore how students utilize multimodalities for meaning-making. Using a qualitative methodology, this study analyzes students' writing as the primary data and their reflection papers as the secondary data. The study finds that students without formal education in multimodal literacy were able t construct meaning by utilizing the multimodal resources around them in their writing. The study also confirms that their strong sense of audience awareness greatly influenced their selections and decisions in their use of multimodal resources, the design of their writing, and their strategies in hypertext construction. Overall, by connecting school literacy with students' literacy practices outside of school, students found learning to be more interesting and meaningful.

**[multimodality/hypertext/composition/
멀티모달리티/하이퍼텍스트/작문]**

I. INTRODUCTION

Over the past three decades, we have witnessed the rapid development of technology and dramatic changes in our society. These changes have transformed the communicational landscape and challenged the concept of literacy and literacy practices. In the current

hypermedia-conceived society, language is not the only and is sometimes not even the dominant mode for meaning-making; rather, people are producing and consuming multiple semiotic modes and resources (e.g., text, image, sound, and animated graphic). Communication and meaning-making are increasingly becoming multimodal, and consequently, meaning-making on screen is growing more complex (Kress, 2010; Serafiini, 2014).

However, despite the proliferation of multimodalities in society, literacy education has not adequately responded to the change; it remains too often restricted to a narrow range of paper- and text-based reading and writing. Although university students, who are digital natives, have engaged in a wide range of literacy practices in their everyday lives, they are rarely exposed to multiple literacies at school and have fewer opportunities to connect classroom learning to their interests and lived experiences (Sandberg, 2011, 2013).

This discontinuity is even worse with English as a Foreign Language (EFL) students. Most EFL writing classes are still bound to morphosyntactic restrictions and seldom offer students opportunities to practice literacies other than traditional EFL school literacy. As Jewitt (2006) claims, in a media-saturated world, it has become increasingly important to read images, understand the multimodal environment, and "to construct, control, and manipulate visual texts and symbols" (p. 9). The foreign language classroom should also provide students with opportunities to construct meaning and to represent their knowledge multimodally. Being literate both in English and multimodally is certainly a challenging task; nonetheless, both types of literacy are core skills that are required to thrive in a media-permeated world. However, multimodal literacy practices have not gained sufficient attention in the EFL classroom, and similarly, they have scarcely received attention from researchers (Kress, 2000; Y. Yi, 2014).

In response to this urgency, this study investigates how university EFL students utilize multimodalities to construct meaning in hypertext writing. In this course, students produced hypertext writing in English using PowerPoint and placed the outcomes on Google Drive to share them with their classmates. They also wrote a reflection paper on their experience with hypertext writing and their peers' writing. Both the students' writing and their reflection papers were collected and qualitatively analyzed for this study.

II. LITERATURE REVIEW

1. Hypertext Reading and Writing

Hypertext reading is no longer anything new. It has deeply permeated our lives since the 1990s. Unsurprisingly, the majority of materials that university students read outside the classroom are hypertext-based. Hypertext is constructed with nodes and hyperlinks. A

node is "a word or phrase that is connected digitally to another document or media, such as video, text, or animated graphic" (Sandberg, 2013, p. 53). A hyperlink is a colored word or phrase that signifies the node and immediately takes the reader to another site that leads to more information. The reader can select none, any, or all of the links in the original document, which creates a reader-selected, non-linear and unique path of reading (Sandberg, 2013). Non-linearity is the most distinguished difference between paper-based and hypertext reading. Unlike conventional paper-based reading, in hypertext reading, the linearity is either loosening or lost; accordingly, the reader can jump anywhere using the links. By reading flexible and interactive hypertext in the open system of the World Wide Web, the reader can gain more control and power (DiPardo & DiPardo, 1990; Duncan, 1999).

While hypertext reading benefits the reader in several ways, hypertext writing provides advantages to the writer. Hypertext writing can reframe students' concept of writing and the writing process because the novelty of non-traditional and nonlinear writing disrupts conventional logic and the typical process of writing. By the time that students reach the university level, traditional essayistic writing becomes the majority, if not the single genre, of their writing (Serafini, 2014). The pitfall is that once students acquire the genre, the genre then controls them, dominates their writing and frames their thinking (Nelson, 2008). Hypertext's lack of linearity can provide a good opportunity to disrupt the fixed concept of writing and help students view writing from a different, more creative, perspective. Therefore, hypertext writing can liberate and empower students.

Hypertext writing also has good potential to enhance students' awareness of audience. In a traditional writing class, where they have only the teacher, who serves simultaneously as the single reader of their writing and as their evaluator, students can hardly embrace the reader's perspective in their writing, and they merely attempt to accommodate their teacher's perspective. In hypertext writing, however, to insert each link at the best moment and place, students must view their writing from the reader's perspective and consider his or her needs and interests. In this sense, hypertext writing can promote a stronger sense of authorship in students. Furthermore, hypertext writing, as claimed by Schoonen, Snellings, Stevenson and van Gelderen (2009), brings the sense of reading and writing closer together. Although hypertext relinquishes some control of the text to the reader, the writer ultimately decides the location and the destination of each link. In addition, the blurred distinction between the reader and the writer in hypertext can contribute to the reconstruction of students' epistemic paradigm concerning knowledge. Rather than viewing knowledge as fixed and static, students can consider that knowledge is fluid, socially constructed, and situated through their hypertext reading and writing experiences (Coiro, Knobel, Lankshear, & Leu, 2008; Hulstijin, Schoonen, & van Gelderen, 2007).

University students routinely access hypertext to seek knowledge, information and entertainment, and hypertext reading has become a significant part of their reading. In

accordance with this trend, hypertext reading has gained more attention from educators and researchers, and much research has been published in this area; however, the research on and practice of hypertext writing remain very scarce and have yet to be conducted (McKenna & McAvinia, 2011). Hypertext writing is a more radical use of hypertext and offers a new opportunity and challenge for student-writers. Because the flexibility, interactivity, and fluidity of hypertext has redefined the role of the author, reader, and text (Jewitt, 2006), hypertext writing in the classroom encourages students to revamp their concept of writing. Therefore, it is imperative to conduct research on hypertext writing to explore its potential and benefits in literacy education.

2. Multimodal Literacy

Similar to hypertext, multiple modalities are currently central to students' literacy practices. Traditionally, language has been "the only articulate means of representation and communication," which leaves other forms of communication "as marginal and merely supportive language" (Jewitt, 2006, p. 8). However, the increased accessibility and use of visual and other modes of communication have remapped the topography of meaning-making. Although it remains the dominant mode in many contexts, language is certainly not the single mode of meaning-making. Rather, multiple modalities, a combination of various semiotic modes in texts, are widely used because of developments in digital technology. In such a world, only a part of meaning is transmitted through text, and a large part of meaning is conveyed by image and other modes (Hafner, 2014). Thus, to fully understand the meaning of a text, it is essential to consider all the modes used for meaning-making (Kress, 2000).

In response to the changes in society, literacy researchers have redefined literacy. Multimodal literacy, first coined by Jewitt and Kress (2003), refers to understanding the different ways of knowledge representation and meaning-making that occur through various semiotic modes. Multimodal literacy theorists consider multimodal literacy substantially different from linear and sequential paper-based literacy (Jewitt & Kress, 2003; Kress, 2010; Pantaleo, 2012). They view literacy as fluid and dynamic and focus more on meaning-making, not on the modal system, as traditional semiotics has done. Within this frame, the relationship between form and meaning is also arbitrary, and meaning-making (and its process) is socially situated.

The role of the writer has also shifted in multimodal meaning-making. As defined by Jewitt and Kress (2003), a mode is a "regularized organised set of resources for meaning-making, including image, gaze, gesture, movement, music, speech and sound-effect" (p. 1), and the writer incorporates various modes to process meaning and simultaneously morphs messages. During meaning-making, the writer faces a series of choices regarding which

mode can best represent his or her world. Furthermore, various modes are arranged to make meaning, which creates a multimodal ensemble, a material form that combines "a plurality of signs in different modes into a particular configuration to form a coherent arrangement" (Kress, 2010, p. 162). A multimodal ensemble engenders interactions and different relationships among the uses of the modes, namely, concurrence, complementarity or divergence (Unworth, 2008). During multimodal meaning-making, the writer's choice and activity, not conventions and grammar, determine meaning. Therefore, the relationship between form and meaning becomes more arbitrary, and meaning is created by the writer and is interpreted by the reader in the specific context and at the specific time (Kress, 2010).

Recently, researchers have explored the promises and potential of multimodal literacy in the language classroom. Stein (2000) asserts that multimodal resources for meaning-making can help overcome the limits of language and that the classroom should be the space to practice multimodal literacy. Similarly, in her study on literature lessons in secondary English classrooms, Jewitt (2005) finds that learning with multimodalities makes student learning more meaningful. Hafner (2014) incorporates multimodal literacy into the English classroom and finds that students develop a creative rhetorical hook to appeal to their audience in their writing. Multimodal literacy has also been proven to be effective in promoting a critical perspective in the EFL classroom (Huang, 2015). Although the previous research emphasized the importance of multimodal literacy, the current Korean EFL classroom has not provided enough opportunities of it.

The central questions addressed in the current study are as follows:

1) How do students construct hypertext writing?
2) What multimodal rhetorical strategies do student-writers utilize to make meaning?
3) How does students' sense of audience awareness influence their selections and decisions during the writing process?

III. METHOD

1. Course Design

The participants in this study were 25 undergraduate students, 10 males and 15 females, who majored in English at a university in Korea, all majoring in English. Most of them were sophomores (n = 12) and juniors (n = 11) with a few of seniors (n = 2). The students' one page writing was utilized to evaluate their initial language proficiency. Twenty students were categorized into intermediate and five into advanced. None of them had

engaged in any multimodal writing or any other multimedia learning in the EFL classrooms. The students were engaged in multiple technology-supported language learning tasks over one semester in 2016. Among the tasks, hypertext writing accounted for five weeks.

The task was to write a 3-4-page hypertext-based short story with the students' choice of topic. The task was conducted in pairs so that they could benefit from one another's expertise, which was, in turn, expected to produce richer and more creative writing. Because none of the students had experience in writing hypertext stories, at the beginning of the task, the instructor explained its concept and provided examples. The task required the creation of at least three points where the story diverged and multiple endings. The three divergences did not need to lead to eight different endings because some paths could connect to the same ending. Using multimodalities was not a requirement; however, the students were encouraged to utilize various multimodal resources in their writing. Considering the technological affordance of hypertext links and multimedia, PowerPoint and a web-authoring tool were recommended for the task. After trying both tools, the students selected PowerPoint.

Prior to creating their stories on PowerPoint, the students first outlined their story and designed the paths in a flow chart. Then, they wrote their stories using a word processor, and the instructor reviewed them and provided feedback on their contents, organization, and language. After the students revised their stories and created them with PowerPoint, they uploaded their final work to Google Drive and shared their stories. Finally, the students wrote an approximately two-page reflection paper on their own work and on the work of other students. The students were especially encouraged to reflect on the following points regarding: 1) their own writing, such as the motif of their topic, the process of writing and their preferences and difficulties with the task, with a particular emphasis on parts or aspects of their writing and their reasons; and 2) other students' writing, such as their preferences, strengths, limitations, and reasons.

2. Data Collection and Analysis

The students' hypertext writing was the primary data for this study, and the reflection papers were the secondary data. This study employed the qualitative data analysis method. During the first step of open coding, the students' writing was carefully examined until the themes emerged. Among the emerging themes, the most significant themes were selected during the following examination. Grounded in the selected themes, axial and selective coding was conducted, and the details were categorized into each theme (Denzin & Lincoln, 1998). At the first level of analysis, a through reading of the students' writings was done. At the next level, several themes, such as visuals, sound, composition of images,

text, and organization, were selected and the students' writings were analyzed grounded on the selected themes.

The reflection papers were analyzed using a similar method. The emerging themes of the reflection papers were compared with the themes from the students' writing to investigate whether the themes were congruent with, complemented, or contrasted with one another. Most comments in the reflection papers supported what appeared in the students' writing. Overall, the reflection papers were valuable data in explaining the reasons that support the students' choices and decisions in their writing, which could not be answered otherwise. At the final level of analysis, the result of analysis of the students' writing was crosschecked and triangulated with the result of analysis of reflection papers.

IV. RESULTS AND DISCUSSION

Because of their familiarity with the availability of modes, the students successfully inserted hyperlinks to create multiple paths in their stories and effectively incorporated various multimodalities. In total, 13 hypertext writing pieces were collected. The students produced 52 pages on average (216 max and 14 min), and the mean total word count was 4,273.9 (17,798 max and 746 min). As U. K. Maeng (2001) also confirmed the positive relationship between student motivation and achievement, these lengths far exceeded the requirement of the task, which indicates the students' strong motivation regarding the task and their high level of writing fluency.

1. Construction of Hypertext

The hyperlinks were the most central concept to the hypertext writing task of the present study. Based on their previous experiences with hypertext reading, the students inserted hyperlinks to create multiple paths in their stories without much difficulty. Following the requirements of the task, they created three divergences in their stories. However, the diverging patterns were idiosyncratic to each pair, and the numbers of the paths varied among them. Figure 1 shows the simplest form of the paths. This story had three divergences and eight different paths. Therefore, this story had eight sub-stories, but not all the sub-stories had the same length; instead, some of the sub-stories ended earlier than other sub-stories. This pattern was common to most of the students' writing in the study. The students employed a "choose and focus" strategy so that they could finish their stories within the limited time and space. In this way, they could also avoid making some sub-stories unnecessarily long and boring to their readers.

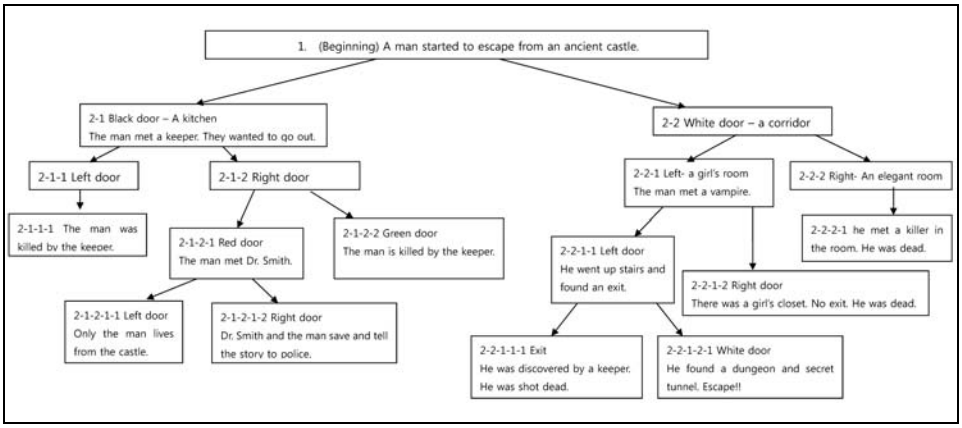

FIGURE 1 A Sample of the Outline of a Story

It was evident that the students were aware of the characteristics of hypertext and carefully planned where to insert hyperlinks. Although print-based reading is somewhat writer-oriented, hypertext reading is more reader-oriented because it allows readers to choose the path for reading and involves them more actively in the construction of the story. The students applied extra effort on page-turning points to involve the reader in the story and used hyperlinks as a literary device to create the feeling of tension and immersion for the reader. Accordingly, hyperlinks appeared in the most critical moments of the story. In every critical moment of the story, readers encountered hyperlinks, which led to a different story and a different ending. The following example from *The panic room* shows how the students divided the story by each page to create suspense, tension and curiosity.

> There is a corridor. I just walk this corridor and see lots of doors.
> A lot of doors… I don't know which door is exit.
> Unfortunately, the shape of doors and colors are same.
> After all, I should risk my life again. (p. 28)
>
> I stand in the middle of the corridor with closing my eyes.
> And then I open one door. (p. 29)

The panic room was a horror story told as a first-person narrative. The story started with the protagonist finding herself locked in a dark strange place. The protagonist began to explore the place and faced several decision-making moments for her life. If she made a good decision, she could get out of the place alive, but if she did not, she would be killed by a zombie, vampire, or human. The reader, as the protagonist (narrator), had to make decisions for her life. On page 28, the protagonist faced options for her life, and on the next

page, she made her decision and opened one of the doors. By dividing this part of the story into two pages, the story further sustained the tension. Furthermore, in finishing the page right on time, the protagonist opened the door without narrating anything further, which held the readers' curiosity regarding what would occur next and motivated readers to continue reading. Here, hyperlinks provided the reader with a sense of place in the story. This page-turning strategy was also frequently found in other students' writing and seemed to be largely influenced by their previous experiences with various media.

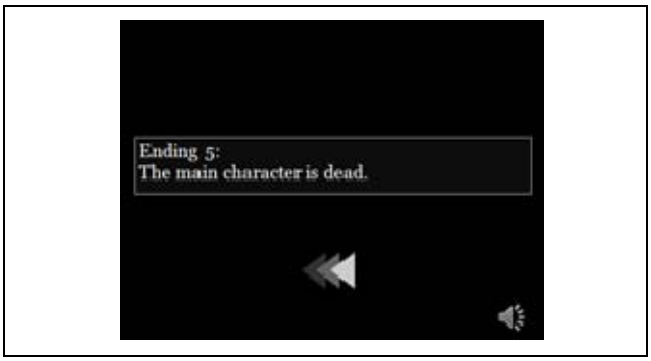

FIGURE 2 A Back Button (*The Panic Room*)

Another interesting use of hyperlinks was the "going back" function to return to a certain point in the story (Figure 2). *The panic room* was a good example in which this function was intelligently used. *The panic room* provided a "back" button on the ending page of each sub-story that allowed the readers to return to the previous diverging point in the story, choose another path that they did not choose initially, read it and find another ending. Most readers of hypertext novels tend to be curious regarding the other paths that they did not choose. This curiosity was particularly true for the readers of *The panic room*, and the student-writers of *The panic room* seemed to know their readers' needs. *The panic room* had eight different endings, and the protagonist could escape from the place alive in only one ending. When the reader found that the protagonist was dead at the ending, he or she typically wanted to return to the previous decision-making point and choose differently. The student-writers of *The panic room* anticipated the readers' needs and inserted the going-back button at each ending; this device well accommodated the readers' needs. In their reflection papers, other students noted that the going back button was a brilliant idea, and some of them regretted that they did not think of this idea for their own writing. Because of the going-back buttons, the readers could read all the sub-stories of *The panic room* with the least amount of effort.

The students placed hyperlinks not only on text but also on images. For example, *The panic room* placed hyperlinks on the doors instead of the text. On this page, the

protagonist (and also the reader) needed to choose between the two doors, and the page visually offered the options to the reader instead of the text, as shown in Figure 3. When the mode is an image, the reader can browse the entire screen at a glance and does not have to process the information on the screen in a linear manner (Hafner, 2014). Thus, the visual hyperlink drew the readers' attention more quickly. In fact, the back button and visual hyperlinks were very reader-friendly devices. The back buttons made the readers' navigation much easier and directed the readers to all the sub-stories. However, the visual hyperlinks, as a more intuitive design, urged the readers to click and heightened their curiosity regarding the next scene. Considering that the setting of the story was a place (presumably an old deserted castle) and the mission of the character was to find the path to escape from the place, the visual hyperlinks effectively fit into the contents of the story. The visual design and multimodalities are further discussed in detail in the following section.

FIGURE 3 Visual Hyperlink (*The Panic Room*)

2. Meaning-Making Through Multimodality

1) Use of the Visual Mode

Although multimodality was not a requirement of the task, it was another significant feature in the students' writing. Because the students grew up surrounded by multimedia, they were aware that visual modes could grab the reader's attention more quickly and easily than text alone. For instance, *Snow White* and some really strange stories (hereafter *Snow White*), a fabricated story of *Snow White*, started with a movie in which *Snow White* had a rap battle with several other heroines of fairy tales. The movie immediately drew the reader's attention and offered the reader a glimpse that the story would not be an ordinary, traditional story on *Snow White* and that there would be some interesting plot twists in it.

Snow White first offered the reader two options on the appearance of *Snow White* as either beautiful or ugly and then another three options on the characteristics of *Snow White* as sexy, scary, or manic-depressive. None of the offered appearances or characteristics in the story coincided with these characteristics of the traditional *Snow White*. As the story continued, the readers were able to observe how the different images and characteristics of each *Snow White* were interwoven into each sub-story. The images were sometimes contrasted and juxtaposed with one another. In this regard, the movie and images in *Snow White* were not, as noted by Jewitt (2006), "a decorative mode solely about making a text more interesting…[but contributed to] the meaning of a text" (p. 11).

The background music used in *Snow White* further enhanced the mood of each *Snow White* character. When *Snow White* was happy, the background music reflected her mental status. On other occasions when *Snow White* was depressed or the story became scary, the background music also echoed the story. The text, images, and background music together, as a multimodal ensemble, deepened the mood of each sub-story, which, in turn, helped the readers feel immersed in the story. According to multimodal social semiotics, "meaning is made through the selection and configuration of modes in texts and through the interests of the sign-maker in a particular context" (Archer & Breuer, 2015, p. 201). Similarly, the student-writers of *Snow White* created meaning through complex choices and the conjunction of form and meaning.

Another exemplary use of visuals was *The panic room*. The visual device complemented the text and amplified the scary mood of the story. In *The panic room*, a large part of the story unfolded through visual modes, such as images, the color scheme, and the background. In particular, *The panic room* strategically used color to intensify the meaning of the text to create the intended mood. Color is an important visual element and semiotic mode in meaning-making (Kress & van Leeuwen, 2001; Pantaleo, 2012), and as sign-makers, the student-writers of *The panic room* manipulated color very well in their writing. In *The panic room*, black was used as the background on every page. The color black corresponded to the setting of the story and reflected the physical situation and mental status of the protagonist. *The panic room* rarely used colors other than black, white, and gray. The objects and characters were distinguished from the darker background only by lighter shades; specifically, they all appeared on a gray scale. Everything looked dim, blended, and faded in the story. Kress and van Leeuwen (2001) note that a highly saturated color manifests an intensity of energy and emotion, whereas a desaturated color signifies the opposite. The students seemed to understand this visual grammar. The low saturated colors in every scene signified the mood of the story and the setting. The students also occasionally modulated the colors of each object and the background on the brightness continuum according to their significance. As a result, more significant objects were made brighter, appeared in the foreground and were highlighted against the dimmed background.

In *The panic room*, bright colors appeared only in the last scene after the character escaped from the place and went outside. Contrasted with black, the bright colors instantly allowed the reader to realize that he or she had finally reached a happy ending and gave a sense of relief to the reader. Without using many colors, the students effectively showed what was salient in each scene. Saliency, or "semiotic prominence" as Jewitt (2006) calls it, was gained through each object's size, location, color, shade, and the complementarity and contrast among objects in *The panic room*. Jewitt stresses that "color has been found to be a potentially powerful tool to direct and maintain attention, interest and motivation" (p. 10). Similarly, all the color elements used in *The panic room*, such as saturation, hue, lightness and shade, played an important role in maintaining the reader's attention and interests, which was the student-writers' objective in the process of writing.

The panic room further drew readers into the realm of the story by effectively using visual rhetoric. In the scene in which the protagonist hid behind the door and peeped into the room, only part of the room was shown through the door; that is, the scene was seen from the eyes of the protagonist. Here again, similar to the use of hyperlinks, the students positioned the reader within the story. The visual rhetoric of the two rectangular shapes that signified the half-opened door and the narrow part of the room shown between them not only brought the reader the illusion of being in that specific place and witnessing what was occurring there but was also well-matched with the text below:

> Using the phone light, I focus on finding the exit. At that time, I hear a footstep. Shit! I hide in the cabinet quickly. I turn off the light and hold my breath. The footstep is closer and closer.

The closed-up scene shown from the eyes of the protagonist almost forces the reader to identify with the protagonist. In the following scene, half of a man's face was shown in the opening of the door, which indicates that the man (zombie) found the protagonist, who was hiding behind the door (Figure 4). In this scene, the door remained the same, but suddenly, the man's face zoomed in and occupied the space in the opening of the door. In *The panic room*, entire scenes were scary; thus, readers could not release their tension while they read the story. The readers' feeling of tension reached the climax in the following passage.

> "I find you."
> He is a keeper, the zombie.
> His eyes become yellow color. (p. 26)

The sentences were short and sounded staccato, but for this reason, they had a greater impact. Additionally, the image doubled the impact. Without explaining what happened to

the character in detail, the story ended immediately after the climax and simply said "The character is dead." *The panic room* did not contain long passages; each scene included three to six short, simple sentences but successfully delivered the mood and sense of immediacy to the reader.

FIGURE 4 Use of Multimodalities (*The Panic Room*)

2) Use of the Sound Mode

In *The panic room*, sound also contributed to meaning-making. The mood of *The panic room* was gory, scary, suspenseful, nerve-wracking, and agitated, and the sound effects effectively connoted and even amplified the atmosphere of the story. Similar to *Snow White*, *The panic room* used background music in certain scenes to intensify the mood; however, unlike *Snow White*, it also inserted sound effects, such as squeaking, screaming, footsteps, and knocking sounds. These sounds created a dramatic effect and made the story more vivid. In fact, the other students wrote in their reflection papers that they felt as if they were watching a movie or playing a game while they read the story.

Although most of the students employed many multimodalities in their writing, a pair of students intentionally chose to use text only. Their work, *The silent planet*, involved a communication between headquarters and a survivor from a wrecked spaceship. The survivor's lines explained his situation and asked for advice from headquarters. Headquarters then gave the survivor two options to choose from. Similar to *The panic room*, *The silent planet* also inclusively positioned the readers in the story as the survivor, and the reader needed to make decisions for the protagonist by clicking the hyperlinks. The communication between the two parties was displayed on the computer screen throughout the story. Unlike the other students' writing, which invoked imagery through the use of visual modes, the black computer screen was the single background for the entire story without the use of any other visual modes. This design emphasized the desperate and

urgent situation of the protagonist, and it was effective in conveying his emotion to the reader. *The silent planet* began with a blank black page, which mirrored the forlornness of the planet and the hopelessness and desperation of the protagonist. The blank black page reappeared several times as the story proceeded, indicating a time lapse during the communication and suggesting that something, still untold, was occurring to the protagonist. The occasional blank black pages in the middle of the story were a good literary device to provoke tension and curiosity in the reader.

FIGURE 5 Use of Text (*The Silent Planet*)

In addition to the black background, the text-only design also reflected the barren, deserted planet. The lines from the survivor were written in white, and the lines from headquarters were written in red. The main speaker of the story was the survivor; thus, the majority of the text was shown in white. The white text against the black background and the occasional use of red simply and clearly represented the urgency of the situation. As readers, the other students agreed that the form, which confined the modality to only text, was the most suitable for the content. One of the students noted that "*The silent planet* does not have any images or animations, but the simplicity of text only and the black background really well represent the emptiness of the universe, where no one but the character exists." The black background also contributed to maintaining textual coherence in the writing. In *The silent planet*, the students cleverly used their resources, which were restricted only to black background and text, to maximize the effect. In this way, in *The silent planet*, content and form were closely related and contributed to meaning-making.

The examples described in this section have indicated the students' motivations behind their uses of different modes to realize different functions. Not only the modes but also the design and colors played a significant role in meaning-making in the students' writing. The students seemed to understand what Jewitt (2006) says, namely, that "the complex interplay of still image, color, moving image, writing, sound-effect and music" (p. 9) construct meaning. In the students' writing, language served as "but one contributor to

meaning [as a] facilitator of the expression of authorial voice," and the diversity of multimodal resources and the synesthetic process of meaning-making together constructed meaning (Nelson, 2008, p. 79). Kress and van Leeuwen (2006) argue that students create a motivated conjunction of meaning and form in a particular context; similarly, the students in this study also created text, brought multimodal resources together and selected a particular design to express their meaning. Although they did not create all the images and movies from scratch, they found many resources to best represent their intentions, and they accomplished them by mixing them like a bricolage.

3. Strategies for Audience Awareness

Hafner (2014) argues that audience awareness is especially significant in the success of digital composition. Because they knew that they would share their writings with their peers, the students seriously considered their readers' needs and interests from the outset. In general, the students considered three aspects from the reader's perspective, specifically an interesting plot, readability, and the use of multimodalities.

1) Plot

The students were concerned with how to make their stories more interesting and appealing to their readers. Their readers' interests and feeling of immersion were the most frequently occurring words in the reflection papers. Most students regarded these two factors as essential to their readers' motivation to read their stories. The students realized while writing that realistic plots were a prerequisite to increasing their readers' interest and immersion. If the story did not make sense to the readers, the story would never be interesting to them.

> Our story focused on portraying the mental journey and internal voice of the character. We tried hard to make the story sound more realistic so that the reader would be interested and immersed in the story, identify with the character, and naturally follow the story.

However, making their story realistic and plausible was particularly difficult to achieve in hypertext writing because the story diverged into multiple paths with multiple endings. Many students confessed that they struggled to make each path and ending plausible.

> The most difficult thing was to make the story realistic. To make the story more interesting, we offered many options to the readers. But contrary to our

> expectations, this resulted in making the story messy and weak. Some of the paths (narratology) were not smoothly connected, and some of the endings did not sound very realistic. Additionally, sometimes, in the course of making it smoother and realistic, the story became too long, which damaged readability.

The students concluded some sub-stories earlier than other sub-stories, instead of making all the sub-stories the same length, and avoided unnecessarily expanding the story. In the example of *The silent planet*, the protagonist died shortly after the reader decided incorrectly in several paths. In the other paths in which the protagonist was rescued and survived, the sub-stories were depicted in a longer length and more detail. Similar to *The silent planet*, other students also chose one or two sub-stories as the main story and focused more on these stories. The students who employed this "choose and focus" strategy achieved better readability and produced a better quality of writing.

Regarding audience awareness, readability was also considered in the students' writing. Mostly, the students attempted to not place too many words on a page so that reading would not be a burden for the readers. The students also carefully selected the font style and color. For instance, *The silent planet* employed one simple font that was typically used in the authentic computer-mediated communication of an official context, and this made the content more realistic and the story more authentic. As explained above, the communication was conducted in colors, and because of this strategy, the reader could easily distinguish between the two speakers who were engaged in communication (Figure 5). In contrast, *The panic room* used a simple font in one color, but it sometimes made important phrases or sentences appear in bold or in larger font for emphasis and to grab the reader's attention (Figure 3).

2) Organization of Text and Images

In organizing text and images on the screen, the students employed various strategies to improve readability. The most common strategy was to avoid using dual modes simultaneously. Although visuals can aid the text in some cases, processing information simultaneously in dual modes can sometimes increase the cognitive load (Zumbach & Mohraz, 2008). The students presented content only in text when the text was especially long so that a reader could read it without cognitive overload. In contrast, when an image contained important information, the students presented only the image on a page. Alternatively, sometimes the students showed an image and text one by one using the animation function of PowerPoint. For example, the first page of *Alice in wonderland* showed the background first and gave the reader some time to consider it, and then, the story displayed the text one by one. This design helped the reader focus on one element at

a time instead of processing all the information simultaneously. Another example, *Dilemma*, employed a more intuitive design for readers. It placed dialogue in a speech bubble, which more visually and immediately showed which character said what (Figure 6). On another page, *Dilemma* used a social network communication format familiar to readers that made the design more reader-friendly.

FIGURE 6 Design Sample (*Dilemma*)

Audience awareness was also the major driving force that supported decisions on the structure of the hypertext and the configuration of multiple modalities in the students' writing. To enhance readers' interest and feeling of immersion, the student-writers deployed multiple modalities for various functions, such as grabbing the readers' attention, creating a certain mood and feeling or emphasizing their message. As noted in one student's reflection paper,

> …we put a lot of effort in making the story interesting so that the readers could be immersed in it. We thought that multimedia would make our story better and more interesting. So we repeatedly tried many different images and sounds for each page and selected the best for each, which, we believe, resulted in a better quality of writing in the end.

3) Positioning the Reader

The significant aspects of the multimodalities that were shown in the students' writing were discussed in the previous section, and this section examines another aspect: how the students positioned the reader within the story. As discussed above, one strategy for this positioning was to have the reader choose for the protagonist through the hyperlinks. The other strategy was to use visual rhetoric. As shown in the earlier example in Figure 4, the

scenes were captured through the reader's eyes in *The panic room*. This design included the reader within the story. Another good example was found in *Alice in wonderland* (Figure 7). On the first page, a girl, Alice, was standing in a strange environment. The reader saw her back, and this perspective situated the reader as an observer of Alice's journey. In the next moment, the following text was displayed on the same page: "Welcome. You are here for saving Alice. Please make a good decision for Alice." This welcoming message to the reader situated the reader more closely within the story and gave the reader a different role as the co-traveler of Alice. This strategy of engaging the reader was consistent throughout the story. On the next page, the caterpillar introduced himself to the reader as the guide of the journey ("Hello, I'm your guide for wonderland. I'm here to introduce how to read hypertext. Please follow me."). On the first two pages, *Alice in wonderland* established the role of the reader and prepared the reader for the journey of Alice and the reader. This strategy of giving the reader a specific role within the story can enhance the feeling of immersion.

FIGURE 7 Gaze (*Alice in Wonderland*)

4) Gaze

Another strategy regarding audience awareness was gaze. In the students' writing, gaze greatly contributed to the success of situating the reader within the story. According to Jewitt (2006) and Hafner (2014), gaze is one semiotic mode. Similar to Hafner's study (2014), the students in this study deployed gaze to achieve a particular rhetorical effect on their audience. In Hafner's study, the student (actor) looks at the camera and shifts his gaze to the audience "to cue the involvement of the audience" (p. 674). In this study, the students manipulated the position and gaze of the protagonist (actor) to involve the audience. The contrast between the gaze of the girl and the gaze of the caterpillar in *Alice in wonderland* showed how the story positioned the reader. The girl was looking forward, showing her back to the reader. This gaze demanded the reader to look in the same direction as Alice. However, the gaze of the caterpillar was toward the reader, which signifies that he was speaking to the reader. *Dilemma* also frequently deployed gaze to

invite the reader. In one scene, the protagonist was in a taxi and talking with the driver (Figure 8). This scene had two frames; the upper frame showed the protagonist, and the bottom frame showed the reflection of the driver in the mirror. The gaze of the driver in the mirror, directly looking at the reader, identified the reader as the protagonist in the taxi. In Figure 8, the gaze of the driver is directed toward the reader, and through this gaze, the reader feels as if he or she is interacting with the driver.

The most striking example of gaze was in *The panic room*. In Figure 4, the gaze of the protagonist peeping from behind the door or the gaze of the zombie in the opening of the door directly looking at the reader instantly drew the reader into the story. Both *Dilemma* and *The panic room* used the subjective shot. In cinematic composition, the subjective shot is a unique convention "to let audiences experience the action as if seen directly through the eyes of a character" (Mercado, 2010, p. 83). The compositions of the scenes from both stories revealed the physical attributes and emotional subjectivities from the characters' perspectives. The students coordinated the gaze of the characters in diverse ways and sometimes synchronized the reader with the protagonist through gaze (e.g., *The panic room* and *Dilemma*) or the role that they targeted in the story (e.g., *Alice in wonderland*). This type of interaction with the reader was an extremely powerful strategy to engage him or her in the stories.

FIGURE 8 Gaze (*Dilemma*)

This study found that the students could make better selections and produce better writing because they wrote their stories through their readers' eyes. The reflection papers proved that the students' use of multimodalities satisfied their readers' interests. In the reflection papers, the students commented on the positive role of multimodalities in their classmates' writing.

> The appropriate use of sound effects and background music induced tension. While reading it, I felt like I became the protagonist of the story. Moreover, the

> structural design, which placed the protagonist at the top and the message window at the bottom on the screen, made me feel like I was playing a game, beyond reading a story. These devices in conjunction with the interesting story naturally sustained my interest and motivation to read it. I was totally absorbed in reading [*The panic room*]!

The current study found that publishing the students' work on the web expanded their sense of audience awareness and incorporating hyperlinks and multimodalities heightened it even further. Although writing in the EFL classroom is a "less purposeful and needs-driven enterprise" (Ortega, 2009, p. 232), audience awareness provided an authentic purpose in the writing in the current study. Consequently, the students' consideration of audience awareness greatly influenced their storytelling, their choices of modes and design, and ultimately, the overall quality of their writing.

V. CONCLUSION

The present study explored the manner in which university EFL students constructed meaning with various multimodal semiotic resources in hypertext writing, and their sense of audience awareness influenced their choices and decisions on multimodal resources and design. This study confirmed that without being formally taught, the students already understood how to utilize multimodal resources to best represent their meaning. The students effectively synthesized multimodal resources and created the best multimodal ensembles. Undoubtedly, the audience awareness of the students played a significant role in the complex process of writing, and it was reflected in many aspects of their writing, including interesting and realistic plots, the insertion of hyperlinks, their choices on multimodal resources, and their decisions on design, which helped the students to make their writing more interesting and appealing.

As digital natives, the students in this study were already multimodally literate to a certain degree because of their experiences in interacting with multimedia in their daily lives. In the educational setting, however, they had not been given opportunities to incorporate multimodal literacy. In their reflection papers, the students noted that hypertext writing was "the most exciting and meaningful literary experience" during their school years. The task was meaningful to them mainly because it connected school literacy to their out-of-school literacy practices. This finding implies that it is time to broaden the perspective on literacy practice in the language classroom. The narrow range of school literacy practice too frequently alienates students from their everyday lives, and students can rarely find school learning to be interesting or meaningful. Vasudevan,

Schultz and Bateman (2010) discuss that "The construct of the boundaries between home, school, and community is no longer useful in understanding adolescents' literacy practices as these boundaries are increasingly permeable and overlapping in adolescents' lives" (p. 462).

Moreover, as shown in this study, contemporary students are multimodally literate and in certain ways, may be more advanced than many of their classroom teachers. This difference may be a reason that underlies the discrepancy between the real-world literary experiences of students and school literacy practices. Teachers must understand the needs and interests of modern students and the new challenges that are emerging in society and adopt a multimodal perspective. In this way, teachers can embrace students' authentic literary experiences in the classroom and make school literacy practices more meaningful. Additionally, as reading images and constructing meaning with multimodalities become increasingly important in a media-conceived society, teachers must facilitate students to become competent consumers and producers of multimodal semiotic resources. By teaching multimodal literacy, teachers can develop "students' knowledge, aesthetic appreciation and visual analysis skills so they [can] engage in more informed and critical readings of multimodal texts and so they [can] be more knowledgeable sign-makers when composing their own texts" (Pantaleo, 2012, p. 61). These needs are not much different in the EFL classroom. According to Kramsch (2006), in a global society, foreign language education should shift its focus from symbolic competence to semiotic competence so that it "enriches [the ability to express, interpret, and negotiate meanings] and embeds it into the ability to produce and exchange symbolic goods in the complex global context in which we live today" (p. 251). Therefore, EFL students also must be sensitized to the potential for meaning of the multimodal resources around them and be able to make effective choices in the production and representation of knowledge.

Finally, the research on literacy must expand its scope and perspective. As Jones (2013) claims, the aim of research in digital literacies is "not to determine if and how people are learning a particular thing, like language, but rather to find out what they are doing as they engage in their everyday practices" (p. 844). In this respect, literacy research should start from students' lives and investigate the challenges and possibilities that confront them in the literary world. The language teachers, being aware of both challenges and possibilities need to find ways to integrated multimodal literacy into their English classrooms, , such as multimodal reading and writing activities, and technology-integrated tasks, beyond merely teaching reading and writing text only. In doing so, they can properly prepare students for the fast changing media-saturated society.

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Examples in: English
Applicable Languages: English
Applicable Levels: Tertiary

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Received 1 April 2017
Revised 4 May 2017
Accepted 12 May 2017