The Meaning-Making of the Children's Drawings as a Manifestation of their Visual Literacy Competence

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Abstract

Following an ethnographic approach, this study was intended to investigate how children transfer meaning in their drawings, as a manifestation of their visual literacy competence. To this end, 32 six- and seven-year-old Iranian male children were observed for six class sessions as they engaged in learning activities that involved drawing. Building upon Kress and Van Leeuwen's (1996) theoretical framework of Visual Grammar, children's drawings were analyzed. Field notes were also used to describe experiences and observations the researcher made while participating in the class. Furthermore, children's descriptions of their own drawings were used as complementary evidence to the analysis. The results of the analyses revealed that drawing upon a variety of visual resources, such as talks, written texts, gestures, and objects, children made ideational, interpersonal and textual meanings in their drawings. Furthermore, although

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each drawing was uniquely created by different types of interests and provided the specific context for the visual structures and forms, some features such as use of space and line framings, diagonal lines, curved/bent figures, profile form, and tilted body position were shared by most children in their meaning-making act. The findings can help educators and practitioners promote children's visual literacy, and propose pedagogical and practical implications.

Keywords: Visual Literacy, Drawing, Meaning-making, Visual Grammar, Textual Meaning

Introduction

The growing influences of multimedia technologies have produced a shift in what counts as texts and what it means to be literate (Jewitt, 2005; Kress & van Leeuwen, 2001). Visual literacy is gaining prominence as a result of the ubiquitous presence of images and visual media which have totally changed our world in the twenty first century (Baker & Watt, 2008). Visual literacy is defined as a set of skills which enable an individual to understand and use visuals for intentionally communicating with others (Ausburn & Ausburn, 1978; Jamshidzadeh & Jam, 2017). Based on this definition, there are two principles basic to the idea of visual literacy. The first one is that visuals are a language; that is, "like verbal language, they have vocabulary, grammar, and syntax. For example, in a picture, elements such as color, light and shade, line and placement of individual items serve as the vocabulary which combine to form the entire visual message" (Ausburn & Ausburn, 1978, p. 1). Second, a visually literate person should be able to read and write visual language; that is, according to Ausburn and Ausburn, "if one thinks of reading and writing in the broad sense as decoding and encoding messages, then the visual analogues of verbal literacy and language usage are quite easily grasped." (p. 1). In this sense, reading visual language is a matter of being able to interpret the visual messages, such as gestures or pictures, produced by others, and writing it entails being able to compose meaningful visual messages oneself (Ausburn & Ausburn, 1978). It is even possible to speak visual language through the expressive use of the face and body.

Older definitions of visual literacy, like that of Ausburn and Ausburn (1978), seem to have used the terms skill and competence (competency) interchangeably (Avgerinou, 2001). However, more recent visual literacy definitions evolve around the term 'ability'. Avgerinou (2003) and Avgerinou and Pettersson (2011) define the visual literacy ability as one's competence to read, decode, interpret visual statements, on the one hand, and to write, encode, and create visual statements on the other. They also introduce a third visual literacy ability, i.e. to think visually.

According to development theory and research, children must master visual skills before they can even begin to develop verbal skills (Arizpe & Styles, 2003). Some theorists even claim that visual skills are a necessary foundation for later speech and reading skills (Anning & Ring, 2004; Jodairi Pineh, 2017;

Kist, 2000; Kress, 2003; Luke & Elkins, 1998). In fact, teaching visual literacy helps children interpret art and visual media that they encounter every day. Furthermore, visual literacy allows a deeper interaction with texts of all kinds, and introduces the process of analytical and critical thinking about representations and meanings (Avgerinou & Pettersson, 2011). As a result, children can be more skeptical and informed viewers of all visual media, including advertising.

Drawing, as a symbol system for meaning making and representing at children's disposal, is a crucial element of visual literacy (Dyson, 1993). As Dyson (1989) argues, drawing can create a bridge between the linguistic and semiotic mode of the image. Recently, children's drawings, as an alternative means of communicating and representing knowledge and understandings, have become the focus of researchers' interest. To take an example, Pahl (1999; 2002) has illustrated the features of children's multimodal drawings. In fact, it was observed that besides drawing, children created multi-layered narratives through representing and re-representing versions of stories in their socio-dramatic play. Also a fluid quality was observed in the way children used objects. In another study, Anning and Ring (2004) revealed that multi-modality is core to children's preferred ways of representing and communicating their growing understanding of the world and their roles as active members of communities. Pantaleo (2005) and Rabey (2003) demonstrated children's meaning-making skills both of and with visual resources, as their drawing responses to picture books were analyzed. Coates and Coates (2006) studied the relationship between children's narrative and their drawing process. They found that what children want to do is to talk to themselves in pictures, thereby weaving stories around the marks being made as a parallel to active fantasy play.

Within teacher-initiated drawing sessions, Hopperstad (2008) observed five- and six-year-old children as they engaged in drawing-related play. From a semiotic point of view, the author investigated the quality of the children's play and demonstrated how it can be considered as a possible learning context for drawing. She argued that drawing and play can be used to promote children's competence to convey meaning and interpret the visual mode. In fact, she considers drawing and play in the same prominent position as images in contemporary texts.

In their interesting study, Reiss et al. (2007) revealed a tension between pupils' diverse conceptions and monolithic science lessons through pupil's visual representations. The drawings revealed multiple ways of portraying the natural environment, concluding that there is scientific worth in this diversity. In addition, the authors argued that due to pupils' lack of interested in a single, solid depiction of the world in their science lessons, schools need to take account of this diversity.

Drawing has also been considered as an alternative way of understanding young children's constructions of literacy. Using young children's drawings about reading and writing, Kendrick and Mckay (2004) proposed an innovative way of examining children's understandings and perceptions of literacy in various contexts of their lives. The study criticizes common classroom practices

that give priority to language-dependent modes of representation compared to other modes. In primary-level classrooms, Ranker's (2012) study also revealed that students' drawings served as visual resources for their literacy processes. Drawing upon a social semiotic framework, Ranker explored the ways in which pupils can use visual semiotic resources while composing texts in literacy classroom contexts. The study defined and developed the concept of a visual composing resource, and qualified the range, scope, and type of visual resources that were available to the students while they engaged in literacy processes in various classroom settings. The author also illustrated how the students brought these sets of visual composing resources into a complex interaction with the semiotic assemblages that they were producing in each context, revealing important aspects of early literacy processes that incorporate visuality.

Most of the studies reveal that children can use drawings to convey meaning and express ideas and understandings in ways which is not possible through verbal language. Building upon Kress and van Leeuwen's (1996) framework, the present study aimed to analyze meaning in the drawings of six- to seven-year-old children and to demonstrate the pedagogical potential of drawing to support and promote children's visual literacy skills.

More specifically, this study was intended to encourage teachers to consider children's ways of constructing meaning through drawings, and to pay attention to the value of drawing for visual literacy education. In particular, this study tried to answer the following questions:

1. How do children convey ideational meaning in their drawings using visual literacy competence?
2. How do children convey interpersonal meaning in their drawings using visual literacy competence?
3. How do children convey textual meaning in their drawings using visual literacy competence?
4. What are the similarities in children's interests and types of meaning-making?
5. What are the variations in children's interests and types of meaning-making?

Method
Participants

This study included 32 six- and seven-year-old Iranian male children in the first grade of an elementary school in Shiraz. There were five first-grade classes in this elementary school, one of which was selected randomly for this study. Furthermore, there was a teacher particularly assigned for the drawing class, while for other subjects, the class had another teacher. The drawing class was held three sessions a week.

Data Collection Procedure

Utilizing an ethnographic research method, the study investigated children's learning activities that included drawing over time. The researchers used an ethnographic approach in order to be a participant observer to experience the context surrounding the drawings and the accompanied talk and actions during the drawing processes.

The class was observed for a period of six sessions, i.e. two weeks. During the first sessions, one of the researchers spent enough time to get to know the children and make them feel secure about her presence.

The children were organized in groups of four when working in class. Field notes were used to describe experiences and observations the researcher made while participating in the class. The focus was on activities which involved drawing and which were initiated by the teacher. The drawing sessions were categorized according to two major sources of inspiration, topics and experiences outside school. In the first category, drawings inspired by topics, the children made drawings relating to the topics, such as 'seasons of the year', 'a hobby', 'a behavior', which were introduced by the teacher herself. In the second category, drawing inspired by experiences outside school, the teacher asked the children to talk and draw about their holiday experiences or about occasional sightseeing they had gone together with their classmates.

The drawing tasks were widely formulated. The teacher walked among the children and took seat frequently to talk about their drawings in progress. The researcher also tried to walk among the groups and take notes of what they were doing and saying, in addition to their behaviors during the drawing process. The researcher tried not to interrupt the children while they were drawing. However, she provided them with support and feedback whenever they asked a question during the process.

Data Analysis

A total of 92 drawings were collected at the end of the fifth session. Using purposive sampling, from each child's set of drawings, the researcher selected the most representative ones for analysis. As a result, 32 drawings were analyzed from among the whole 92 drawings. In the last session, each child was supposed to come to the front of the class and describe his selected drawing. In fact, the children's descriptions in the last session and the observation field notes, which had been collected during the drawing process, were used as complementary evidence to the researcher's analysis of the drawings based on Kress and van Leeuwen's (1996) analytical framework.

In 1996, Kress and van Leeuwen built upon Halliday's (1994) theory to developed their theory of visual 'grammar' to analyze images representing three basic types of meaning; i.e. ideational, interpersonal, and textual. Ideational meaning refers to what an image 'says' or represents about a particular phenomenon. Here, Kress and van Leeuwen (1996) differentiate between classifi-

cational, analytical, and narrative visual structures. The second type of meaning, that is interpersonal meaning, considers the way an image addresses its audience and potential viewers. This, in turn, results in two groups of images; that is, those in which characters are looking directly at us and those which do not have this direct gaze. The first category 'demands' interaction, while the second is an interpersonal 'offer' (Kress & van Leeuwen, 1996, p. 119). The third type of meaning is concerned with the ways images work as compositions or make textual meaning. Kress and van Leeuwen identify these visual features as framing and classify them into relative size, elements, and uses of color.

Furthermore, Kress (1997) argues that, like any other meaning-making activity, drawing is a motivated process used by children to situate them in the world. This means that children's meaning making is stimulated by an underlying interest. As a result, any drawing can be considered as a creative response to the experiences of its maker.

Finally, Kress (2003) states that the visual mode is mostly used to depict what the world consists of rather than to tell about actions and movements. He believes that children can make use of multimodal meaning-making to overcome the limitation. Building on Kress and van Leeuwen's (1996) analytical framework, this study analyzed children's drawings, how they are read as complicated statements, and the ways they interact with us as viewers.

Results and Discussion
Ideational, Interpersonal, and Textual Meaning

To answer the first three questions of the study and to see how children convey **ideational, interpersonal,** and **textual** meaning in their drawings, the researcher studied the drawings and field notes related to the drawing process and children's descriptions on their own drawings. As a type of triangulation, children's descriptions, in the form of field notes, helped the researcher to get a more comprehensive understanding of different types of meaning in the drawings. In the following sections, meaning types and their observed realizations are presented.

Ideational Meaning in the Drawings

In the analysis of drawings which conveyed ideational meaning, three major groups of drawings emerged. Two of them were related to the functions, according to which the drawings were distinguished as analytical and narrative (Kress & van Leeuwen, 1996), and the third group was drawings with multimodal representations, in which children had combined semiotic resources.

Analytical Drawings. Analytical drawings or representations emphasize the constant structure of an object or system, for example the constituent parts of a whole, by focusing on the relationships between the depicted elements in terms of part-whole structure (Kress & van Leeuwen, 1996). The

meaning of an analytical image corresponds to linguistic expressions such as "this is" or "this consists of".

The first drawing is a typical example of an analytical drawing. Ashkan's drawing (Figure 1) was inspired by an experience outside school, a visit to Hafez tomb which is the tomb of the great Iranian poet in Shiraz. In this analytical drawing, Ashkan has depicted different parts of the tomb area. In the drawing one can see the tomb itself in the center. To the left of the tomb is a tree with a lawn and a small pool of water at its foot. And to the right of the tomb, there is a larger lawn, a bigger pool of water and two red shapes which Ashkan described as two flowers. On top of the page is a piece of cloud which is raining and a sun shining to the right of the cloud. It seems that Ashkan has drawn the essential objects the tomb area consists of (Kress & van Leeuwen, 1996). More interesting is Ashkan's detailed representation or analysis of the structure of the tomb itself. One can see that he has paid attention to the essential characteristics of the tomb: Ashkan has drawn the pillars which hold the dome above the grave stone; pillars, according to Ashkan's explanations, are so strong that he has continued drawing them under the ground. While observing the way he explained his drawing, it became clear to the researcher that Ashkan was enjoying as he was making his detailed analysis. While talking about the pillars, Ashkan used his body language and gestures to show the strength of the pillars.

Figure 1. *Hafez Tomb*

Another example of an analytical drawing is Nima's drawing related to the topic 'four seasons of a year' (Figure 2). As Nima himself described, the drawing shows one year in the shape of a circle with twelve lines each of which repre-

sents one month of a year. Around the circle and in each corner of the paper one season is depicted in a square-shaped frame. Above the circle are the pictures of fall and winter, and below the circle, spring and summer are drawn. Based on Kress & van Leeuwen's (1996) definition of analytical drawings, Nima has illustrated the four basic constituents of a year, i.e. the four seasons. Furthermore, in each season its features and properties are also shown quite delicately and accurately. Spring is depicted with two trees with pink blossoms on their braches, and the sun which is shining, along with a piece of cloud next to the sun. Summer is represented with a big tree full of fruits, and a big sun which is larger in size compared to the suns in other seasons. Nima himself emphasized that the big sun shows the hot weather in the summer. The picture of fall shows a tree with yellow leaves some of which are falling on to the ground. As Nima explained, hail is also visible in the sky of this season. Finally, winter is represented with a dry tree, snow which is everywhere, and also a snowman next to the tree.

Figure 2. *Seasons of A Year*

Narrative Drawings. According to Kress and van Leeuwen (1996), narrative representations depict events, or processes of change evolving in time and/or space. They involve one or more vectors, i.e. distinct lines indicating the direction of evolution (Kress & van Leeuwen, 1996). In the present study, the researcher found that the children made use of vectors as diagonal lines to signify movement and direction.

Figure 3. *Dinosaur Being Trapped*

For example, Hamid made a drawing inspired by a movie in which a helicopter is throwing a large net on a dinosaur to entrap the animal (Figure 3). The out stretched, bent lines by which the net is depicted shows the falling movement of the net on the head of the big dinosaur. Furthermore, the tilted body position of the dinosaur and its open mouth, which according to Hamid shows the fact that the dinosaur is trying to bite and tear the net, can add to the narrative function of the drawing. In fact, Hamid has demonstrated his narrative meaning as an interaction between the helicopter and the dinosaur (Kress & Van Leeuwen, 1996). Hamid also used gestures to show the way the animal was trying to tear the net and avoid being trapped.

Figure 4. *Man Catching Fish on A Sailing Boat*

Next is Hossein's summer break-inspired drawing (Figure 4). He drew a man in a sailing boat in the sea as he is catching a large fish. There is some bait at the end of the hook toward which the big fish has bent its body to catch it. The curved body of the fish trying to eat the bait and the tilted body position of the man who is, according to Hossein's explanations which were accompanied with gestures, making an attempt to pull the fish out of water signify the narrative nature of the drawing.

Multimodal Representations. According to (Gee, 2003, 2004), multimodal discourses integrate different representational resources such as colors, visual images, sounds, movements, gestures, and language for communication.

Different studies of children's meaning-making (Anning & Ring, 2004; Coates & Coates, 2006; Dyson, 1989; Hopperstad, 2008; Kendrick & McKay, 2004; Pahl, 1999) have observed multimodal representations. Armin's written caption in figure 5 is one example. The drawing shows a man who has pushed another man from above a stair-case and the second man is fallen onto the ground with his head bleeding. The written caption (He was a bad man) "آن مرد بد بود" was used by Armin to make the situation clearer. In this case, according to Pantaleo (2005), the drawing provides more information than the written words by extending the texts. In the same line, Barthes (1977) argues that most pictures are capable of several interpretations until anchored to one by a caption.

Figure 5. *Bad Man*

The balloon form, which is taken from comic strips, was used by a few children in their drawings to represent the thoughts or speech of persons. This can be seen in Ryan's drawing (Figure 6) in which a boy, Ryan, as he himself explained, is holding his friend in his arms while saying "دوست من" (My friend).

Figure 6. *My Friend*

Furthermore, some children combined drawing, talking and gesturing to depict movements. This was visible in Ashkan's (Figure 1), Hamid's (Figure 3), and Hossein's (Figure 4) drawings explained above. While talking about the pillars, Ashkan used his body language and gestures to show the strength of the pillars. Hamid also used gestures along with speech to show the way the dinosaur was trying to tear the net and avoid being trapped. Finally, Hossein's explanations were accompanied with gestures when he was talking about the man making an attempt to pull the fish out of water. As Kress (1997) argued, this multimodal strategy makes the representation of movements more 'real' as it allows children to 'enter' the drawings. Similarly, in this study, the combinations of gestures, drawing, and talk promoted the children's engagement with the dynamicity of the topics, texts and experiences of which they made their drawings.

Interpersonal Meaning in the Drawings

Building upon Kress and Van Leeuwen's (1996) visual grammar, it was observed that some drawings are 'offering' interaction while others are 'demanding' interaction. In fact, such drawings appear to address the audience and influence their involvement with the content of the drawings.

Drawings 'Demanding' Interaction. Most of the drawings depicted the persons, animals or other animate figures in frontal view in such a way that the drawn characters looked directly at us. They also smiled in most cases. This

observation can be related to Kress and van Leeuwen's (1996) description of images that demand engagement and interaction from the viewers. In fact, the direct gaze invites the audience to engage with the content. This can be observed in Ryan's drawing (Figure 6) in which a boy, i.e. Ryan himself, is holding his friend in his hands while saying "دوست من" (My friend). The direct gaze of Ryan in the drawing, along with his wide smile, demand that we pay attention to and recognize his friend.

Drawings 'Offering' Interaction. In some of the narrative drawings, the characters are depicted from behind or in profile. As Kress and Van Leeuwen (1996) describe interaction as an offer, such drawings communicate with us more openly, offering us the opportunity to think about the phenomenon which is illustrated.

For example, Amir's drawing (Figure 7), which was inspired by his summer-break experience, shows a man from behind who is playing the piano on the beach for those who are swimming in the sea. According to Amir's explanations, those in the sea are enjoying from the music that is playing. Perhaps the act of playing the piano and making the people happy in the sea is more important to Amir than the man's facial details. In fact, Amir's explanation about the happiness of the people supports this interpretation.
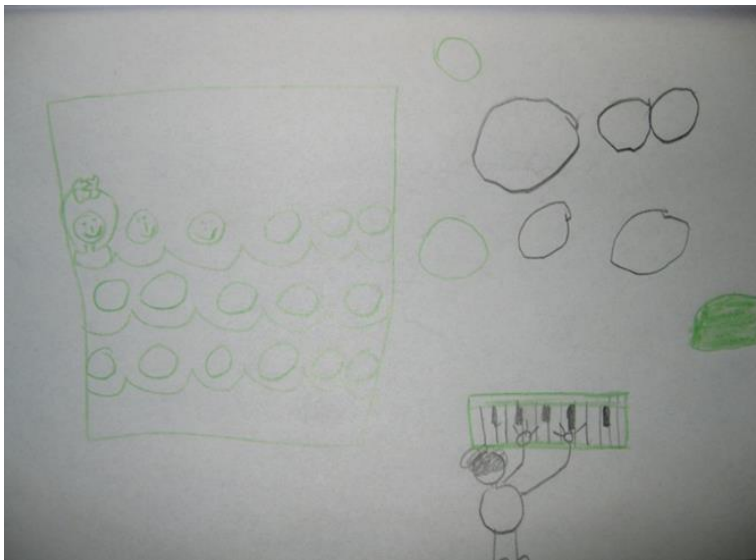

Figure 7. *Man Playing the Piano on the Beach*

Textual Meaning in the Drawings

Children utilized some visual features to create visual texts. Based on Kress and Van Leeuwen's (1996) framework, the following realizations of textual meaning

in the material will be described: (1) framing of drawn elements, (2) signals of salience and (3) reading paths.

Framing of Drawn Elements. The best example of framing of drawn elements is Nima's drawing (Figure 2) related to the topic 'four seasons of a year'. In this drawing, as it was explained above, the months of a year are depicted as twelve lines framed in a circle. Furthermore, every season is framed within square-like shapes. In fact, the frames were used to disconnect each season from the others and also from the year. In fact, the drawing demands us to scrutinize each element carefully. The use of framing for drawn elements was visible in several of the analytical drawings.

Signals of Salience. As Kress & van Leeuwen (1996) argue, the use of colors in some drawings can be considered as a tool which signals the importance of a specific element. For example, in Figure 1, Ashkan explained that he used dark blue to color the water in the small pools on either side of Hafez tomb in order to emphasize the cleanliness and clearness of the water inside.

Furthermore, in some of the drawings, children placed some elements on top of the page which, according to Kress (1997), can imply background information, compared to those elements which are drawn towards the bottom of the page, indicating foreground information. This can be observed in Amir's drawing (Figure 7) where the man playing the piano is drawn at the bottom of the page and the sea and the people in it are higher toward the top of the page. In fact, the man's position attracts our attention and makes him and his action the salient elements, standing out from the rest of the drawing.

In addition, in some other drawings size has been used to indicate the relative significance of the element. For example, in Figure 1, the tomb itself is the larger element. In Ryan's drawing (Figure 6), the big heart can be considered as a sign of significance which invites us to pay more attention to. As Ryan himself explained, the heart is the signal of love between the two friends. Furthermore, the red color of the heart adds to this salience.

Reading Paths. Pictures and visuals are cultural products shared by individuals (Moriarty & Rohe, 1992); as such, they are understood within individual people's frames of reference (Singer, 2010). Language and cultural differences may impact the effectiveness of visuals (Kovalik, 2004). As a result, the elements in drawings might be arranged according to patterns of written texts (e.g., left-right, right-left) revealing some cultural norms. In some other drawings, elements are organized in a more non-linear fashion. Kress and Van Leeuwen (1996) argue that when an element is placed in the center of an image, it can signify its importance, compared to when it is placed in the margin.

For example, Mehdi's drawing (Figure 8), inspired by topics, depicts a big map of Iran in the center which has occupied most of the page. This is surrounded by the flags of other neighbor countries in the margin. As Mehdi himself explained, He put Iran in the center to show that it is the most important country among all the other ones in the area.
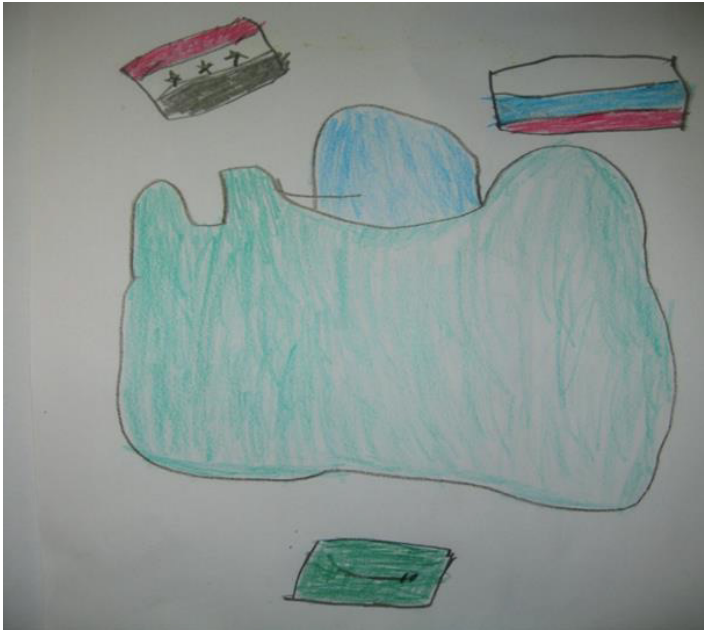
Figure 8. *Map of Iran*

Similarities, Variations, and Interests

Regarding the last two research questions, a comparison of the drawings revealed a set of similarities and variations in the types of meaning that were made and their realizations. With respect to the similarities, in some of the analytical drawings (e.g. Figure 2), space and line framings were used to make distinctions between drawn elements. This shows that children consider the drawings as compositions. Diagonal lines, curved/bent figures, profile form, and tilted body position were features constituting visual vectors in drawings which represented narrative meanings (Figures 3 & 4). Furthermore, the multimodal quality of some of the children's drawing practices (Figures 1, 3 &4) can be considered as a type of similarity in the children's act of meaning-making. They used talking, writing, and gesturing, and sometimes objects for meaning making and representing their thoughts. This is in line with different studies (Anning & Ring, 2004; Coates & Coates, 2006; Dyson, 1989, 1993; Hopperstad, 2008; Pantaleo, 2005; Pahl, 1999, 2002; Rabey, 2003) which revealed children's skills to make meaning, using a variety of visual resources. These similarities reveal that the children have common access to the necessary skills used for meaning-making forms and structures that were shared by them. They also show the visual literacy children bring with them to school. Another justification for the similarities could be the fact that the children, when sitting together to draw, may have copied from each other. In fact, children can easily look at each other's drawings and pick up visual structures in such an intimate situation at the table. In the same line, Pahl (1999) stated that there is a rich possibility for

children to copy each other as they are engaged in group activities. This is also true for ideas which can spread among children as they are working together. However, Kress (1997) challenges this argument that children only copy. In fact, he believes that copying is itself one type of 'new making' (p. 37) because meaning-making is always a transformative process.

Coming to the variations among the drawings, it is noticed that although the children in the present study may have copied other children's visual forms and structures, each drawing was uniquely created by different types of interests and provided the specific context for the visual structures and forms. Kress (1997, 2003) argues that children's interests are reflected in their drawings. As a result, one needs to look for those interests in order to understand how children make unique meanings in their drawings. In the present study, traces of aesthetic interest, interest in facts, and interest in events were visible.

According to Rabey (2003) and regarding an interest in facts, the children tended to represent figures and objects that originated from the topics or their experiences out of school. That is, since the children's drawings were built upon their interests in facts, they hadn't provided much setting details, and consequently, the represented elements could easily be scrutinized (e.g. Figures 3, 5, 6 and 8). Furthermore, some of the drawings reflected an interest in in the dynamic aspect of the world; that is, events. The dinosaur drawing (Figure 3) and the man catching the big fish (Figure 4) are examples. In other drawings, the children represented emotional dimensions (Figures 6 & 7). Finally, an aesthetic interest was particularly illustrated by using colors. The dark blue color of the small pools on either side of Hafez tomb (Figure 1), which emphasized the clean and clear water inside, and the red color the heart in Figure 6 are examples. It is also worth mentioning that the interest in aesthetics can affect interest in events and facts, which depicts the artistic pleasure children may take from visual meaning-making.

However, the interests which were described above are not exhaustive at all; that is, according to Kress (1997, 2003), there are many other factors that can influence children's interests and not all sources of interests can be tracked. For example, as Hopperstad (2008) states, different factors in the setting, peer conversations, interactions, and also out-of-school drawing experiences, can determine children's decision what and how to draw. Furthermore, according to Hopperstad, the interests are dynamic phenomena which cannot be separated from the drawing process itself. That is, as the child is drawing, new and different interests may emerge. Similarly, Pahl (1999) argues that only through close observation one can detect the complex meanings and shifting interests represented in children's drawings. This change of interest was observed in the drawing process of some children in the present study when they crumpled their incomplete drawing and tried to make a new one.

Another important issue regarding interest is children's growing control over visual resources. Thibault (1997) asserts that children's interests may be so complex that children are not able to depict them visually. For example, lack of a visual vector in a drawing does not necessarily mean child's lack of interest

in the dynamic aspect of the texts. One justification is the fact that the child does not have control over signifying the action which has affected their decisions of what to draw. Another explanation is the presence of peers in the drawing process. In the present study children could simply pick up from each other, ask questions and comment as they were in small groups. A negative remark from a peer can make a child to quit their drawing and start a new one. This can result in an unsecure feeling because as Pahl (1999) argues, full engage in drawing requires a safe feeling. Finally, the sources of inspiration and the way the drawing tasks were presented to the children in class may also have influenced the children's interest in drawing. The sources of inspiration were defined by the teacher. While it is encouraging and helpful for some children to follow their own interests, some others may feel anxious and insecure as they need to fulfill the teacher's expectation (Anning & Ring, 2004). Furthermore, different sources of inspiration may not cause the same degree of encouragement for different children. In the drawing sessions, when the sources of inspiration were defined by the teacher, some children became cheerful while some others felt stressful and unsafe. In fact, due to sufficient data in the present study, one cannot say anything specific about this and further research is recommended in this respect.

Conclusions

Based on the results of the study, it can be concluded that most of the children's drawing practices have a multimodal quality; that is, they draw upon a variety of visual resources, such as talks, written texts, gestures, and objects in their drawing processes to convey ideational, interpersonal and textual meanings. In fact, the results of the present study promoted teachers' awareness regarding children's visual literacy they bring to school. According to Anning and Ring (2004), unfortunately, school children usually think of drawing as a temporary mode. However, students need to learn that visual mode, like any other semiotic modes, has a grammar with its own rules and principles. That is, teachers should pay attention to different sources that encourage visual meaning-making in children, and instruct them to make meaning through drawing. Furthermore, as Coates (2002) argues, drawing should be introduced as a free-choice activity because other parts of the children's visual literacy may be activated this way. Some of the children in the present study created multimodal texts, including drawing, talking, writing, and gesturing. As a result, teachers can make children aware of the potentials of multiple modes and encourage their combination. Teachers can also explain to children about the purposes and ways in which different modes are useful for them.

In addition, teachers can foster children's visual literacy by reading and talking about the meaning of drawings. In fact, Kress and Van Leeuwen's (1996) analytical framework could be utilized as a means of understanding and talking about meaning in drawings. According to Hopperstad (2008), this approach can help peer-learning processes and promote children's confidence in their own drawing style.

Also, a comparison of the drawings revealed a set of similarities and variations in the types of meaning that were made and their realizations. The similarities reveal that the children have similar access to the necessary skills used for meaning-making forms and structures that were shared by them. Furthermore, when sitting together to draw, the children may have learned ideas from each other.

With respect to the variations among the drawings, it was noticed that although the children in the present study may have copied other children's visual forms and structures, each drawing is a different context for the visual forms and structures that are copied. This variation can be derived from the children's differing interests reflected in their drawings (Kress, 1997, 2003). In the present study, the children seemed to have been driven by an aesthetic interest, an interest in facts, and an interest in events.

In fact, as Pahl (1999) argues, the things children find interesting will often differ from our adult perspective. Consequently, the teachers should to be pay special attention to each child's meaning-making issues and consider the children's various meaning-making interests as valuable.

Finally, children's safe feeling during drawing and the way sources of inspiration and drawing tasks are presented to them should be taken into account in the interpretation of children's meaning-making processes.

One significant question to be answered is how teachers can create a safe and secure condition for children to follow their drawing preferences and meaning-making interests. This is an important issue because it can provide the researchers with more valid interpretations and inferences when analyzing children's drawings. An unsafe situation can deteriorate a child's drawing ability and interest. In addition, regarding the fact that different sources of inspiration have different stimulating power for different children, studies can be carried out to see how the introduction of sources of inspiration and drawing tasks can affect children's meaning-making activities in school. Finally, longitudinal studies can be carried out to see how children's drawings in class can promote their visual literacy in out-of-class situations in the future.

References

Anning, A., & Ring, K. (2004). *Making sense of children's drawings*. Open University Press.

Arizpe, E., & Styles, M. (2003). *Children reading pictures: Interpreting visual texts*. Routledge Falmer.

Ausburn, L., & Ausburn, F. (1978). *Visual literacy: Background, theory and practice. PLET, 15*(4), 291-297.

Avgerinou, M. (2001). *Visual literacy: Anatomy and diagnosis* [Unpublished doctoral dissertation]. The University of Bath, UK. British Library Documentation System.

Avgerinou, M. D. (2003). A mad-tea party no more: Revisiting the visual literacy definition problem. In R. E. Griffin, V. S. Williams, & L. Jung (Eds.) *Turning Trees* (pp. 29-41). IVLA.

Avgerinou, M. D., & Pettersson, R. (2011). Toward a cohesive theory of visual literacy. *Journal of Visual Literacy*, *30*(2), 1-19.

Baker, D., & Watt, W. B. (2008). *Cultural pathways across aboriginal landscapes: The importance of visual representation of heritage information for the protection of aboriginal heritage and for negotiated development in South Australia.* International Visual Studies Association (IVSA) conference, Buenos Aires, Argentina.

Barthes, R. (1977). *Image, music, text (S. Heath, Trans.).* Hill and Wang.

Coates, E. (2002) 'I forgot the sky!': Children's stories contained within their drawings. *International Journal of Early Years Education, 10*(1), 21-35.

Coates, E., & Coates, A. (2006) Young children talking and drawing. *International Journal of Early Years Education, 14*(3), 221-241.

Dyson, A. H. (1989). *Multiple worlds of child writers: Friends learning to write.* Teachers College Press.

Dyson, A. H. (1993). From invention to social action in early childhood literacy: A reconceptualization through dialogue about difference. *Early Childhood Research Quarterly, 8*(4), 409-425.

Gee, J. P. (2003). *What video games have to teach us about learning and literacy.* Palgrave Macmillan.

Gee, J. P. (2004). *Situated language and learning: A critique of traditional schooling*. Routledge.

Halliday, M. A. K. (1994) *An introduction to functional grammar* (2nd Ed.). Edward Arnold.

Hopperstad, M. H. (2008). When children make meaning through drawing and play. *Visual Communication, 7*(1), 77-96.

Jamshidzadeh, Z., & Jam, B. (2017). The visual transitivity system in two ELT books series. *Research in Applied Linguistics*, *8*, 7-13.

Jewitt, C. (2005). Multimodality, "reading," and "writing" for the 21st century. *Discourse: Studies in the Cultural Politics of Education, 26*(3), 315-331.

Jodairi Pineh, A. (2017). Moving against the grain: Exploring genre-based pedagogy in a new context. *Research in Applied Linguistics*, *8*(2), 136-158.

Kendrick, M., & McKay, R. (2004). Drawing as an alternative way of understanding young children's construction of literacy. *Journal of Early Childhood Literacy, 4*(1), 109-128.

Kist, W. (2000). Beginning to create the new literacy classroom: What does the new literacy look like? *Journal of Adolescent and Adult Literacy 43*(8), 710-718.

Kovalik, L. C. (2004). *Visuals across languages: Training materials and developing countries.* In R. E. Griffin, S. B. Chandler, & B. D. Cowden (Eds.), *Visual literacy and development: An African experience* (pp. 133- 140). IVLA.

Kress, G. (1997). *Before writing. Rethinking the paths to literacy*. Routledge.

Kress, G. (2003). *Literacy in the new media age*. Routledge.

Kress, G., & van Leeuwen, T. (1996). *Reading images: The grammar of visual design*. Routledge.

Kress, G., & van Leeuwen, T. (2001). *Multimodal discourse: The modes and media of contemporary communication.* Oxford University Press.

Luke, A., & Elkins, J. (1998). Reinventing literacy in 'new times'. *Journal of Adolescent and Adult Literacy 42*(1), 4-7.

Moriarty, S. E., & Rohe, L. (1992). Cultural palettes: An exercise in sensitivity for designers. *Journalism Educator, 46*(4), 566-570.

Pahl, K. (1999). *Transformations: Meaning making in nursery education*. Trentham Books.

Pahl, K. (2002). Ephemera, mess and miscellaneous piles: texts and practices in families. *Journal of Early Childhood Literacy, 2*(2), 145-166.

Pantaleo, S. (2005) 'Reading' young children's visual texts. *Early Childhood Research and Practice 7*(1). http://ecrp.uiuc.edu/v7n1/pantaleo.html

Rabey, K. (2003). Thinking aloud: Looking at children drawing in response to picture books. In E. Arizpe & M. Styles (Eds), *Children reading pictures: Interpreting visual texts* (pp. 117-144). Routledge Falmer.

Ranker, J. (2012). Young students' uses of visual composing resources in literacy classroom contexts: A cross-case analysis. *Visual Communication, 11,* 461-483.

Reiss, M., Boulter, C., & Tunnicliffe, S. D. (2007). Seeing the natural world: A tension between pupils' diverse conceptions as revealed by their visual representations and monolithic science lessons. *Visual Communication, 6*, 99-114.

Singer, W. (2010). The brain's view of the world depends on what it has to know. In A. Berthoz & Y. Christen (Eds.), *Neurobiology of "Umwelt": How living beings perceive the world* (pp. 39-52). Springer.

Thibault, P. (1997). *Re-reading Saussure: The dynamics of signs in social life*. Routledge.