

# Representation meaning of multimodal discourse in textbooks (a case study of Persian language-learning textbook)

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## ABSTRACT

Resources such as images, colors, sounds and actions have already been regarded as different types of modes which fulfill the meaning-making. Multimodal discourse refers to two or more modes working together for the meaning-making of the whole discourse. The paper conducts a multimodal discourse analysis of Persian language-learning textbook from ideational aspects. Persian language-learning textbooks give almost equal weight to both their pictures and verbal texts. The study of ideational aspect focuses on factors such as participants, processes (action, reactional, etc.), circumstance, etc. This article has a two-fold objective: (1) to discuss how the system of transitivity in Kress and van Leeuwen's Visual Grammar (1996) for the analysis of images is related to the system of transitivity in Halliday's Systemic Functional Grammar (2004) and (2) to investigate how multimodal texts combine in meaning production. In terms of a theoretical discussion about visual language, the study of Visual Grammar is relevant, considering the need for investigating the ways this kind of grammar can contribute for language teaching. The analysis reveals the pictures' functions in meaning interpretation and explains the relations between the pictures and the verbal texts.

**Keywords:** Visual Grammar; multimodality; transitivity; Persian language-learning textbook.

## Introduction

As science and technology develop rapidly, the world enters an information era which is also an age of international communication. With wide application of digital technologies, internet and multimedia, meaning-making rarely depends on language alone. Image, colour, sound and action symbol which have been considered as paralinguistic no longer play a subordinate role in modern communication. Combined with linguistic discourse, the paralinguistic is also incorporated into semiotic resources for meaning-making jointly. For example, advertisements, posters, textbook, newspaper, etc. usually

include two or more different semiotic modes such as images, sound and language, etc. These different systems or possible "channels" (e.g. speech, writing, and images) which achieve meaning-making practices are identified as semiotic modes. Thus, some meaning-making practices or communicative events present the multimodality. Contemporary living requires multi-literacy: the reader's capacity of construing meaning from the multiple 'designs' (linguistic, audio, spatial, gestural and visual designs) which compose multi-modal texts (Cope; Kalanithi's, 2000, cited in (Désirée Motta-Roth, 2009)) [1]. For example, a print advertisement present two designs of meaning (linguistic and visual) which, in combination, convey experience in terms of 'which world is represented?', 'how people in this represented world relate to each other?' and 'how verbal and visual languages are shaped for representing this world?' 'Considering this need for multi-literacy, Kress and van Leeuwen's Visual Grammar constitutes a description of how language experts use/combine visuals to construct meaning [2]. The idea of applying Systemic Functional Linguistics [3] to images is derived from Kress and van Leeuwen's assumption that verbal language relates to verbs, nouns, mood and theme-rhyme structures,

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while visual communication relates to framing, color saturation and semiotic modality<sup>[2]</sup>. The majority of textbooks add visual images with the aim of helping students have a thorough understanding of topics and contents of lessons. These visual images such as pictures, photos and paints, etc. are adopted to transmit the information of different matters. Multimodality is one of characteristics embedded in these discourses. This paper presents the analysis of a set of multimodal texts and provides an example of pedagogical application of SFG and VG and some of the main categories in the system of transitivity in Systemic Functional Grammar will be presented. We will explore the ways the system of transitivity in Systemic Functional Grammar is expressed in Visual Grammar. We will attempt to explore a multimodal text using the theoretical framework presented in the article and will concern pedagogical applications of Visual Grammar to language teaching.

As much attention has been paid to multimodal discourse, there is an urgent need to analyze how visual images function in the meaning making of the discourse on the condition that two semiotic resources are used together. Based on Halliday's Systemic-Functional Grammar and Kress and van Leeuwen's Visual Grammar framework as a research tool, taking pictures and related texts in Persian language-learning text book as examples, the paper will conduct a multimodal discourse analysis of Persian language-learning textbooks in Iran, analyze and discuss how visual images converge with verbal texts in the multimodal discourse to reflect social reality and culture.

## Literature Review

Textbooks are instructional materials which present knowledge in a systematized and clear way for educational purposes. These textbooks are regarded as multimodal texts as they encompass two types of semiotic modes; language and illustration, in order to provide a more effective path for language learning. Therefore, these books are regarded as important texts since they are the prescribed texts used in the foundation years of learning Persian for non-native speakers in Iranian Universities. Thus, they represent a relatively suitable sample of the locally-developed textbooks already in use in Iran. These textbooks are taught in both private and public institutes and in some Universities. As far as the review of literature is concerned, in Iran several projects have been carried out to evaluate EFL textbooks. These researchers studied textbooks from a number of perspectives. Various textbook evaluation studies carried out in Iran. Some studies have studied discourse features such as speech acts, intertextuality and the representation of discourse elements in the EFL textbooks, not Persian language-learning textbook. Besides, in today's literary-artistic studies, semiotics has a special place, and several studies have been done with this approach: Kress and van Leeuwen's (2006) visual social semiotics was initially developed based on Halliday's systemic functional linguistics and is an approach to visual analysis that signifies the role of context in the (re)creation of meaning in the visuals<sup>[4]</sup>. According to social semiotics, every single person in a special social context is surrounded by and

provided with a range of semiotic resources<sup>[4]</sup>. The term *resource* is a key term in social semiotics and derived from the work of Halliday in that he considers grammar a resource, rather than codes or rules, which is used to make meaning<sup>[5]</sup>. These works can be considered as the main foundations of social semantics in analysing images. Having employed Kress and van Leeuwen's (1996[2006] as cited in (Désirée Motta-Roth, 2009) ) visual social semiotics, either solely or in conjunction with other frameworks, researchers have shown how different visual factors manipulate meaning in the visual texts of different magazines, newspapers and advertisements (e.g., Bell & Milic, 2002; Bohlke, 2006; Borhart, 2003; Godeo, 2009; Lin & Ihara, 2009; Martínez Lirola, 2009, 2010; Manolache, 2010; Oyama, 2007; Pinto-Coelho & Mota-Ribeiro, 2009, cited in (Désirée Motta-Roth, 2009))<sup>[1]</sup>. However, to the best of the researchers' knowledge, very few studies have examined gender representation in the images of ELT materials (e.g., Kordjazi, 2012)<sup>[6]</sup> and textbooks (e.g., Tahririan & Sadri, 2013)<sup>[7]</sup> based on Kress and van Leeuwen's (2006)<sup>[4]</sup> visual social semiotics<sup>[8]</sup>. In analysing the images of educational books, Torres (2015) evaluates social semiotics of a textbook in the South Korean education system using Kress and van Leeuwen's (1996[2006]) framework. His findings showed that some of the visual messages and verbal messages of the mentioned textbook conflict with each other. He also states how this contradiction reveals the ideology within those images. A number of Iranian researchers have also studied the visual and aesthetic aspects of teaching English language teaching books in the educational system of the country. For example, Rouhani and Saidfar (2013) studied the visual components of guidance books in the previous educational system<sup>[9]</sup>. They came to the conclusion from interviews with many teachers and students that teachers using images used in books which are related to educational goals<sup>[9]</sup>. In another study, published by Tahririan & Sadri (2013)<sup>[7]</sup>, the images of high school books in the previous educational system were comprehensively analysed using Kress and van Leeuwen (2006)<sup>[4]</sup> model. Their findings show that the images were not fully used in the language learning process, for the reason of the problems in representing and interacting characteristics in transferring the concepts. The relationship between text and image in educational books has been the subject of a variety of researches. In many cases, they have indirectly discussed the relationship between text and image. Some researchers have provided a list of image functions. There are also scholars who have explored the relationship between images and written text. Naziri (1371) analyses and evaluates the content of the Persian Book of the second grade in primary school. His findings show that there is no relationship between text content and image. Moreover, there is no co-ordination between the components of the images and their location. Nabavi (2006) has examined various types of visual signs in written texts. His research shows that visual signs help to understand the meaning of written texts. Hessampour and his colleagues (1393) have reviewed the relationship between text and image based on the theory of Maria Nikolayeva and Carole

Scott (2006) <sup>[10]</sup> in three Iranian stories and three foreign stories. This research also focuses on the dynamics, the relation between text and image and its pathology, and finally provides an appropriate and worthwhile model for reading visual books based on the role of the relationship between text, image and audience <sup>[11]</sup>.

Multimodality also considers correlation among different semiotic resources. Most theories regarding correlation in multimodal texts are derived from the theory of correlation established by Halliday and Hasan (1976) <sup>[12]</sup>. Van Leeuwen (1991), one of the pioneers who have made great attempts to study correlation between different modes, investigates visuals and language of television documents and films in terms of conjunctive structure. Lemke (1998) examines scientific articles in which language and diagram are combined to create the text. He claims that no specific system pertaining to inter-semiotic relations has been observed in articles to integrate these two semiotic resources <sup>[13]</sup>. Royce (1998, 2007) also presents an exhaustive analysis related to inter-semiotic relations between images and texts across advertisements of *The Economist* and environmental science textbooks <sup>[14, 15]</sup>. He perfectly explains the ideational, interpersonal and textual features of image-text relations in multi-semiotic texts. As literature review of Iranian textbooks indicates, there are very few studies on correlation of verbal texts of these textbooks and that relation of image and language in terms of correlation has been neglected. To fill the gap, this research will look at the correlation between the two semiotic resources from different aspects. On the other hand, there are studies on images in language textbooks that exclusively focus on conceptual elements presented in visual imageries to examine the depicted culture and norms. However, this study takes into consideration not only how visual images illustrate the materiality and mentality of Iranian Persian textbook but also how they are parallel with language used in texts.

The main aim of the present study is to highlight how the interaction of language and image help in meaning construction and hence contribute to text correlation in multimodal textbook. In order to realize the aim, it is essential to identify the visual and verbal elements found in Iranian textbook and the semantic relationship between them.

## Methodology

### Materials and Data Collection Procedures

The present study applied the dimensions of representational meaning presented to photographs for data analysis randomly selected from the Persian language-learning textbook series (A. Saffar Moqaddam, 1391, published by Persian language development council Press) <sup>[16]</sup>. This series includes four volumes covering the beginning level to the high-intermediate level. The choice was made based on the following rationales. The series is declared to be the most successful one used to teach Persian to non-native learners around the globe. The series is also widely used in many Iranian Universities and

institutes. Furthermore, it has been claimed that the current approaches to teaching and learning languages have been incorporated into this edition. Indeed, these rationales lent support to the speculation that the books merited close scrutiny in terms of Persian representation. As such, out of the total number of pictures (64) in the series, (8 photographs) was randomly chosen. Indeed, 2 photographs chosen through random sampling from each volume provided the necessary data for the present study. The focus of the current study was to investigate representation meaning of visual images and logical semantic relationship between text and image and to explain how visual images and verbal text combine with each other to expose meanings. The texts thus selected were scrutinized based on the components of the framework (Halliday 1978 & 1994) and pictures based on (Kress & van Leeuwen, 2006) employed in the study which will be briefly introduced in the following section <sup>[4, 17, 18]</sup>.

### Analytical framework

The model adopted for the critical visual analysis in this study is the visual social semiotics developed by Kress and van Leeuwen (2006) <sup>[4]</sup>. Following Halliday's idea that there are three major meta-functions for semiotic modes (i.e., ideational, interpersonal, and textual), Kress and van Leeuwen (2006) reflected these meta-functions in their work of visual analysis turning them into representational (how the visual elements are related to each other), interactive (how the image producer and viewer interact, on the one hand, and how they interact with the depicted elements, on the other) and compositional meanings (how visual elements are placed in the visual text) to apply them to visual structures <sup>[4, 19]</sup>. The following concepts and their explanations taken from Kress and van Leeuwen's (2006) *Reading Images* summarizing their social semiotics framework.

Table 1: Theoretical Frameworks of the Study

Verbal Discourse Analysis	Visual Discourse Analysis
Systemic Functional Linguistics <sup>[3, 18]</sup>	Visual Grammar <sup>[2, 4]</sup>
Transitivity system: ●□Participant●□Process	Representation: ●□Narrative●□Conceptual

### Multimodal Discourse Analysis of Persian language-learning Textbooks

Persian language-learning textbook series, involves various topics, such as Persian language and the history or the culture of Iran. It has 4 volumes. Every lesson has an image at the beginning of the lesson and a text composed of some information about the title of the lesson.

#### ● Systemic-functional Grammar

Halliday holds that language is perceived as social semiotic in his Systemic-Functional Theory. He develops systemic-functional grammar in the 1960s, which is part of a broad social semiotic approach to language in which language is

considered as a socially-based semiotic system. He believes that language incorporates three meta-functions. The three meta-functions are principles that semiotic resources simultaneously present a method for constructing ideational meaning and for fulfilling social relations. These principles then could organize discourse, which is the textual meta-functions. Thus, ideational meta-functions refer to the representation of different experience processes in reality, which is realized by transitivity system and relates to the field aspects of a text. Interpersonal meta-functions indicate that when communicating with others, people exchange their feelings, attitude and judgments by means of mood and modality. It matters a text's aspects of tenor or interactivity. Textual meta-functions, which concern mode, focus on how to use language to organize a cohesive text and "establishing continuity in time and space"<sup>[17]</sup> through thematic structure and information structure. In a word, the three meta-functions laid a foundation for verify the functionalities of semiotic resources.

The system of transitivity proposed by Systemic Functional Grammar (SFG) classifies the kinds of 'doings' and 'beings' that constitute human experience<sup>[3]</sup>. The transitivity system is used to represent ideational content, i.e. the semantic content of language. The system is composed of six Processes that represent human experience in terms of: physical and physiological actions (Material and Behavioural), thinking and speaking actions (Mental and Verbal) and actions that signal the existence of something/someone and their identifying features (Existential and *Relational*)<sup>[3]</sup>. The system of transitivity focuses on the clause as its unit of analysis. A clause is composed of two essential elements: the Process and the Participant(s) involved in it<sup>[3]</sup>. In addition, there may be a third element in a clause, the Circumstance(s) surrounding the Process<sup>[3]</sup>. Each different Process in the system requires different kinds of participants<sup>[3]</sup>. For example, Material Processes usually present an Actor (the 'doer' of the action) and a Goal (the Participant whom the action is aimed at). In the case of Mental Processes, the Participant who performs the action is the Senser and the mental construct engendered by him/her is the Phenomenon. In Relational Processes, the first Participant is the Identified, who is identified by, has an attribute expressed by or symbolizes a second Participant who, by its turn, is the Attribute of, the Identifier of, or the symbolic meaning expressed by, the first participant. Circumstances representing which manner and under what conditions the Process is realized<sup>[3]</sup>. As, for example, in Figure 1<sup>1</sup>.

**Figure 1: Example of Material Process**

Actor	Material Process	Goal	Circumstance
I	was cooking	dinner	When the phone rang.

<sup>1</sup> - We have chosen to identify each exemplified clause with the word 'Figure' in the legend (instead of Chart or another term) in accordance with Systemic- Functional Grammar (Halliday, 2004, p.169-170), which defines a clause experientially "as a **figure** or configuration of a process, participants involved in it and any attendant circumstances.

Actor	Material Process	Goal	Circumstance
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In Figure 1, there is a main Process ('cooking' – Material Process), an Actor who performs the action ('I') in relation to a Goal('dinner') and the temporal Circumstance in which the Process occurs ('when the phone rang'). This is the main structure of this clause. Evidently, there is a minor clause embedded in the Circumstance ('the phone rang'), but we will not extend this analysis since our purpose in this paper is to explore multimodal texts and not verbal texts.

### • Visual Images

In recent years, Kress and Van Leeuwen take a view of Halliday's systemic-functional grammar to study visual images. They consider Halliday's three meta-functions as a main tool to analyze any human communication system. Though three meta-functions at first are applied to study language, they do not only focus on language signs. Scholars such as Kress and van Leeuwen also extend their study on discourse including visual images. Kress & van Leeuwen (1996)<sup>[2]</sup> also suggest that "the visual, like all semiotic modes, has to serve several communicational (and representational) requirements, in order to function as a full system of communication" (p.40). They develop Visual Grammar for further study. Kress and Van Leeuwen's *Reading Images: The Grammar of Visual Design* (2006) introduces Visual Grammar, which is a clear multimodal approach to visual communication and gives a thorough and systematic illustration of the grammar of visual design. They named representational meaning, interactive meaning and compositional meaning in correspondence with Halliday's ideational, interpersonal and textual meta-functions.

### • How the transitivity systems of SFG and VG are related to the other?

While SFG presents a system of transitivity composed of six Processes to represent ideational content in verbal language, Visual Grammar (VG) offers two main dynamics: Narrative and Conceptual Processes. In general terms, Narrative Processes depict Participants 'doing' something or performing an action while Conceptual Processes depict the Participants' general state of affairs. According to Kress and van Leeuwen (1996, p.114-115), SFG and VG present some similarities as regards their semiotic categories. For example, Material Processes present linguistic functions that find correspondence in Narrative Processes because both serve to represent 'outer experiences' in the material world. At the same time, Existential and Relational Processes realize meanings similarly to Conceptual Processes because all of them are about 'being and having', the way Participants are construed as 'things' or actions/events (Existential) or are represented in terms of their Attributes (Relational). In the next section, we will explore these three types of Processes in SFG - Material, Relational and Existential - as well as the two major types of 'ideational' Processes in VG - Narrative and Conceptual. The reason for concentrating on a partial account often set of

experiential meanings in SFG is that Kress and Van Leeuwen's VG does not explore projecting and physiological Processes (Mental, Verbal and Behavioral) in detail. A set of questions may be used to explore the relationship between verbal and non-verbal texts.

- (1) How are the participants in the picture and their actions referred to in the verbal text (by means of which lexical grammatical choices)?
- (2) What attributes and circumstances are associated with the participants, their actions, and the mood of the scene?
- (3) Is there any logical semantic relationship between images and their texts in Persian Language Learning textbooks?

In the next section, we will explore these three types of Processes in SFG - Material, Relational and Existential - as well as the two major types of Representational Meaning or 'ideational' Processes in VG - Narrative and Conceptual. The reason for concentrating on a partial account of the set of experiential meanings in SFG is that Kress and van Leeuwen's VG does not explore projecting and physiological Processes (Mental, Verbal and Behavioral) in detail.

### ✓ **Doing and happening: Material and Narrative Processes**

#### ➤ **Material Processes**

In SFG, Material Processes describe actions in the material world in terms of physical actions and happenings (such as 'running' and 'throwing') and changes unfolding through time and space (such as 'cooking' or 'breaking' something) [3]. There are two types of Material Processes depending on the nature of the Process: Creative (refers to those clauses in which a Participant comes into existence) and Transformative (refers to those clauses that express some change in an existing Participant). In Material clauses, there is at least one Participant who performs the action (Actor). In transitive clauses, there is also the Goal, the Participant at whom the action is aimed, as shown in Figure 2.

#### (1) **The students answer the professor question.**

[dânešjuyan] [be] [soâle ostâd] [javâb midahand].

**Figure 2: Verbal representation of (Persian language-learning textbook, volume 1, lesson 10)**

[dânešjuyan]	[be] [soâle ostâd]	[javâb midahand].
Actor	Goal	Material Process

Actor [dânešjuyan] is doing a physical action [javâb midahand] aimed at another Participant represented as an inanimate object [soâle ostâd]. The Process type is Transformative because the Actor is changing or modifying the external aspects of the Goal [soâle ostâd javâb dâde mišavad].

#### ➤ **Narrative Process**

As it said before, representational meaning can be classified

into two categories: narrative representation and conceptual representation. Narrative representation refers that "when participants are connected by a vector, they are represented as doing something to or for each other" [4]. Such kind of vector patterns focuses on illustrating Unfolding actions and events, processes of change, transitory spatial arrangements" [4]. Vector, as the distinctive feature of narrative processes, is usually realized by elements appearing in pictures that form an oblique line, often a quite strong, diagonal line" [4].

Similarly to Material Processes in SFG, Narrative Processes in VG depict a physical action which expresses an event, a movement or a change in state [2]. Take the following Image as an example;

#### (2) **The students read and repeat the text and answer the professor question.**

[dânešjuyan matne dars râ mixânand, tekrâr mikonand va be soâle ostâd javâb midahand.]

**Diagram 1<sup>2</sup>: Correlation between SFG and Visual Grammar's transitivity systems [Material processes] (Linguagem & Ensino, Pelotas, v.12, n.2, p.319-349, jul./dez. 2009)**

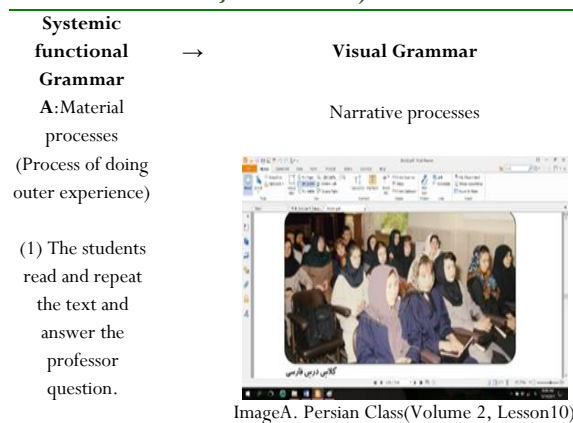


Diagram 1, is an attempt to summarize in non-verbal terms the transitivity systems of SFG and VG to show how one system is related to the other, in other words, how material processes in SFG is related to narrative processes in VG. In the above image, the students read and repeat the text in the classroom. Their eyes and ears form a vector. Actually, vectors can be reflected by various ways, such as human bodies or tools in action. Diagram 1 realizes a Narrative Process by representing 'what is happening or being done' (instead of representing a state of affairs or 'how things are'). The image depicts many Actors who are carrying out a certain scope of physical activity related to a classroom (read and repeat the text and answer the professor question.). In verbal terms, the image could be represented as Figure 2. So, there is relationship between text and related image. As generalizations, the verbal passage '[dânešjuyan matne dars râ mixânand, tekrâr mikonand va be soâle ostâd javâb

<sup>2</sup> - According to Kress and van Leeuwen (1996, p.114-115), SFG and VG present some similarities as regards their semiotic categories, as we attempt to illustrate in Diagram 1, 2 & 3.

midahand.]’ (Material Process) reinforce the stereotypes presented by the image.

✓ **Being, having and existing: Relational, Existential and Conceptual Processes**

➤ **Relational Processes**

In SFG, Relational Processes ‘serve to characterize and to identify’ things (either concrete or abstract ones) by establishing a relationship of identity or class membership between two entities [3]. In the next, two kinds of SFG Relational Processes will be explained. There are two kinds of Relational Processes or, in Halliday’s words, ‘two modes of being’: Attributive and Identifying. As shown in the above Figure, Attributive and identifying ‘modes of being’ can vary according to the type of relation established between participants. There are three main types of relations expressed by the English system: Intensive, Possessive and Circumstantial:

- Intensive is the type of relation in which one Participant is characterized in relation to another (‘x is y’) [3]. For example, in Figure 3, the type of relation is Intensive because one specific Participant (‘[kebab]’- Token) is being characterized (in this case, classified) in terms of another Participant who represents a more general class (‘one of the most famous Iranian Food’ -Value).

**Figure 3: Verbal representation of (Diagram 2.Image B1) – Intensive type of relation**

[kebab]	[maʔruftarin ʧazâye meli –ye- iraniyân]	[ast]
Roast meat	one of the most famous Iranian food	is
Identified	Identifier	Relational Identifying Process

- Possessive is the type of relation in which Participants establish a part-whole relationship in the clause (‘x has y’) [3], as illustrated in Figure 4.

**Figure 4: Verbal representation of (Diagram 2.Image B2) – Possessive type of relation**

[har fasl-e- sâl]	[zibâyi]	[dârad]
Every season of the year	beauty	has
Carrier (the whole)	Attributes(the parts)	Possessive Attributive Process

The Participant (‘har fasl-e- sâl’) is being characterized in terms of features (‘zibâyi’).

- Circumstantial is the type of relation in which Participants establish a relationship in terms of a circumstance (time, place, manner etc.) (‘X is at y’) [3] as seen in Figure 5.

**Figure 5 – Verbal representation of (Diagram 2.Image B3) Circumstantial Attributive Process**

[bimârestân-e- milâd]	[dar tehrân]	[ast]
Milad hospital	in Tehran	is
Carrier	Attributive Process (circumstance)	Circumstantial Attribute

➤ **Existential Processes**

Existential Processes serve to signal to the reader the existence of an entity (e.g. ‘There is a man at the door’) or a happening (e.g. ‘There was a storm yesterday’) [3]. These Processes present only one Participant (the Existent) which is usually accompanied by a Circumstance of time and place (Figure 6). [marâkez ziyâdi dar irân vojûd dârad.]

**Figure 6 – A possible verbal representation of (Diagram 3.Image C) Existential process**

[marâkez ziyâdi]	[dar irân]	[vojûd dârad]
many education centers	in Iran	there are
Existent	Circumstance	Existential Process

➤ **Conceptual Processes**

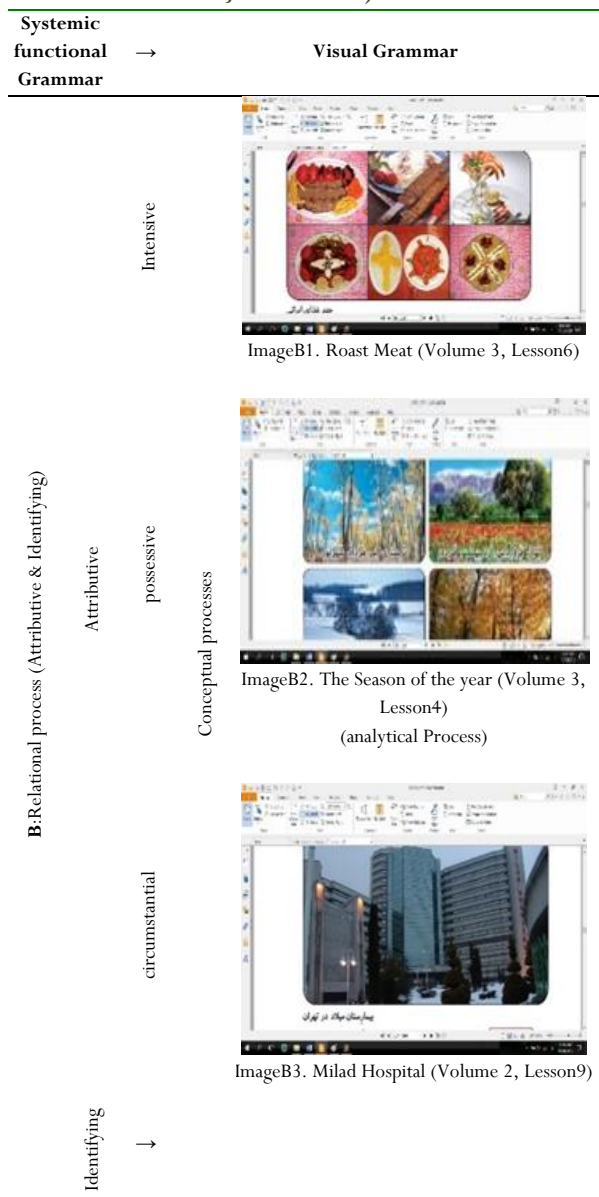
As it said before, representational meaning can be classified into two categories: narrative representation and conceptual representation. Narrative representation is explained in the previous part. Conceptual Processes are image representations of the general state of affairs of participants and general truths about the world [4]. Conceptual representation is a non-narrative process involving “representing participants in terms of their more generalized and more or less stable and timeless essence, in terms of class, or structure or meaning” [4]. Compared with narrative representation, conceptual representation has no vector and also has three structures involved. Classification, analytical and symbolic processes are different categories of conceptual processes.

- “Classification processes relate participants to each other in term of a ‘kind of’ relation, taxonomy: at least one set of participants will play the role of Subordinates with respect to at least one other participant, the Super ordinate” [4]. Image B. 1 in Diagram 2 is an example of classification process, which indicates an ordering and usually includes two participants: subordinates and super ordinates.

- Analytical Processes connect participants in terms of a part-whole structure. Two participants involved in these processes are respectively one Carrier (the whole) and any number of Possessive Attributes (the parts). Image B. 2 in Diagram2 is an example of analytical process, which is a part-whole structure, involving two participants: one Carrier (the whole) and several Possessive Attributes (the parts).

- Symbolic process focuses on what a participant means or is. If two participants are included in this structure, the Carrier achieves its meaning or fulfills its identity in this process while the Symbolic Attribute represents the meaning or identity itself. This type of structure is called symbolic attributive. If only one participant exists in this structure, it is the Carrier. This kind of process is named Symbolic Suggestive. Image C in Diagram3 is an example of symbolic attributive process including the Carrier and the Symbolic Attributes. As said it before, According to Kress and van Leeuwen (1996, p.114-115), SFG and VG present some similarities as regards their semiotic categories [2]. In the next Diagram, Correlation between SFG and Visual Grammar’s transitivity systems in Relational processes is presented.

**Diagram 2: Correlation between SFG and Visual Grammar's transitivity systems [Relational processes] (Linguagem & Ensino, Pelotas, v.12, n.2, p.319-349, jul./dez. 2009)**



Despite these points of contact identified between the two grammars, Kress and van Leeuwen (1996, p.115) argue that there is a wide range of structural devices in non-verbal language which have no equivalent in verbal language. The semiotic richness of using multimodal texts for representing human experience resides in the interplay of both modes of language, playing semantic roles that are equally important for textual meaning (Ibid).

In the next subsections, we will provide a more detailed explanation of Conceptual Processes in VG, illustrating our discussion with examples and trying to relate the visual and verbal modes of meaning production.

Diagram 2 is an attempt to show how Relational processes in SFG is related to Conceptual processes in VG in the corpus of the present study (language learning textbook). Diagram 2

realizes a conceptual Process by representing 'what is being / having and representing a state of affairs or 'how things are'. For Kress and van Leeuwen (1996, p.115), Intensive and Possessive Processes show equivalence to two subtypes of VG's Conceptual Processes: Classification and Analytical. The main reasons for such equivalence are that both:

1. Classification and Intensive Relational Processes characterize one Participant in terms of another (in the case of Classification Processes, one Participant ascribes a class to another), as shown in Diagram 2;
2. Analytical and Possessive Relational Processes establish a relation of ownership between participants as shown in Diagram 2 (more details on sub-section) Conceptual Processes).

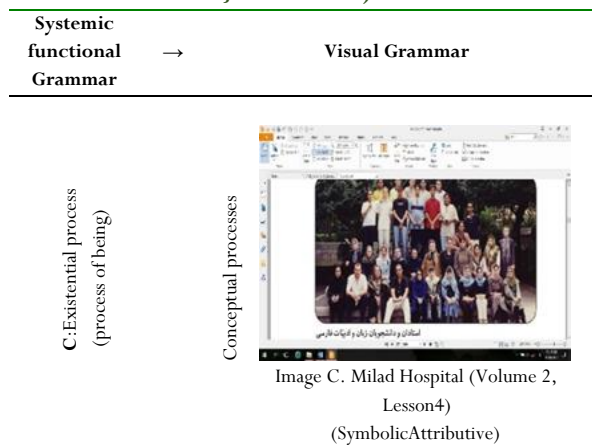
In Diagram 2, image B1, Some kind of Iranian food presented in the visual mode. It represents Iranian food habits. The verbal part of Image B1 discusses and classifies Iranian food habits. In this image, roast meat, chicken, fish, etc. are subordinates. As for these food habits, their super ordinate is Iranian food habits. This image gives a brief introduction of Iranian kinds of food. Then, readers could gain detailed information from verbal text. It will be easily and quickly for readers to grasp writer's opinion on this title of the text of the lesson. In verbal terms, the image could be represented as Figure 3. So, there is relationship between text and related image. As generalizations, the verbal passage '[kebab ma?ruftarin yazâye meli -ye- iraniyân ast.]' (Intensive type of relation) reinforce the stereotypes presented by the image.

In Diagram 2, image B2, It displays some of the Possessive Attributes rather than all of them. In this process, part of the space of the Carrier has been filled with certain possessive attributive. Every season of the year in Iran has special fine weather. In ImageB2, spring, winter, autumn and winter seasons are presented. It verbally talks about climate in Iran. Then, it discusses what climate is in different seasons. As it said before, Relational Processes realize meanings similarly to Conceptual Processes. Verbs such as (ast and mišavad) are relational processes and reinforce the stereotypes presented by the image. Readers gain useful information from the image. Then, they would have a better understanding of the verbal text. In verbal terms, the image could be represented as Figure 4. So, there is relationship between text and related image. As generalizations, the verbal passage '[har fasl-e- sâl zibâyi dârad]' (Possessive type of relation) reinforce the stereotypes presented by the image.

In Diagram 2, image B3, is type of relation in which Participant establishes a relationship in terms of a circumstance (place) ('X is at y'). In this image, Milad Hospital is presented. This hospital is near Milad tower in Tehran. In verbal terms, the image could be represented as Figure 5. So, there is relationship between text and related image. As generalizations, the verbal passage '[bimârestân-e- milâd dar tehrân ast.]' (Circumstantial Attributive type of relation) reinforce the stereotypes presented by the image. In the next Diagram, Correlation between SFG and Visual

Grammar's transitivity systems in Existential processes is presented.

**Diagram 3: Correlation between SFG and Visual Grammar's transitivity systems [Existential Process] (Linguagem & Ensino, Pelotas, v.12, n.2, p.319-349, jul./dez. 2009)**



In an attempt to describe image in (Diagram 3) in simple verbal terms, we could simply say: there is an Existent ([marâkez] with certain Attributes -'[ziyâdi]') that exists under specific place Circumstances ('dar iran'). Image C.4.in Diagram3 is an example of symbolic attributive process including the Carrier and the Symbolic Attributes. One of the Persian learning centers presented in the visual mode is the Carrier. It represents language learning center. At the first sight of this image, readers could know that its verbal content is related to language learning center. Then, with this view, they further find out the main thought of verbal text. The verbal part of this image discusses that Iran has many Persian learning centers. Verbs such as [ast, dârad and mišavad] are about 'being and having', the way Participants are construed as 'things' or actions/events (Existential) or are represented in terms of their Attributes (Relational). This image gives a brief introduction of a language learning center. Then, readers could gain detailed information from verbal text. In verbal terms, the image could be represented as Figure 6. So, there is relationship between text and related image. As generalizations, the verbal passage '[marâkez ziyâdi dar irân vojûd dârad.]' (Existential Process) reinforce the stereotypes presented by the image. However, the meaning of the verbal text is expanded when combined with non-verbal language.

## Conclusion

This paper offers an example of a multi semiotic reading which explores categories presented both by SFG and VG. Correlations between theoretical principles and pedagogical application will be elaborated along the discussion. In some genres, especially textbooks, images are extremely appealing elements because they constitute the most immediate stimulus for the reader. In the teaching of Foreign Languages, where language is the issue, learning to analyze the visual

configuration of texts can be extremely helpful in the meaning production. In multimodal reading, visuals in combination with the context (a set of other peripheral textual portions embedded in the text) create useful resource for the reader. Non-verbal elements, such as color, shape, size, volume, illumination and spatial orientation, offer clues of 'what is going on' in a text because they can activate the readers' background knowledge before the actual reading of the verbal text. Multimodal texts combine verbal language with non-verbal elements.

Persian language-learning textbook series involves two components, one is visual images (mostly at the beginning of every lesson) while the other is verbal texts (Reading Text Part). Based on Halliday and Kress and Van Leuwen framework, this paper conducted 8 images and related text of the textbook and discussed the interface between visual and verbal semiotic systems from ideational aspect. The verbal text of Sample 1-8 mainly discusses the features of Iran and Persian language. In the visual mode of these Samples, Represented Participants, the Processes, the Goals and the Circumstances are different. The paper analyzed Persian language-learning textbook with visual images from the perspective of ideational/representational meaning. The research not only helps readers be familiar with the nature and characteristics of multimodal textbooks discourse but also gives some useful instructions to the authors so as to improve the quality of textbooks.

The findings of the verbal analysis show that Material process structures outnumber other processes in the studied lessons text of Persian textbook. It seems that all the four volumes of the textbook favor the Material clauses or sentences. The second frequently found process is Relational process of the attributive and identifying types present in short sentences. Such evidence proves that the languages of these series of textbook are very simple and tangible to enable students whose Persian proficiency is low in order to comprehend the text.

The visual analysis of the current study indicates that most of the images in the textbook are conceptual. It may arise from the fact that images of the texts of the textbook serve to illustrate attributive and identifying of represented participants (especially Persian language and Iran) in order to create crystal clear details from related texts. This is to compensate for the low Persian language proficiency of non-Persian students.

The last phase of the analysis of the data is devoted to explore the transitivity systems of SFG and VG to show how one system is related to the other. SFG and VG present some similarities as regards their semiotic categories. For example, Material Processes present linguistic functions that find correspondence in Narrative Processes because both serve to represent 'outer experiences' in the material world. At the same time, Existential and Relational Processes realize meanings similarly to Conceptual Processes because all of them are about 'being and having', the way Participants are construed as 'things' or actions/events (Existential) or are represented in terms of their Attributes (Relational). Based on

the analysis of the data, some of the participants are presented both in the verbal texts and the related images of the text. Moreover, participants may be introduced in the images and reintroduced in the verbal texts and vice versa. The presence of such a cohesive tie shows that the participants of one of the semiotic modes (visual or verbal text) can be traced in other semiotic resource. This could prove there is meaning relationship between the participants of the images and verbal texts. However, all images of the textbook are drawings with high color contrast and highly saturated the reality of the images. Therefore, participants who are depicted in verbal texts are finely illustrated in images to depict their details and this fact to some extent increases the correlation between image and verbal text through reference. Thus, combined visual represented participants with verbal words in these 8 samples and meaning-making is established between two modes.

The findings of the study reveals that visual structures of the images and verbal structures of the verbal texts play the very important role in narration since the experiences are depicted through the processes presented in these semiotic modes. On the basis of the findings, it can thus be deduced that both language and image develop a narration in some cohesive way.

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