

# Impact of Number and Type of Figures' Identification on Accessing Caricatures' Meaning

Zuhoor A. Al-Fatlawi<sup>1</sup> & Rana H. Al-Bahrani<sup>1</sup>

<sup>1</sup> College of Education for Women, University of Baghdad, Baghdad, Iraq

Correspondence: Rana H. Al-Bahrani, Department of English Language, College of Education for Women, University of Baghdad, Baghdad, Iraq. E-mail: prof.rana.albahrani@gmail.com

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## Abstract

The present paper is part of an MA thesis; it aims at quantitatively and qualitatively analyzing the objective of the study which reads: examining the impact of the number and type (strip or comprehensive) of figures' identification on accessing caricatures' meaning. The first part of the objective is quantitatively analyzed using EXCEL software whereas the second part of the objective is analyzed qualitatively using Tolman's Theory of MENTAL MAPS (1948). The study ends up with a number of results, such as the percentages of comprehensive thinking or identification are higher than that of the strip way of identification. As a result, the study concludes that there are many factors that affect image reading where both the number of the figures identified and type of thinking are cases in point. However, it has been noticed that the full identification of figures is important, but what is more important is to know which of these figures need to be comprehensively conceptualized, and the sequence by which such figures are mapped and linked.

**Keywords:** cognitive linguistics, figures, image reading, strip thinking, comprehensive thinking, visual language

## 1. Introduction

Living in a digital era is not an easy job; it requires laymen to be technologically qualified in order to be regarded as literate (Riddle, 2009). One of these technological qualifications is the visual literacy. In Sinatra's term (1986), this type of literacy involves a visual restoration or recalling of previous information and experiences for the purpose of communication or information gaining. Due to its rising importance, it has nowadays been regarded, as Giorgis et. al (1999) add, a contingent need; especially in the domain of learning, which has recently become majorly visual. Learners nowadays need to know how to understand the visuals that surround them, and derive meanings critically and analytically. In this regard, Cohn (2012) maintains that to understand visual language, one needs to cognitively represent graphics. For Tezuka (as cited in Cohn, 2012), an image is not a picture or a piece of drawing. It is a story that has a special type of symbols. Thus, to understand visuals, as Kress and Leeuwen (2006) state, one needs to investigate the rules and regulations that characterize such a type of language.

Cognitively speaking and as Yeh (2004, p. 243) says, a text might be understood by the cohesive devices it has, "the adjacency of two phrases", or by linking what is written with what is stored mentally in form of schemata. According to the researchers of the present work, why a text is understood, it is not yet clear cut, let alone when the discourse is an image where there are no tangible cohesive devices, and where everything is derived and linked COGNITIVELY and SUBJECTIVELY (the researchers' emphasis).

Historically speaking, visual language is the first form of language, even before speaking and writing. This fact is naturally represented by the newborns who usually "listen and understand before they learn to speak, begin to draw before they learn to write, and begin to read images before they learn to read words" (Lloyd, 2015, p.5). Besides, the old saying, "one picture is worth a thousand words", reveals the importance and richness of visual language. In this context, Novak (1998) argues that one image can convey information much more than a whole sentence does. This again reminds the readers of visual language about the emphasis put by the researchers of the present study in that images are cognitively and subjectively construed. Such an emphasis is accentuated by Chen and Wang (2014, p. 97) who mention that "studying language from the level of mind is more persuasive and reasonable". That is; language reflects the way people think, and that the same language is used differently because language users have different minds. Finally, Jamieson (2007) declares that only in visual

communication, the viewer is capable of construing the visual pieces of an image based on his/her own mental schemas.

### *1.1 Figures Mapping*

Liungman (1991; as cited in Cohn, 2012, p. 7) states that in verbal language, there is phonetics and phonology whereas the corresponding fields in visual language are “graphetics” and “photology”. The building blocks of verbal words are phonemes while the building blocks of the objects in an image are graphemes, i.e., lines, spirals, and dots that are combined differently to form different basic shapes. Later, these graphemes are used to form figures, which will be combined with other figures to present a specific scene. Accordingly, in Liungman’s term “figure” means the object of an image. Other scholars, such as Kress and Leeuwen (1996) refer to such objects as “units”.

Different scholars highlighted different factors that affect image understanding. For instance, Jamieson (2007, p. 59) states, to understand or interpret an image, one needs to take into account the psychological, social and cultural factors all together. That is; the viewer or reader of an image needs to relate between the apparent objects and the ideas and the concepts highlighted by these objects to generate a harmonious and unified meaning. In other words, meaning is created via a set of relationships.

Such a type of relationships is described by Jamieson (2007) as being creative because it implies different ways of relating, filling the gaps, and planning. In other words, signs in the visual mode are said to offer countless options for coding and re-coding than in verbal language. Consequently, to understand an image, one needs to take into account three levels of meaning: syntactic (i.e., the relation between the signs); semantic (i.e., the relation between the signs and what they represent), and pragmatic (i.e., the relation between the signs and the social/cultural factors of the users). This proves what Jamieson (2007) says in that the process of construing an image is dynamic in nature; it is physically restricted by the brain, socially and culturally as well. That is; there is not one to one correspondence between an object or an image and its meaning; the relationship between an image and its concept is one to many accordingly. This further supports what he states in that “interpretation is not always uniform” (p. 34); it might take different directions depending on the receiver’s previous experiences and knowledge.

Carter (2012), on the other hand, sheds light on another important aspect in image reading, saying that understanding a discourse does not only involve organizing its components. Rather, it involves “the outcome of cognitive processes among text users” (p. 108). That is; deriving meaning or coherence is something that is done by the receivers themselves in their minds and has nothing to do with language. Here, Wang and Guo (2014) state that it is people who make significance and sense of what they read or listen to. They fill the gaps that occur in the discourse by creating cognitive meaningful connections. Hilligoss and Howard (2002; as cited in Al-Bahrani & Al-Azzawi, 2017) add that individuals should know what to read and how to read as receivers are selective in their reading to achieve some purposes. In addition, people decode and interpret events and things according to their background knowledge and anticipations.

As to the pattern or way of thinking, Jamieson (2007) argues that the meaning of visual work is based on two levels: the surface and the deep. When the objects of an image mean directly themselves, the type of meaning is called the surficial or “overt” meaning. On the other hand, when they mean something else, it is called the “covert” meaning. In this vein, Valle and Eckartsberg (1989) state that people perceive meanings or think in two different ways: the first mode of thinking is denotative; it represents the prime meaning of a word in a real world without any linkages or connections with other concepts. The second mode of thinking is the connotative meaning, which represents the associative meaning of a word. The latter type of meaning is implicitly derived based on the way one perceives or recalls the background knowledge. Jamieson (2007) calls this kind of meaning “symbolic art where the viewer is required, or indeed expected, to make the necessary mental connection between the image displayed and its reference which is absent” (p. 19). Trask (2008) further pinpoints that the process of meaning identification is not an easy job. This is because concepts have either literal or central meaning; i.e., denotative or implicitly associated meaning/connotative. Ajay (2014, p. 31) maintains that human mind works in two different ways: “RADIANTLY and LINEARLY. Radiant thinking is our natural way of thinking. Linear thinking is the way we are taught to think”. In this context, Cao (2012, p. 28) believes that people tend to think metaphorically as thoughts are “fundamentally metaphorical in nature”. Speaking of metaphor, Nayding (2013, p.33) maintains that metaphor is essential since it enables language users to express things that we cannot express without metaphor. For Hazrati, Yousefirad, Rovshan and Ahmadkhani (2016), metaphor represents an unconscious way of expressing one thing in terms of another. In Song’s words (2011), metaphor is used for the purpose of understanding emotions, mind, and all other theoretical or abstract notions

that cannot be grasped by hands or seen by eyes.

### *1.2 Objective of the Study*

There are many factors that affect image reading and understanding. Among these factors are the number and way of figures' identification. Accordingly, the present study aims at examining the impact of the number of the figures identified and the type of figures identification (strip/linear or comprehensive/radiant) on accessing the intended meaning of caricatures.

### *1.3 Limitations of the Study*

The study is only a small part of an MA thesis. It involves examining two factors that affect image reading, the number of figures identified by the participants and their way of conceptualizing these figures whether in a strip way (linearly) or comprehensively (in a radiant way). Not only this, the emphasis is further shed on examining the general and exact meanings of the caricature in question. That is; any other interpretations that are applicable to the image, but reflect neither the general nor the exact meaning are discarded. The study is conducted on third year students of the Department of English/ College of Education for Women/ University of Baghdad. The number of caricatures examined is only one that reflects an Iraqi social issue; it has been drawn by the Iraqi famous caricaturist, Maitham Radhi.

## **2. Literature Review**

Many studies have been conducted on the denotative or connotative meanings and on visuals like that of cartoons, photos, images, or caricatures, etc., but from different perspectives. For instance, Gaikwad (2013) investigated the impact of visual presentations to explain grammatical concepts on Chinese undergraduate students' writings. The researcher used quantitative method to measure the syntactic complexity and sentence variety of students' writing using pre and post-test interviews as well. The students were divided into two groups: experimental and control groups. Findings revealed that Chinese students who were given and taught the grammatical concepts using visually written instructions (experimental group) did better than the students in the control group who were taught and given similar lessons using traditional approaches. As a result, the experimental group presented syntactically complex and more sophisticated texts in the post-test. Qualitative findings revealed that visual representations increased the students' conceptual understanding of grammatical concepts. This study further emphasized the role of multimodal learning, and recommended that the visual method would not work successfully in cultures that encourage traditional or routine learning where the aim of which is to pass exams only.

Mwelwa (2015) investigated the multimodal instructional texts used in road safety signs in Zambia. The researcher explored the coherence derived from associating the choice of words, colors, images in visual forms like posters, billboards, and brochures with their usages. The researcher adopted Halliday's (1994) Systemic Functional Linguistic model and Kress and van Leeuwen's (1996) approach to read visual images. The study concluded that visual forms that are incoherently used badly affect the way the message is accessed, and make some signs ineffective.

Rababah (2015) comparatively examined the connotative meaning of some terms used in the American media ten years before and after 11th of September attack. The study was quantitative and qualitative at the same time; it involved (450) million words taken from fictions, magazines, academic journals, newspapers and spoken words. Results have shown that the more frequent terms were eight in number with either an Arabic or English origin, such as: "Sunni", "jihad", "Islamist", "fatwa", "terrorism", "radicalism", "militant" and "fundamentalism" (p.113). The study concluded that the connotative meaning of such words have acquired a negative sense after the attack.

Al-Bahrani, Al-Saadi and Yousif (2016) quantitatively and qualitatively investigated whether image language is universal as Gernsheim said, or it is a source of creativity and ambiguity as Fairclough (1992) presumed. The researchers adopted Barthes' model entitled "Mythologies" (1957) together with Langacker's (1987) cognitive semantic model. The researchers chose one social Iraqi caricature and detextualized it to be examined by the participants. A test was designed by them to achieve the objective of the study, which is represented by identifying the denotative objects of the image. The study concluded that the percentage of part identification was higher than the percentage of full identification, which was (19%) only. The participants' failure to grasp the denotational meaning was due to the absence of the captions; a matter that complicated the process of getting the denotational meaning. The study proved that textless caricatures or images were ambiguous for they give the participants the freedom to express their thoughts and creativity. Furthermore, it proved that images do not have a universal language.

Ali (2016) conducted a cognitive semiotic study to explore the impact of captions on caricatures understanding. Five images were randomly chosen from the internet and a test was designed with questions to achieve the objectives of the study. The answers of the questions were in a written form in order to highlight students' different responses. The responses were quantitatively and qualitatively analyzed using Pierce's model (1931). The researcher concluded that the students cannot deduce any additional messages with the existence of the captions. Furthermore, the images alone without any captions raised more than one connotation; a result that was opposite to the images with captions. This was because the captions restrict the reader or limit the students' imagination. Therefore, the study recommended that more studies need to be conducted on images to enhance people's understanding of non-verbal language.

In what has been stated so far, one can see that the denotative and connotative meaning can be studied in both text and visuals. Speaking of visuals, the focus was on examining the importance of visuals when teaching, the coherence of multi-modal texts, the importance of identifying the key signs in detextualized caricatures, and the importance of caption in image reading. Consequently, still much more work needs to be done on visuals in general and caricatures in particular; specifically on topics that deal with the way an image is read or the factors that affect image reading.

### 3. Cognitive Linguistics as an Approach

Cognitive linguistics is an innovative branch of linguistics that was launched in 1970s. It focuses on the correspondence among language, human mind (thought) and experiences. It is strongly affected by other sciences, like psychology, anthropology, and philosophy (Lakoff, 1987). Evans and Green (2006, p.3) describe it as a "movement" because it is not a restricted or a specific theory, but it implies different assumptions, perspectives, and principles which lead to diverse, overlapping, and complementary theories. What makes this domain of knowledge different from any linguistic fields is that it deals with cognition. Cognition means as Brandimonte, Bruno and Collina state (2006, p. 3), a "mental" process that involves a range of functions, such as comprehension, memory coding, perception, recalling, attention, decision making, imaging, reasoning, problem-solving...etc. Here, Geeraerts, Kristiansen, and Peirsman (2010) explain that meaning does not exist in isolation; it is rather transmitted and mapped through the interaction between PEOPLE, and CULTURALLY and SOCIALLY situated cognition (the researchers' emphasis). Besides, the basic element of this approach is concept, which is defined by Pesina and Solonchak (2015) as "an abstract unit used by a person in the thinking process" (p. 587), and "a combination of information stored in the memory, which ensures adequate cognitive processing of situations, and the system of concepts shapes the routine worldview of the person". Thus, concepts are "the main culture cell in the person's mental world" (p.588).

#### 3.1 The Adopted Theory in Data Analysis

Mental map is a kind of mental representation which aids a person to store, decode and recall information about a relative phenomenon in his environment to make spatial decisions (Downs & Stea, 1977). The pioneer of this theory is the cognitive psychologist Edward C. Tolman (1948). He states that learning does not only involve "stimulus-response connections"; however, humans create a map-like representation within the nervous system which is employed to guide their everyday activities (Tolman, 1948, p. 193). Cognitive mapping helps bridge thoughts by employing past experiences to understand present and future situations using background knowledge (Davies, 2011).

Mental maps are depicted as SUBJECTIVE interpretations of spatial reality which are formed based on individuals' perspectives. They embody the world as it appears to the observer. They depict "the world as some person believes it to be"; and they do not need to be correct (Downs & Stea, 1977, p. 6). In Tolman's words, there are two types of maps or ways of thinking, "strip" and "comprehensive".

As far as the present analysis is concerned, the researchers apply this theory to reflect the way the participants connect between the limited figures or objects of the image in question. In addition to the way they radiate some objects; ie., the way they add some more details to access the meaning of the caricature and create a "comprehensive map" accordingly. When the way of thinking is simple; it represents a "single path to the position of the goal" as Tolman (1948, p. 193) says. Thus, this type of mental map is called "strip map" while when the way of thinking involves a wide range of different areas or details, it is said to be "comprehensive", creating as a result a radiant map. Such a type of detailed map is called "context maps" by Fiol and Huff (1992, p. 272) whereas the direct or strip map includes a series of "clear points".

Schemata are regarded as a means to create mental mapping as they represent "the building blocks of cognition"; they are considered the source for all human knowledge processing, for instance, categorization and planning, perception and comprehension, recognition and recall, and decision-making and problem-solving (Casson, 1983,

p.429).

### 3.2 The Procedures of the Study

To achieve the objective of the study, the researchers prepared the following as a first step to conduct the main study:

- Selecting a number of social caricatures that belong to the same Iraqi caricaturist Maitham Radhi;
- Preparing a cover letter that clearly states the title, objective of the study; the caricatures selected, the model to be used in the analysis, the two questions to be answered by the participants, the level of the participants, and the number of the participants to be involved in both the pilot and main studies;
- Submitting the cover letter to (5) jury members or panelists who are specialists in linguistics and applied linguistics; and
- Examining the reports and setting the bases of the study based on their instructions which read, choosing one caricature image, selecting (15) participants for the pilot study and (30) for the main study from a total of (60) students, and conducting the study on third year students as they will be available in their college during the time of both the pilot and the main studies, which is from January to March (2018).

### 3.3 Data of the Study

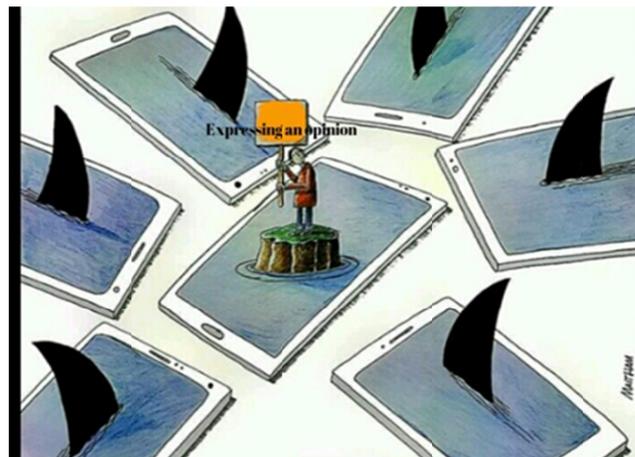


Figure 1. The selected caricature

As far as the data of the present research is concerned, it consists of one Iraqi social caricature that has been drawn by the popular Iraqi caricaturist, Mathaim Radhi; consider Figure 1. The caricature image reflects one of the current social problems in Iraq, which is the way freedom is restricted in social media by some people. The panel consists of a number of figures; these include the following:

- The **PERSON**, who refers to humans in general who like to express their opinion;
- The **SIGN**, which represents human's opinion;
- The **SHARKS**, which represent the opposing side to the laymen who always disagree with others;
- The **MOBILES**, which represent the online media; and
- The **ISLAND**, which represents the place in which the event is experienced.

The participants' conceptual interpretations to the figures of the image in question were color-coded by the researchers for ease of identifying and numerating the number of figures identified by the participants when they answer the questions put by the researchers. That is; any explanation about any of the figures of the image, **PERSON**, **SIGN**, **SHARKS**, **MOBILES** AND **ISLAND**, were given the following color codes: Orange, green, red, blue, and brown, respectively. Thus, the second source of data is the participants' identification and description of the image in question.

### 3.4 The Pilot Study

To conduct the pilot study, the researchers did the following:

- Took the approval from the caricaturist to conduct the study on one of his selected caricatures chosen by the panelists;
- Selected randomly (15) students from the third year, Department of English Language/ College of Education for Women/ University of Baghdad;
- Set the date and place to conduct the study, which was the English Language Lab;
- Prepared the data Show projector to display the selected image;
- Clarified the nature of the study and what was required from the participants before starting the test;
- Asked the participants to sign a consent letter that proves their willingness to participate in the study;
- Distributed the two question sheet; one sheet for each participant to answer on once the image is displayed;
- Silence was maintained and negotiations among the participants were prevented to maintain the confidentiality and privacy of their answers;
- The answer sheets were then collected. The first part of the objective was analyzed quantitatively whereas the second part of the objective was analyzed qualitatively based on Tolman's theory of mental maps (1948); and
- Finally, the conclusions were derived.

#### 3.4.1 Results and Discussion of the Pilot Study

Speaking about the first part of the objective, it has been shown that the (15) participants in the pilot study were categorized according to their answers into the following four groups as shown in Figure 2 where the long bars starting from the right represent the number of the participants regarding the four types of meanings identified whereas the short bars represent their percentages:

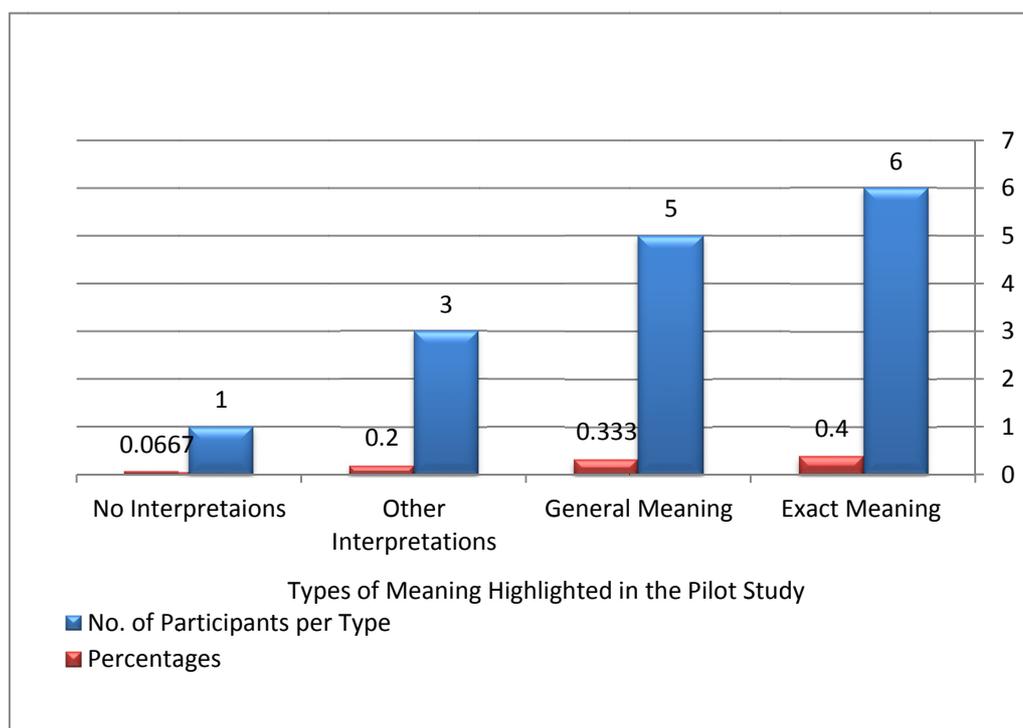


Figure 2. Results of the pilot study/ (15) participants

- Group no. (1), who managed to access the exact meaning of the caricature, the ABSENCE OF ONLINE FREEDOM. They were (6) in number, including the participants: (1, 2, 4, 7, 12 & 13). This group was able to identify (3 - 5) figures comprehensively; and (1-2) in a strip way; consider Figure (3);
- Group no. (2), who managed to access the general meaning, the ABSENCE OF FREEDOM. They were (5) participants, including the following (3, 8, 9, 11 & 14). The given meaning did not specify the type of freedom

being missed, the online one. This was because one of the important figures of the caricature was missed, **the MOBILES**. That is; the number of the identified figures ranged between (2-4) comprehensively, and (1-5) in a strip way; consider Figure 3:

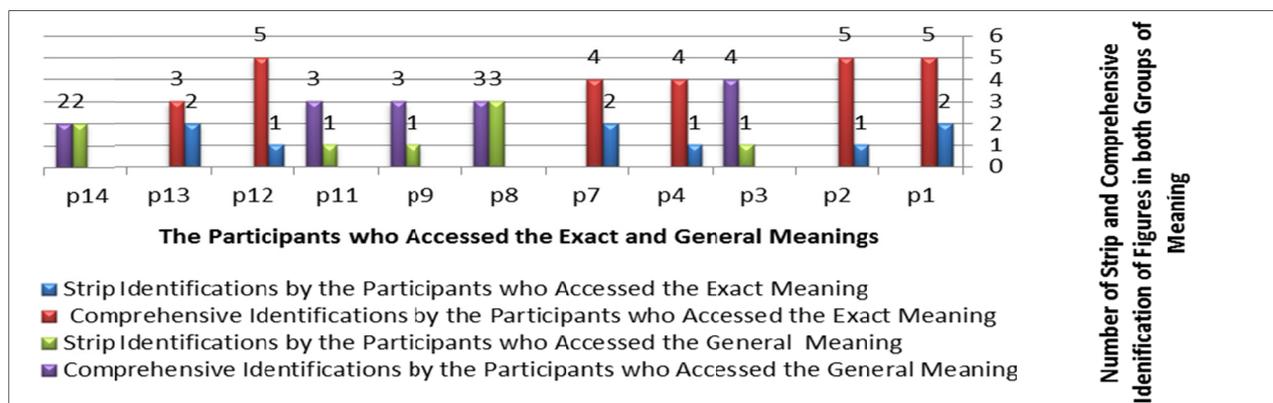


Figure 3. Number of each type of identification by the participants who accessed the exact and general meaning in the pilot study

- Group no. (3), who managed to derive meanings other than the exact and general ones. They were (3) in number; they were: (5, 6 & 10). The number of figures identified by them ranged between (3-4) comprehensively and (0-2) in a strip way. Examining more, one can see that (2) of these participants managed to identify (4) objects just like the participants who got the exact meaning, yet they neither cognitively accessed the general nor the exact meaning, as is the case with participants no. (5 & 10). This shows that these participants were creative in giving a cognitive interpretation other than the intended one by investing the same objects. Such a meaning was derived based on their experiences in real life. This further reflects that caricatures are a source of multiple mappings;

- Group no. (4), who gave no interpretation at all. This group includes (1) participant, who failed to highlight any meaning because she failed to identify any of the figures used. Accordingly, this participant was discarded. Taking into account the limitations of the study, the last two groups will be excluded when analyzing the data.

As to the second part of the objective, the way or type of figurers' identification or thinking, it has been concluded that both groups were thinking in a strip way (linearly) and comprehensively (radiantly) simultaneously. However, the percentages of the latter were higher than the former. When linearly, the participants in both groups referred to the identified figures literary by using the word **SHARKS**, **MOBILE PHONES**, etc. or by using synonyms to these figures. For instance, instead of saying "the man", one of the participants said "the human", or instead of saying "expressing an opinion, some said "talking about something", "expressing a thought or an idea", etc. That is; the strip way of thinking was confined to the identification process, not to generating the exact meaning of the caricature. When comprehensively, the participants, who accessed the exact meaning, managed to connect their schemata when mapping the meaning of these figures all together. Instead of saying the **MAN**, they said one of the following: "People, Iraqi people, Arab society, any person, anyone, one, & you". This means that they configured this **MAN** as any Arab or Iraqi honest man who suffers from a current problem. By saying this, they radiated the concept of "the man" by giving more details about who "this man" might be. Consequently, the ratio of conceptualizing this figure comprehensively was (6:6).

As for group no. (2), the **MAN** was wholly conceptualized comprehensively by saying the following: (anyone, prey, you, people, & I). Thus, the ratio of conceptualizing this figure comprehensively was (5:5).

- Speaking of the **SIGN OF EXPRESSING AN OPINION**, it was radiated to clarify why the act of expressing opinions is muted. The participants attributed that to the fact that the topic might be religious, political, personal, or about a particular issue or saying frankly or the truth. Such topics create a kind of dispute and fights among people. Accordingly, the ratio of conceptualizing this figure comprehensively was (4:6).

Regarding group no. (2), the participants managed to conceptualize this figure comprehensively by radiating it into the following: (certain idea, different, or particular thing). That is; more details were given to clarify why

opinions were attacked by others. Thus, the ratio of conceptualizing this figure comprehensively was (2:5).

- Talking about **SHARKS**, one can also find that this figure was conceptualized differently, but negatively to mean: “bad people, people with a bad personality, people of words and not actions, difficulties, uneducated people”. Such a type of people represents a source of difficulties, or danger that strangulates the voice of fact and freedom of the laymen. Thus, the ratio of conceptualizing this figure comprehensively was (6:6).

In group no. (2), such a figure was wholly conceptualized comprehensively to mean any of the following: “people, a bad situation, & dangerous people”. The ratio of conceptualizing this figure comprehensively was (5:5).

- What differentiates between the two groups is the identification of the figures of **MOBILES**. As far as the first group is concerned, they conceptualized **MOBILES** metonymically as: “social media, facebook, website, network, internet, & computer”. That is; they radiated the concept of mobile to mean some of its related components, and applications. They further mapped the middle mobile to the layman who expresses his opinion while the surrounding mobiles were mapped to the sharks to generate the following meaning: “the person who expresses his opinion online” will be attacked online by bad or authority people. The ratio of conceptualizing this figure comprehensively was (6:6).

With respect to group no. (2), the figure of **MOBILES** was configured radiantly by only one participant, no. (11), using the phrase “social media”. However, she could not access the exact meaning because she failed to map them to the surrounding objects. That was why; she somehow deviated from the exact meaning. As a result; the ratio of conceptualizing this figure comprehensively was (1:5).

- As to the figure of the **ISLAND**, it was conceptualized radiantly to mean “the world, Arabic society, Iraq, or the person is alone” because he was speaking about a particular issue that was not in line with others. This figure might be not important because the majority of the participants who accessed the exact meaning referred to the place when radiating the figure of the “man”. That is; the ratio of conceptualizing this figure comprehensively was (4:6).

Speaking of group no. (2), only (2) participants out of (5) managed to identify this figure by saying “in the society”. That is; the ratio of conceptualizing this figure comprehensively was (2:5); consider Figure 4:

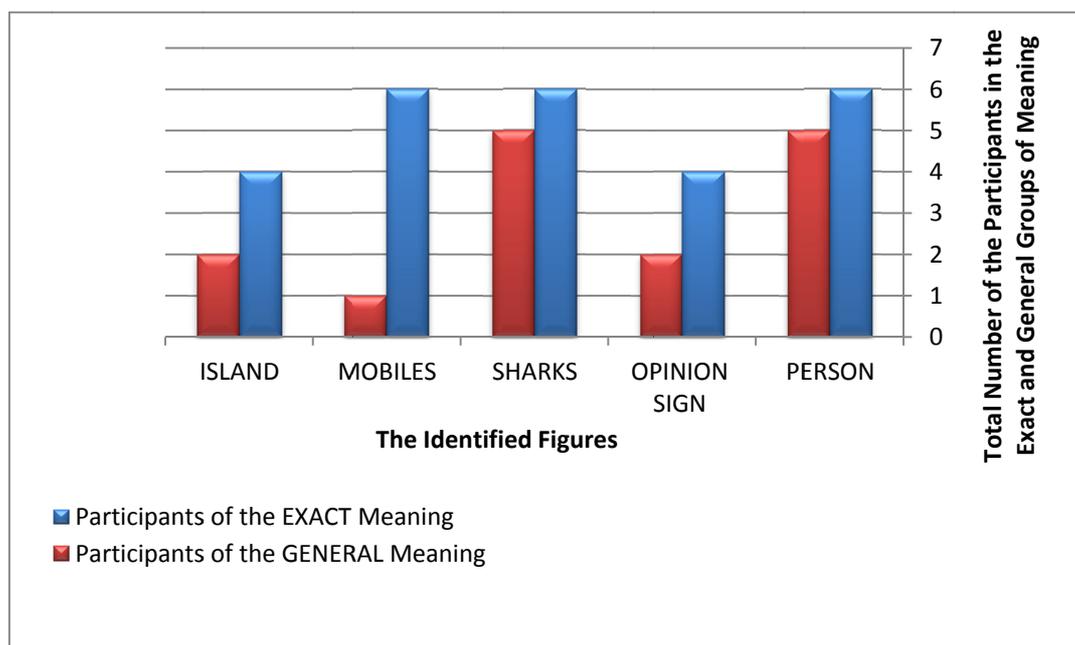


Figure 4. Number of the comprehensively identified figures by the participants of the exact and general groups of meaning in the pilot study

### 3.5 Main Study

After (5) weeks of conducting the pilot study, the main study was conducted following the same steps followed in the pilot. However, this time, the number of the participants is (30); consider Tables (1 &2):

Table 1a. Accessing the exact meaning through figures mapping in the main study

The participants who accessed the exact meaning	Strip Thinking					Percentage of Strip Thinking (100%)
	PERSON	SIGN	SHARKS	MOBILES	ISLAND	
1.	Someone	Expressing an opinion	×	×	×	40%
3.	×	expressing an opinion, thoughts or opinions	×	×	×	20%
5.	A person, he	opinion	the sharks	×	×	60%
8.	Someone	Express, opinion,	sharks	×	×	60%
10.	a person, that person	Expressing an idea, opinion	×	×	×	40%
11.	the person, he	Expressing an opinion	×	×	×	40%
13.	a person,	An opinion, to express about	×	a mobile phone	×	60%

Table 1b. Accessing the exact meaning through figures mapping in the main study

The participants who accessed the exact meaning	Comprehensive Thinking					Percentage of Strip Thinking (100%)
	PERSON	SIGN	SHARKS	MOBILES	ISLAND	
1.	Someone	Expressing an opinion	×	×	×	40%
3.	×	expressing an opinion, thoughts or opinions	×	×	×	20%
5.	A person, he	opinion	the sharks	×	×	60%
8.	Someone	Express, opinion,	sharks	×	×	60%
10.	a person, that person	Expressing an idea, opinion	×	×	×	40%
11.	the person, he	Expressing an opinion	×	×	×	40%
13.	a person,	An opinion, to express about	×	a mobile phone	×	60%

Table 2a. Accessing the general meaning through figures mapping in the main study

The participants who accessed the general meaning	Strip Thinking					Percentage of Strip Thinking (100%)
	PERSON	SIGN	SHARKS	MOBILES	ISLAND	
2.	×	Opinion	×	×	×	20%
4.	×	Opinions, what we want	×	×	×	20%
6.	someone	Express, opinion about ....., give, opinion	×	×	×	40%
9.	man, he	say what he feels	×	×	×	40%
12.	×	Expressing an opinion	×	×	×	20%
16.	Someone he or she	Give opinion, what ... mean	×	×	×	40%
17.	Someone	reveal or express about ... opinion	×	×	×	40%
19.	×	express what ... have in ... mind, talk	×	×	×	20%
20.	Person	expressing opinions, ideas	×	×	×	40%
23.	the same person, Someone	Express an opinion	A shark, a lot of sharks	×	×	60%
24.	×	Express an opinion	×	×	×	20%
25.	One, he,	opinion	×	×	×	40%

Table 2b. Accessing the general meaning through figures mapping in the main study

The participants who accessed the general meaning	Strip Thinking					Percentage of Strip Thinking (100%)
	PERSON	SIGN	SHARKS	MOBILES	ISLAND	
2.	x	Opinion	x	x	x	20%
4.	x	Opinions, what we want	x	x	x	20%
6.	someone	Express, opinion about ....., give, opinion	x	x	x	40%
9.	man, he	say what he feels	x	x	x	40%
12.	x	Expressing an opinion	x	x	x	20%
16.	Someone he or she	Give opinion, what ... mean	x	x	x	40%
17.	Someone	reveal or express about ... opinion	x	x	x	40%
19.	x	express what ... have in ... mind, talk	x	x	x	20%
20.	Person	expressing opinions, ideas	x	x	x	40%
23.	the same person, Someone	Express an opinion	A shark, a lot of sharks	x	x	60%
24.	x	Express an opinion	x	x	x	20%
25.	One, he,	opinion	x	x	x	40%

3.5.1 Results and Discussion of the Main Study

As for the results obtained from conducting the main study, the researchers have found the following, as shown in Figure 5:

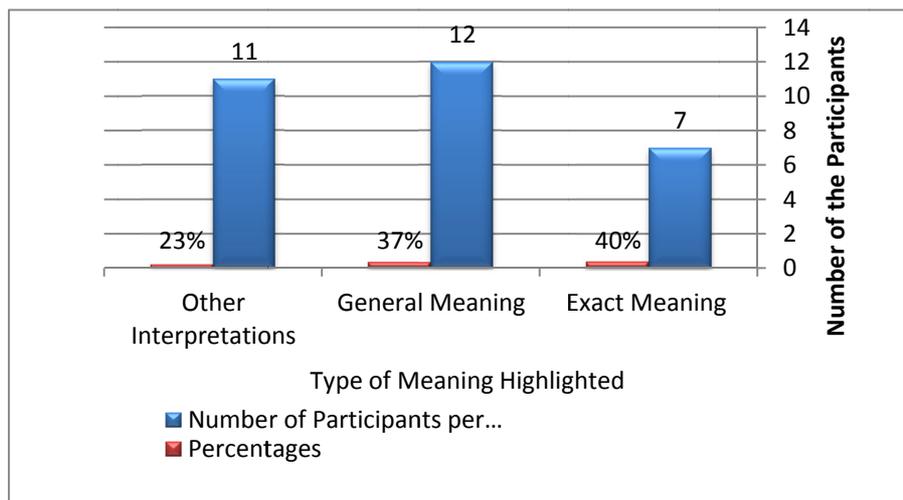


Figure 5. Results of the main study/(30) participants

Based on Figure 5, the interpretations given by the (30) participants resulted in classifying them into three groups:

- Group no. (1), which included the participants, who managed to access the exact meaning, the ABSENCE OF ONLINE FREEDOM. They were (7) in number out of (30); these are (1, 3, 5, 8, 10, 11, &13). The range of the strip identification of figures was between (1-3) while that of comprehensive identification was between (2-4);

- Group no. (2), who managed to access the general meaning, the ABSENCE OF FREEDOM. They were (12) participants, including the following (2, 4, 6, 9, 12, 16, 17, 19, 20, 23, 24, & 25). The given meaning did not specify the type of freedom being missed, the online one. This was because one of the important figures of the caricature was missed, the MOBILES. That is; the number of the identified objects ranged between (1-3) comprehensively, and (1-3) in a strip way;
- Group no. (3), who managed to derive meanings other than the exact and general ones. They were (11) in number; these included: (7, 14, 15, 18, 21, 22, 26, 27, 28, 29 & 30). The number of the figures identified by them ranged between (1-5) comprehensively and (0-4) in a strip way; consider the details of each of the first two groups in Figure 6, where the first bar of each couple of bars –starting from the right- represents the strip way of thinking whereas the second represents the comprehensive way of thinking :

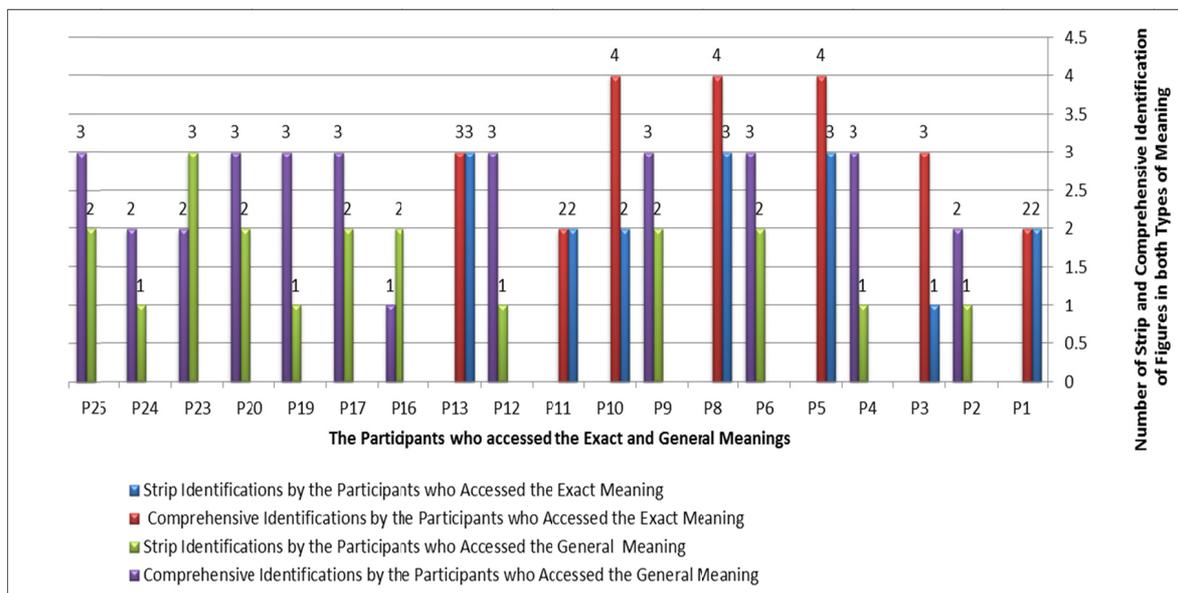


Figure 6. Number of type of identification by the participants of both the exact and general groups of meaning in the main study

As to the second part of the objective, the way of thinking, it has been concluded that these five figures were configured differently by the participants who accessed both the exact and general meanings. Moreover, it was noticed that both groups were simultaneously thinking in a strip way and comprehensively. However, the percentages of the comprehensive configurations of these figures were higher than that of the strip way, as illustrated in Tables (1a&b & 2a&b). With the strip way of thinking, the participants in both groups referred to the identified figures literary by using the word SHARKS, MOBILE PHONES, etc. or by using synonyms to these figures. For instance, instead of saying the MAN, one of the participants said “someone, a person, that person, the man, one”, or instead of saying “expressing an opinion, some said “talking about something”, “expressing a thought or an idea”, “saying what one wants”, etc. That is; the strip way of thinking was confined to the identification process, not to generating the meaning of the caricature; a result that confirmed what the pilot study revealed.

When comprehensively, it has been shown that the participants, who accessed the exact meaning, managed to connect their schemata, background knowledge when mapping the meaning of these figures all together. Instead of saying “someone”, they said one of the following: “you, one, people, some, & they”. This means that they configured this “man” as any laymen who suffers from a current problem. By saying this, they radiated the concept of “the man” by giving more details about who “this man” might be. Accordingly, the ratio of conceptualizing this figure comprehensively was (5:7).

As for the participants who accessed the general meaning, the researchers found that the MAN was comprehensively conceptualized differently using the following: “anyone, you, we, our life, the humans, the society, the persons, they”. This means that they connected this figure with what happens with the people of their

society or societies in general. The ratio of conceptualizing this figure comprehensively was (7:12).

As for the **SIGN OF EXPRESSING AN OPINION**, it was radiated or branched by group no. (1) through adding more details that clarify the act of suppressing opinion expression. Accordingly, one can see that among the reasons that made the “**SHARKS**” or the bad or authority people strangle the voice of fact were that the opinion might be about “a particular topic, about freedom, or about any debatable idea”. Such topics create a kind of dispute among people, and lead ultimately to fights. The ratio of conceptualizing this figure comprehensively was (3:7).

As for group no. (2), they conceptualized the type of the **OPINION** being expressed by describing it as: “a specific thing, or anything, saying something in a specific way, expectations, emotions, new ideas, changes, freedom, rights, civilization or progress”. Such types of topics lead to dispute and bad misunderstanding. Accordingly, the ratio of conceptualizing this figure comprehensively was (8:12).

Talking about **SHARKS**, one can also find that this figure was conceptualized differently, but majorly negatively to mean: “all people around, comments of others, the opposing part, everyone, those who criticize people in an uneducated way that is away from moral, problems or negative things”. Such a type of people or people’s bad actions represents a source of difficulties, or dangers that prevents the voice of fact and freedom of the laymen. Accordingly, the ratio of conceptualizing this figure comprehensively was (7:7).

As for group no. (2), **SHARKS** were conceptualized as such: “everybody, society, no easy difficulties, apposing part, people who attack without thinking or hearing, or who do not respect, who want to distract, negative or authority people, or people of high positions”. Thus, the ratio of conceptualizing this figure comprehensively was (12:12).

What differentiates between the two groups is the identification of the figures of **MOBILES**. With respect to the first group, they conceptualized them metonymically as: “social media, media, & technology”. That is; they radiated the concept of mobile to metonymically mean some of its related components, and applications or hyponymically to mean technology. They further mapped the middle mobile to the layman who was expressing his opinion while the surrounding mobiles were mapped to the sharks to generate the following meaning: “the person who expresses his opinion online will be attacked online by bad or authority people. Thus, the ratio of conceptualizing this figure comprehensively was (7:7).

Speaking of group no. (2), only one participant configured **MOBILES** as “the sea” whereas the rest missed it in their configurations. That is; the ratio of conceptualizing this figure comprehensively was (1:12).

As to the figure of the **ISLAND**, it was not conceptualized comprehensively at all. It was totally missed by the participants of the first group. This figure might be not important because the majority of the participants who accessed the exact meaning referred to the place when radiating the figure of the “man”. Accordingly, the ratio of conceptualizing this figure comprehensively was (0:7).

As for the participants of group no. (2), it was noticed that only (3) participants out of (12) managed to identify this figure comprehensively by saying “in this society or in the world”. Thus, the ratio of conceptualizing this figure comprehensively was (3:12); consider Figure 7 of the comprehensive identification of figures by the participants who accessed the exact or general meaning where the first bar of each couple of bars starting from the right represents the participants who accessed the exact meaning whereas the second bar represents the participants who accessed the general meaning.

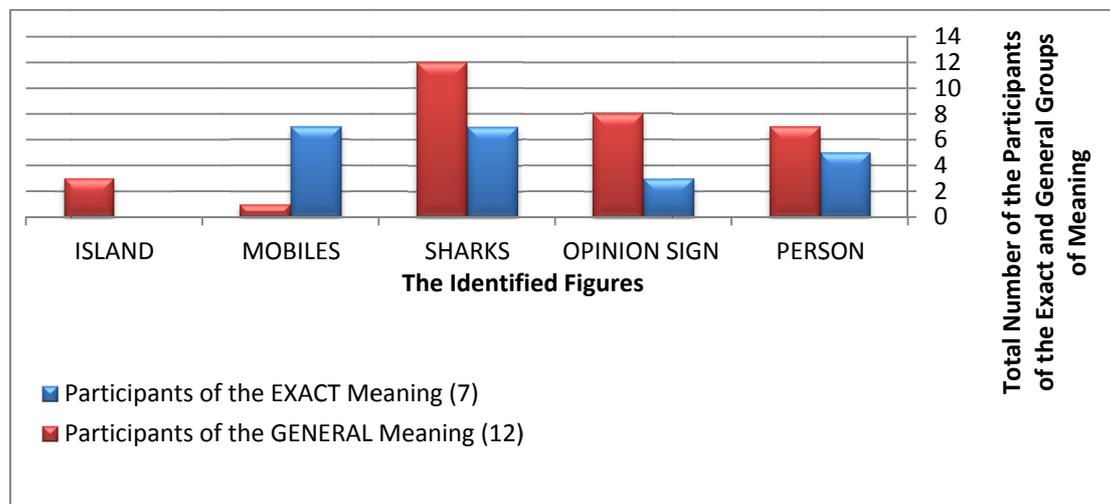


Figure 7. Number of the Identified Figures by the Participants of the Exact and General Groups of Meaning in the Main Study

#### 4. Conclusions

Based on the results obtained from both the pilot and main studies and on Tables (1a&b & 2a&b), the study has concluded the following:

- 1) These limited numbers of figures should not be treated equally. Some of these figures are sufficed to be interpreted or identified in a strip way; that is to say, taking the denotative meaning into account. Such objects include the following: “PERSON & SIGN”. Others need to be interpreted or thought of comprehensively by going deep and thinking connotatively, such as that of “SHARKS & MOBILES”. This is because SHARKS in this caricature metaphorically mean authority people, people of high positions, bad people, enemies, etc. Accordingly, figures are just like words can be of two types: Denotative/strip/linear or Connotative/comprehensive/radiant;
- 2) Other figures like that of the “ISLAND” are optional because the meaning of this figure is embedded within any of the previously mentioned figures when comprehensively analyzed. Accordingly, the number of the figures identified is important, but what is more important is to know how each of these figures should be grasped or thought of. That is; the full strip identification does not lead to access the exact meaning of the caricature whereas the full comprehensive identification leads to access the exact meaning. The partial identification of both strip and comprehensive figures leads to two results, either accessing the exact or general meaning. This is because the exact meaning here highly depends on identifying ALL CERTAIN figures, like that of the “SHARKS & MOBILES” comprehensively; otherwise, the meaning will be general. That is; the high percentages of comprehensive thinking in both the pilot and main study mean nothing if one of these two objects is missed;
- 3) When there are two similar objects available in the image as is the case with the MIDDLE MOBILE and the SURROUNDING MOBILES, the participants should separate between the two and comprehensively link each figure with its corresponding figure. That is; the MIDDLE MOBILE should be linked to the MAN whereas the SURROUNDING MOBILES to the SHARKS; otherwise, the results will be a general meaning. In other words, figures mapping should be correspondingly arranged and linked; and
- 4) In both strip and comprehensive identifications of figures, there is no one to one correspondence between a figure and its highlighted concept in the mind of the participant. The MAN, for instance, was seen as a layman from Iraq, or a specific man from any part of the Arabic society, or from the world. Consequently, the MAN here metonymically refers to any layman or laymen. Comprehensively, SHARKS represent human enemies whether known; that is from the close circles of acquaintances, or unknown, i.e., strangers. In other words, a figure might be a source of multiple concepts in both the strip and comprehensive ways of thinking.

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