Figure/Ground Schemas: Applying Cognitive Linguistics to teaching English prepositions through Visual Aids

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Abstract: It is well-known that the Figure/Ground schemas provide a 'cognitive' basis for a range of linguistic structures, most notably relations between entities designated in a sentence that are expressed by an English preposition. Cognitive Linguistics, a branch of linguistics that studies language and mind in a cognitive way, enables us to understand how our mind can categorize, contrast, and possess the meanings of a sentence in relation to an English preposition through perception, memory and attention. The Figure/Ground schemas provide a way of analyzing the language usage of an English preposition to be mapped onto the situation not only mentally in our mind, but also in real life. The aims of the research are, first, to explore the psychological perspective of language by considering the human perspective or viewpoint in meaning construction; second, to look into the cognitive aspect in teaching English prepositions: how can Figure/Ground schemas help language learners to conceptualize the experience to be communicated in the real world; and, third, to develop some language teaching visual aids to help learners to acquire a higher language capacity to conceptualize situations in relation to an English preposition better by means of the Figure/Ground schemas. With the aims of the research to be achieved, this research could provide a theoretical framework of developing language teaching visual aids using the Cognitive Linguistics approach to help teaching English prepositions to enhance pedagogy more effectively. It is predicted that with visual aids developed for teaching English prepositions, young learners of lower cognitive abilities will have improvements in conceptualizing situations with the Figure/Ground schemas. For adult learners

with higher cognitive abilities, these visual language teaching aids could strengthen and consolidate conceptualizing the situations in the mind better so as to distinguish what are the possible and the impossible situations in meaning construction. To dig deep down into this theoretical research, psychologists could carry out further research empirically to test this hypothesis to confirm to what extent the theoretical framework could work for learners of different levels of cognitive ability.

Keywords: Figure/Ground Schemas, English prepositions, Categorization, Contrast, Pedagogy, Visual Aids.

1. <u>Introduction</u>

Cognitiion is defined in terms of thought. To have the ability to think means that someone has cognitive power. Cognitive Linguistics is an approach to the study of language from the Cognitive perspective. In other words, Cognitive Linguistics is a branch of linguistics, in which how language is acquired by the means of the functioning of the human mind is explored. It deals with how thought in general is connected to the possession of language. In simple words, Cognitive Linguistics studies the relation between language and mind. How does the mind work to enable one to possess language? Perception, memorization, attention, categorization, and language acquisition are some of the issues.

In this paper, the relationship between language and mind will be investigated to raise the research question: 'How do the Figure/Ground schemas in our mind and its relation to expressions in linguistic structure help us to understand a situation by means of an English preposition?' The history of Cognitive Linguistics, including the emergence of Gestalt Psychology, will be examined to provide us with the background needed to deepen our understanding of the issues raised by the research question. Some of the debates about language and mind involving the founders of Cognitive Linguistics and of Gestalt psychology will be discussed. There has been a huge amount of research on semantics, syntax and morphology, language acquisition and phonology in Cognitive Linguistics; however, there could be more research on Figure/Ground schemas and English prepositions. It is hoped that this paper on Figure/Ground schemas and English prepositions may fill a research gap in Cognitive Linguistics so that the scholars as well as the general public could find this research area worthwhile and meaningful.

Language and mind are complex. There have been some psychological studies on the two hemispheres of the brain. It is believed that the left hemisphere functions as reading, comprehending, speaking – the verbal language ability, whereas the right hemisphere function as color differentiation, spatial relations – tasks that are non-verbal. The left hemisphere of the brain highlights the location of two centers for language processing in the brain: Broca's area, which is involved in speech production and Wernicke's area, which is involved in language comprehension (Weiten, p. 98). 'The left hemisphere usually is better on tasks involving verbal processing, such as language, speech, reading and writing. The right hemisphere exhibits

superiority on many tasks involving nonverbal processing, such as most spatial, musical and visual recognition tasks - discriminating colours, arranging blocks and recognizing faces.' (Weiten, p. 99-100) The right hemisphere is of unconventional and innovative language, in contrast with the conventional language function of the left hemisphere. While some psychologists argue that each hemisphere of the brain has its own role to play, some other psychologists argue that both hemispheres, despite their differences, function collaboratively so that it is hard to tell which hemisphere is responsible for which kind of task. The mystery of the brain hemispheric specialization remains intact. Yet, interestingly, fMRI studies by Ahrens, Liu, Lee, Gong Gang & Hsu (2007) have shown that while conventional metaphor processing is mainly supported by the left hemisphere, new metaphor process is associated with both the left and right hemispheres. When we attempt to answer the research question: 'How do the Figure/Ground schemas in mind help us to understand a situation by means of an English preposition?' We can then break the process of language acquisition into various tasks carried out by the mind, namely perception, memorization, attention, categorization and Figure/Ground schemas of language acquisition.

2. Background

The historical movement of Cognitive Linguistics and

the emergence of Gestalt Psychology

Cognitive Linguistics

Cognitive Linguistics, which emerged in the 1970s, has become increasingly active since the 1980s. Noam Chomsky, the father of modern linguistics, led a new breakthrough of linguistics in the 1950s and 1960s, showing that the study of language provided a 'favorable perspective' for the study of human mental process (Carroll, p. 13). This Chomskyan revolution had such a powerful effect on studying language from the psychological perspective that linguistics could be profitably viewed as a branch of cognitive psychology. However, Cognitive Linguists to the claim of Chomskyan linguists that language is an autonomous cognitive faculty in the mind with an innate basis by means of which grammatical sentences can be generated.

Cognitive Linguistics is a modern school of thoughts of an interdisciplinary nature, which draws heavily upon linguistics, psychology, neurobiology, and the philosophy of language. Opposed to the traditional dominant formal approaches to the study of language, which separates syntax or syntactic rules from semantics or meanings, Cognitive Linguists share a common goal of pursuing the 'meaning central to language' from the Cognitive perspective. Interested in the relation of language and mind, these Cognitive Linguists explore different aspects of language from the Cognitive perspective: Cognitive Semantics and Cognitive Grammar – the studies of meaning of words and grammar from a new Cognitive perspective. In the late 1980s, the most influential Cognitive Linguists, Charles Fillmore, George Lakoff, Ronald Langacker, and Leonary Talmy, developed influential theories in this interdisciplinary discipline. Talmy, Langacker, and Lakoff are best-known as three founders of Cognitive Linguistics.

There are three hypothesis guiding the Cognitive Linguistic approach.

First, there is no autonomous cognitive module in the mind for acquiring language; this is opposed to the Chomskyan generative grammar's well known hypothesis of Universal Grammar. It argues that the process by which knowledge of language is acquired in the mind is not fundamentally different from other cognitive abilities that are outside the domain of language, for example, visual perception and reasoning. This denies an autonomous innate human capacity for language. Not concerned with the innateness of linguistic abilities, Cognitive Linguists are rather more concerned with 'general' cognitive abilities in language. Language is the 'real-time perception and production of a temporal sequence of discrete, structured symbolic units (Croft and Cruse, p. 2).' Thus, Cognitive Linguists appeal at least in principle to models in Cognitive Psychology, such as those for memory, perception, attention and categorization.

Second, grammar is conceptualization. It expresses our 'conceptualization' of the world, given that language is 'embodied' in the environment or situation. In short, grammar is a means of 'conceptualizing' the world. The human cognitive ability allows us to use grammar in language to conceptualize the experience to be communicated. Conceptual structure is subject to construal, for instance, conceptual structure, organization of knowledge, and categorization. The construction of grammatical structure in the mind plays a major role in construing the experience to be 'communicated'.

Third, knowledge of language emerges from language use. Opposed to the tradition of truth-conditional semantics and generative grammar in which abstract and general representations of meaning and form are sought, this hypothesis argues that general cognitive abilities, such as schemas and categories, govern the organization of linguistic knowledge. Knowledge of language emerges from how the language is used when humans conceptualize the world by grammar through the human brain.

Cognitive Movement and Gestalt Psychology

Cognition means thinking, the thinking that underlies behavior, which is all behaviorism recognizes. In early modern Western philosophy, Descartes said "I think, therefore I am", suggesting that only by thinking can one exist. The true cognitive movement did not start until the 1950s when a burgeoning interest in mental states grew. The importance of mental processes and consciousness was emphasized at that time. In fact, the Cognitive Movement existed long before in Structuralism and Functionalism, especially in the Gestalt school.

Gestalt means form, shape or pattern that gives rise to the whole picture. In other words, Gestalt means "on the whole", which has been derived from patterns of shapes or forms. Gestalt psychology is a branch of psychology developed from the Gestalt school. Psychology began in Germany, developed in USA through structuralism, functionalism, and behaviorism. While behaviorism was on the rise, Gestaltism arose, and had become the most significant rival of behaviorism. Gestalt, meaning 'on the whole', was founded by Max Werthemer (who will be discussed later) who attacked Wundtian approach of elementalism. Other founders include Kurt Koffka (1886-1941), and Wolfgang Körler (1887-1967) (who are not in our focus).

Max Wertheimer (1880-1943), the founder of Gestalt Psychology, published 'Experimental Studies of the Perception of Movement' in 1912. He argues that the whole is greater than the sum of the parts by illustrating films or movies as being perceived as one

apparent movement of a series of lights going backward and forward, known as the illusive "Phi phenomenon". This is contradictory to Wundt's argument of analyzing light movements as separate elements.

Wertheimer is most well-known for his discovery of visual perception from six perspectives. Visual perception links the sense organs connected with seeing, to the brain which involves thought. Out of the six theories or perspectives of visual perception, the Figure/Ground schemas will be our focus. The Figure/Ground schemas pose a huge impact on understanding the spatial relations of entities through an English preposition in conceptualizing the world. It is thus meaningful and worth studying in the research in Cognitive Linguistics. There are different situations or cases grouped in this research based on previous research on Figure/Ground schemas and English prepositions (which will be discussed).

The six theories or perspectives of Visual Perception are:

1) Figure/Ground schemas

The famous artist Robin drew a picture that can be perceived in two ways: as two silhouetted faces against a white background or as a white vase against a black background. The reversibility of the two possibilities demonstrates the Gestalt principle of Figure and Ground. 'Dividing visual displays into Figure and Ground is a fundamental way in which people organize visual perceptions' (Baylis & Diver, 1995). The Figure is the salient part, whereas the Ground is the background against which it stands. Leondard Talmy, an influential scholar in Cognitive Linguistics specializing in Cognitive Semantics, has distinguished features or characteristics of Figure and Ground by comparison (which shall be discussed later) in his work entitled 'Figure and Ground in Language' in Chapter Five of his masterpiece Towards a Cognitive Semantics.

2) Proximity

Human beings tend to group things that are proximate to each other when perceiving things. Interestingly, elements that are close to one another tend to be grouped together in perception. For example, dots that are close to each other are grouped to be perceived as a whole picture.

3) Similarity

Elements that look similar tend to be grouped together. For example, similar dots that are grouped to form the number '2' as a whole have become salient out of the background.

4) Continuity

The principle of continuity reflects one's tendency to follow one single direction to where it leads. They tend to see elements in ways that produce smooth continuation. For example, dots will be perceived in one single continuous way.

5) Simplicity

The law of Pragnanz, the Gestalists' principle, means good form. Human beings tend to group elements that combine to form a good form. They tend to organize elements in the simplest way possible to maintain goodness of form. For example, they tend to outline the shape of dots in the simplest way.

6) Closure

Human beings often group elements to create a sense of closure to achieve completeness, even though there may be gaps in them. They tend to supply missing elements to close or complete a familiar figure, for instance, dots that complete a figure of a dog.

The Figure/Ground schemas (which will be discussed in the Theoretical Framework) have been selected as the Cognitive Linguistic methodology to be used in this study to teach English prepositions in a more pedagogically effective manner.

3. <u>Literature Review</u>

There has been intensive development in Cognitive Linguistics since the 1980s. Spatial language has attracted attention much since Lakoff's studies in 1980s. The Cognitive Linguistic approach has therefore proved to be theoretically convincing for analyzing spatial relations (Lakoff, 1987, Langacker, 1987, 1991 a, 1991 b, Janda, 1993, Dabrowska, 1997; Tylers and Evans, 2007).

Since the early 1980s, cognitive linguists have been putting forward new groundbreaking work on English prepositions (Brugman, 1981, Brugman and Lakoff, 1988, Hawkins, 1988, Herskovits, 1986, 1988, Lakoff, 1987, Linder, 1982).   Tyler and Evans, experts in Cognitive Linguistics, have provided a systematic account of English prepositions in their work <u>The Semantics of English prepositions: Spatial Scenes, Embodied Meaning and Cognition (2003)</u>. This work investigates the spatial relations of entities expressed by an English preposition by employing Trajector (TR) – the focus, and Landmark (LM) – the background, in the image-schema, an image in form of the schema that recurrently appears in the mind. Image schema is an image constituted conceptually in the mind by the cognitive power. In this study, the Figure/Ground schemas will be adopted instead, tracing back the cognitive process of categorizing, comparing, contrasting and analyzing, advocated by Gestalt psychologists.

There has been a fairly large amount of research on English prepositions and Second Language Learning and Teaching.

Peter Grundy's 'The Figure / Ground Gestalt and Language Teaching Methodology' published in <u>Cognitive Linguistics, Second Language Acquisition, and Foreign Language</u> focuses on how the Figure/Ground Gestalt contributes to Language Teaching. In this paper, this topic has been narrowed down to its application to English prepositions to put the knowledge of this Second Language Teaching methodology into practice.

In Tyler and Evans' paper entitled 'Applying Cognitive Linguistics to Pedagogical Grammar: The English Prepositions of Verticality', it is noted that learning English prepositions has long been the most difficult areas of acquisition for Second Language learners. While Tyler and Evans' paper has put an emphasis on Second Language learners learning English prepositions, this research study, even though with the same methodology that of the Cognitive Linguistic approach, develops a theoretical framework of developing teaching visual aids that are not just for Second Language learners. This study, by having conceptualized how one can acquire learning English prepositions by the Figure/Ground schemas, could test the abilities English language learners of different cognitive and linguistic abilities by different age groups – young learners and adult learners in English Language Teaching by psychologists in further

research. The visual aids developed by the Figure/Ground schemas could be of pedagogical use in English Language Teaching and Learning.

The other study by Tyler and Evan is called 'Applying Cognitive Linguistics to Pedagogical Grammar: The Case of 'Over' 'published in the book <u>Cognitive Linguistics, Second Language Acquisition and Foreign Language Teaching</u>. Given that Second Language learners find learning English prepositions difficult, Tyler and Evan adopt a usage-based approach related to context to help Second Language learners to learn English prepositions. . The findings show that the multiple meanings associated with each preposition form a principled polysemy network. In addition, human conceptual structure is shaped by the interaction with the physical world, and prepositions are better represented as being more gestaltlike and schematic in nature. The schematic nature of conceptual structure of the Figure/Ground schemas will be employed in this study.

Another research study on English prepositions and Second Language Learning is an experimental investigation using the cognitive linguistic approach to instruct learning of the semantics of English prepositions – 'to', 'at' and 'for' (Tyler, p. 181). The results indicate that 12 advanced learners experienced substantial improvement in understanding f the semantics of the three prepositions. Although this research study is not on Second Language Learning of English prepositions, the study entitled 'Applying Cognitive Linguistics to Learning the Semantics of English 'to', 'at' and 'for': an experimental investigation' could be modified to work out how Figure/Ground schema can contribute to conceptualizing the world by means of an English preposition experimentally through the visual aids developed for more effective pedagogy.

The research study entitled 'Prepositions in Dictionaries for Foreign Learners: A Cognitive Linguistic Look' has taken a Cognitive Linguistic approach to investigate the significance of having prepositions in dictionaries for foreign learners (Adamska-Salaciak, p. 1477). There have been problems for lexicographers compiling prepositions in dictionaries for foreign learners, and more practical recommendations have been made for prepositions entries for dictionaries for foreign learns based on Tylers and Evans' Cognitive Linguistic analysis of English prepositions. It is suggested that Cognitive Linguistics has been an insightful approach alleviating some of the problems faced by these lexicographers. Some of the practical recommendations discussed in the study are relevant to this study - the Cognitive Linguistic approach of studying English prepositions by the Figure/Ground schema, such as the Cognitive Linguistic analysis of the English prepositions 'over' and 'above' versus 'under' and 'below'.

In addition, there has been research on studying prepositions in languages other than English (Šari .,2012, Lam, 2009). The studies of English prepositions are profoundly significant as English language is an international language, and English prepositions have been widely studied since childhood.

This research study on applying Cognitive Linguistics to teaching English Prepositions is based on the modeling of Yvonne Lam's paper 'Applying Cognitive Linguistics to teaching the Spanish prepositions por and para' and of Ljiljana Šari 's paper 'A Cognitive Linguistic view of South Slavic prepositions and prefixes.'

In this research study, English prepositions in previous research studies have been grouped to organize a more systematic study.

In the study entitled 'Understanding prepositions through Cognitive Grammar, a case of 'in' ', Turewicz gives a thorough account of the preposition 'in' as the case study to argue that the spatial basis of prepositions is crucial to their semantic evolution, leading to the formation of meaningful prepositions (Turewicz, p. 1). The non-spatial approach he adopts in the analysis of the preposition 'in' is a way to understand the preposition from the angle of Cognitive Grammar that is relevant to our Cognitive Linguistic approach to look into English prepositions. The preposition 'in' could be part of this study along with other English prepositions in the modest forms that have the richest meanings. To conclude, the preposition 'in' means inclusion, confinement, restarted area of occurrence, covering separation by postulating inventory of meaning sub-schema of enclosure. Turewicz draws the conclusion that the preposition 'in' is a product rather than a result. The striking example he gives is 'The pear is <u>in</u> the bowl'; the preposition 'in' here outlines the fruit pear's most direct physical path to the bowl conceptually.

There has been a thorough discussion of the English preposition 'at' from the Cognitive Linguistics approach. In the study entitled 'Understanding the English preposition 'at'. Semantics and translation from a Cognitive perspective', the English preposition 'at' has been the most problematic English preposition for foreign learners (Brala, p.1). The semantics of the English preposition 'at' have been focused on, and the terminologies of 'Figure' and 'Ground' have been adopted. There has long been a historical account of the literature review of the English preposition 'at', and the cognitive approach of studying English prepositions is on the rise as time goes by. Some issues related to the English preposition 'at' in dictionaries and English-Foreign-Learning materials have been addressed. It has been suggested that the Cognitive based representation of prepositions is a solution to these problems or issues. The study of the English preposition 'at' is viewed in the light of cognitive semantics, to see how the specific English preposition 'at' could fit into the lexigraphy of dictionaries and of English-Foreign-Learning materials.

There has been a study using cognitive maps to study English prepositions. The study is entitled 'The Spatial Prepositions in English, Vector Grammar and The Cognitive Map' by John O'Keefe published in the book <u>Language and Space</u> by Paul Bloom (O'Keffe, p. 277). The cognitive Map indicates how the objects are positioned visually; however, in our study, there will be a focus on the Figure/Ground schema in the visual representations of objects through the language teaching visual aids to be developed. This study has modified the Cognitive Map with the focus on the Figure/Ground schema to achieve the pedagogical value of learning English prepositions in language teaching.

4. <u>Theoretical framework: Figure/Ground Schemas as Cognitive Linguistic methodology</u>

A schema is a commonality extracted in the process of schematization to arrive at a conception representing a higher level of abstraction, according to Ronald Langacker, in the <u>Cognitive Grammar: a Basic introduction</u> (Langacker, Ch.1, online). Figure, is the most salient, prominent entity in relation to Ground, which is secondary and less prominent in terms of degree (Geeraerts, p. 128). Figure stands out against the background known as Ground. Figure/Ground schemas construct a linguistic construal. A construal is a phenomenon that can never reflect a purely objective (Littlemore, p. 4). Language reflects certain ways of viewing the world. How

we perceive the word is subjective in language that Figure and Ground are positioned in relation subjectively. It 'depends on the speaker's subjective perception of a real-world scene (Geeraerts, p. 129).' Language is a subjective construal.

When human beings perceive things, certain cognitive processes are taking place: comparison, categorization, pattern-finding, and blending (Littlemore, p. 14). Figure/Ground schema is an end result of judgment and comparison (Holme, p 129). Attention allows us to foreground an object in a scene, the Figure, and makes it a focus of attention, relative to the Ground. Figure is the moving object, whereas Ground is a space to which the movement is relative (ibid, p 90). Figure and Ground are judged, evaluated, categorized, and finally contrasted in comparison. Contrast is the essence of Figure/Ground schemas (Littlemore, p. 14). Figure/Ground schemas undergo conceptualization in the mind having taken place during perception. Without the ability of the cognitive recognition of this schema, 'we would live in conceptual anarchy where all the attributes of a scene vie for our attention (Holme, p. 142).'

According to Leonard Talmy, a reputable Cognitive Linguist, the distinctions between Figure and Ground are summarized in the below, taken from his work called "Figure and Ground in Language" (Chapter Five), in the book Toward a Cognitive Semantics (p. 315-316).

	Figure	Ground
Definitional characteristics	- has unknown spatial properties to be determined	- act as a reference entity, having known properties that can characterize the Figure's unknown
Associated characteristics	- more movable	- more permanently located
	- smaller	- Larger
	- geometrically simpler in its treatment	- geometrically more complex in its treatment
	- more recently on scene/ in awareness	- more familiar,/expected
	- of greater concern/ relevance	- of lesser concern/relevance
	- less immediately perceivable	- more immediately perceivable
	- more salient, once perceived	- more background, once Figure is perceived
	- more dependent	- more independent

The characteristics of Figure and Ground have been explicitly defined by Leonard Talmy. There have been criticisms that Figure and Ground fall into some of the characteristics, not all. For example, Figure could be more immediately perceivable, whereas Ground could be

geometrically simpler in its treatment. In other words, not all characteristics listed are applicable to definitions of Figure and Ground.

In the next part, the Figure/Ground schemas in relation to English prepositions will be investigated to find out some interesting patterns derived from the Cognitive analysis of English prepositions via the Figure/Ground schemas.

4. Figure/Ground Schemas as Cognitive Linguistic tool of analyzing English prepositions

> '*Figure/Ground* organization provides a *cognitive* basis for a range of linguistic structures, most notably among them relational predications expressed by *prepositions* … (Geeraerts, p. 128)'

Gestalt, literally meaning of the whole, plays the foremost and central role in the Figure and Ground distinction (Geeraerts, p. 597).   The mental representation of the whole is conceptualized in our mind. Figure/Ground schema comes to scene.

Cognitive grammar, the cognitive approach to grammar, characterizes relations in the whole picture in terms of the well-known distinction, Figure and Ground (ibid, p. 131). Greater attention tends to be focused on the entity as the Subject, with which the Figure coincides (ibid ,p. 131). The Figure, in the grammatical sense, is the Subject, the main agent (ibid, p.131), while the Ground, is the Object, the secondary entity.

One example is 'The bike is near the house.' The bike is the Figure, moving, and more recent in awareness, whereas the house is the Ground, the more stationery, the reference.

Another example is 'The lamp is above the table.' The lamp is the Figure, the subject, the trajectory – according to Ronald Langacker's Cognitive Grammar; whereas the table is the Ground, the object, the landmark – the entity that is construed as a reference point according to Ronald Langacker's Cognitive Grammar. (This is similar to the example, 'The cat is on the chair. (Evans, p. 12).' It is impossible that the chair is below the cat conceptually.)

The two examples show that the Figure/Ground schemas are fundamental in cognition. Perspective, a particular viewing position, is constructed. However, asymmetric construal is imposed. Figure and Ground, in that case, cannot be interchanged, or swapped. Conceptually, 'the house is near the bike' or 'the table is below the lamp' are impossible It would be odd and unnatural to conceptually change the positions of Figure and Ground in the sentence construction. Although syntactically A is near B, is the same as B is near A, or A is above B, or B is below A, the cognitive conceptualization of A and B is essentially associated with Figure and Ground in the context. The context provides a pragmatic way to conceptualize A and B cognitively so that the mental representation of A and B can be mapped into real life.

One striking example is 'The goldfish is in the bowl.' Obviously, the goldfish is the Figure, and the bowl is the Ground. The goldfish is salient in prominence in that it occupies a part of the bowl inside. However, asymmetrical imposition is not allowed. It is impossible to imagine and conceive that 'the bowl is out of the goldfish', even though human beings perceive the bowl first, in which the goldfish is swimming. The bowl cannot be the Figure, and the goldfish cannot be the Ground. The bowl filled with water, according to Talmy, must be the

Ground that is stationery and permanent, to which the swimming goldfish as the Figure corresponds.

In many cases that contrast with the examples discussed above which involve inherently asymmetrical relations in the context, however, Figure-Ground relations can be 'manipulated' so that the same object can function as figure in one context, and ground in another, favouring contexts can also be overridden for the opposite figure-ground construal, with appropriate contextualization.

Examples are:

'The cat (the Figure) is on the table (the Ground).'

'I found a flea (the Figure) on the cat (Ground).'

In this case, the cat can be the Figure in one context and the Ground in another context, given the same preposition 'on'. The role of the same entity as Figure or Ground can be interchanged in two different contexts. It is interesting to see that there is no fixed assignation of Figure and Ground to one entity, and that the meanings of Figure and Ground are contextually conditioned.   Conceptualizing context to determine Figure and Ground is important; we do not just assign the values of Figure and Ground by virtue of the simple relations of the two entities.

To sum up, the Figure and Ground distinction displays relations between entities; some are inherently asymmetrical and while some can be manipulated in different contexts. All these conceptualizations in the mind have to undergo testing in terms of possible and impossible conditions in the real world as perceived by humans. In the next chapter, some visual aids based on these cases will be developed to enhance pedagogical values of teaching English prepositions.

6. Visual aids for English prepositions in connection to the Figure/Ground Schemas to enhance pedagogy in the English classroom

There follows an account of visual aids for learning English prepositions that will facilitate pedagogy in the English classroom. The Figure/Ground schemas will aid the mental representation of *relations* of the entities in the scene. Language is a subjective construal. Perspective in focus is constructed.

Case studies: Visual aids of English prepositions

1. "near"

'The bike is near the house.'

Figure: the bike

Ground: the house

 + =

What will happen if 'The house is near the bike?'

Figure: the house

Ground: the bike

Impossibility of conceptual change

 + =

2. "above"

'The lamp is above the table.'

Figure: the lamp

Ground: the table

+   =

What will happen if 'The table is <u>below</u> the lamp?'

Figure: the table
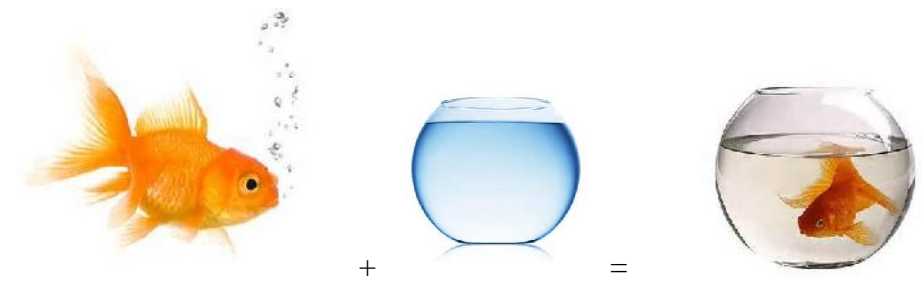
Ground: the lamp

Impossibility of conceptual change

+   =

3. **"in"**

'The goldfish is <u>in</u> the bowl.'
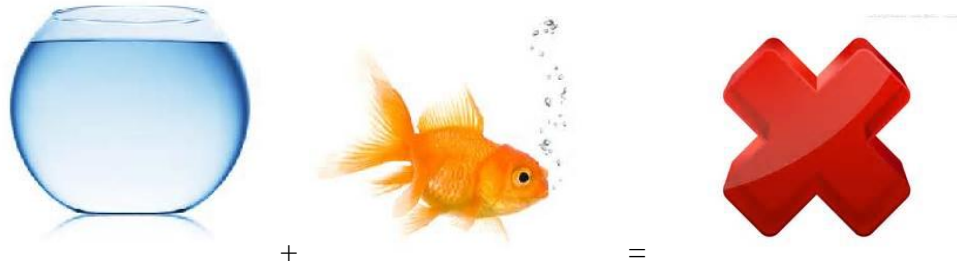
Figure: the goldfish

Ground: bowl

+   =

What will happen if 'The bowl is <u>out of</u> the goldfish?'

Figure: the bowl

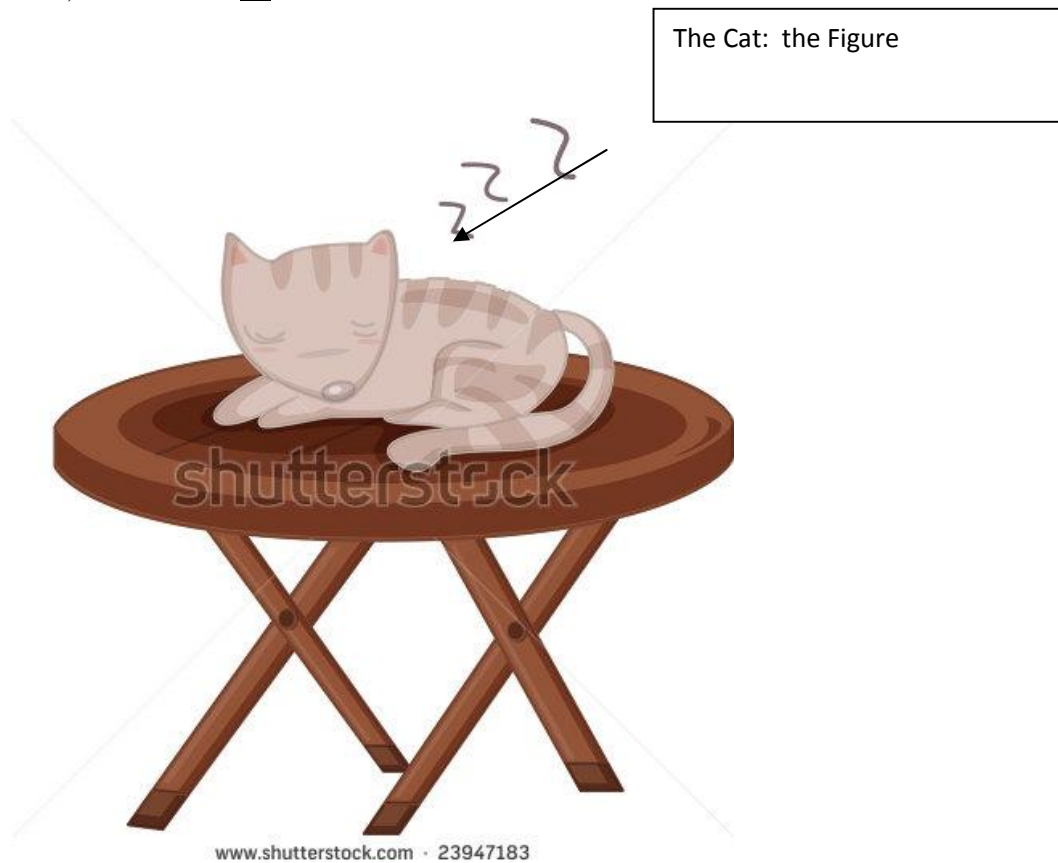Ground: the goldfish

Impossibility of conceptual change

4. **"on"**

'The cat is <u>on</u> the table.'

'I found a flea <u>on</u> the cat.'

   a)   'The cat is <u>on</u> the table.'
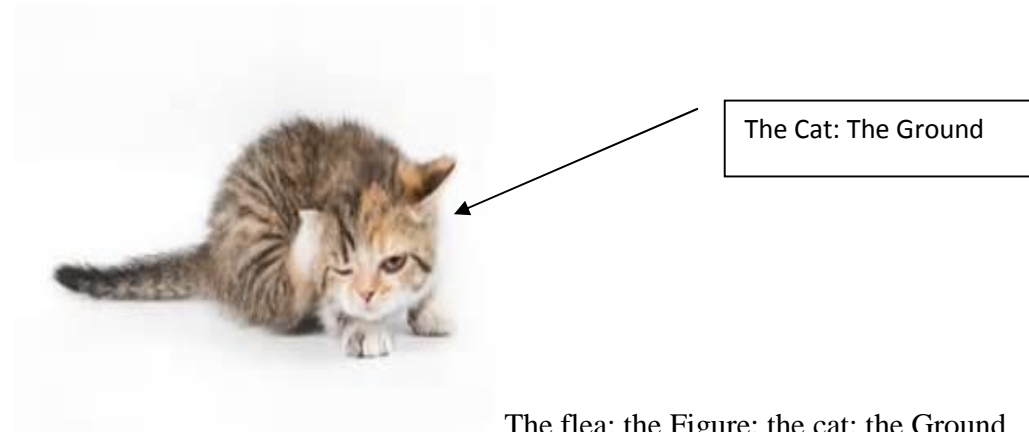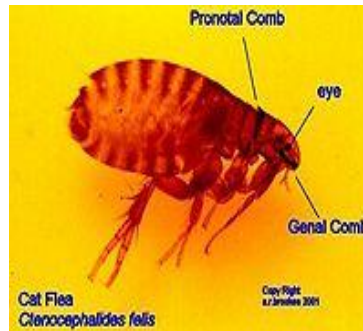
The Cat: the Figure

The cat: the Figure; the table: the

Ground

What will happen if the cat changes from the Figure to the Ground?

Possibility for the cat to interchange Figure with Ground in two different contexts

  b) 'I found a flea <u>on</u> the cat.'

The Cat: The Ground

The flea: the Figure; the cat: the Ground

7. <u>Conclusion</u>

The characteristics of Figure and Ground seem well-defined in the schema itself; however, the Figure/Ground distinction could be challenged in real life so that some visual aids have to be developed to facilitate learning of the English prepositions.

To conclude, these visual aids discussed in the last session can help learners to test whether the Figure and Ground can be conceptually changed or interchanged in the mental construction of the *context* itself. The Figure/Ground schemas add pedagogical values to understanding the usage of an English preposition in the context.

By these visual aids, English teachers can develop forms of learning English prepositions with implications for students to learn how to conceptualize entities in the relations logically *to make sense of the world.*

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