The Role of Cognitive Context in the Interpretation of Riddles: A Relevance Theory Perspective

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ABSTRACT

This paper addresses the role of cognitive context in the interpretation of riddles within the framework of Relevance Theory. Relevance Theory, proposed by Sperber and Wilson (1986/1995), implicates assumptions suitable for the interpretation of how cognitive context is created in the act of riddling. It is argued that this theory shows how and why the riddlee resorts to the cognitive context to give appropriate resolution to the riddle. In this regard, the cognitive context proposed by Relevance Theory is more powerful than the co-text or the context of situation in giving appropriate interpretation to the riddle. The riddles under analysis are confined to one type of riddle, the metaphorical riddle, selected from Pepicello and Green's 1984 'The Language of Riddles'. The cognitive context here does not refer to the co-text or the context of situation but to the set of assumptions and beliefs in the mind of the riddlee about the world available to him in the process of riddle interpretation. The context determines the interpretation of an utterance while the lack of contextual information will lead to communication failure or misinterpretation. This relates to the fact that the cognitive context is affected differently by different individuals due to various factors ranging from one's cognitive ability to one's social and cultural experiences. Hence, riddle interpretation, according to Relevance Theory, is an inferential process where cognitive context determines the interpretation of the riddle.

Keywords: Relevance Theory, cognitive context, riddle, optimal relevance, co-text

INTRODUCTION

Context has long been investigated from different perspectives in different language-related fields as having a main role in language understanding in the act of verbal communication (Dascal, 1989; Bevir, 2000;

Stern, 2000; Schmid, 2002; Van Dijk, 2008, 2009; Gee, 2014; Hu, 2014; Wardhaugh & Fuller, 2015). There is a general consensus that communicating and generating meaning are determined by the context in which an utterance occurs. However, the traditional view of context is constrained to refer only to the role of the context of situation and culture in determining the meaning of an utterance. That is, it ignores the cognitive ability of language users and their active control over context; hence, the dynamic process of communication is over-looked (Hu, 2014).

This state of affair extended to research on riddles and how they are interpreted or processed. As a form of communication, many studies (Ben-Amos, 1976; Green & Pepicello, 1979, 1984; Pepicello, 1980; Pepicello & Green, 1984; Hoew, 1989; Dienhart, 1998) have been conducted to show the importance of context in the interpretation of riddles. Studies on riddles and how they are understood have focussed on and noted that linguistic, cultural and social contexts are useful elements in interpreting riddles. Despite the importance of context in interpreting riddles, the role of cognitive context has not been explored systematically or only a few studies have been conducted on it.

To the best of the researchers' knowledge, there is only a paper by Solesa-Grijak (2011) that shows the role of cognitive context in interpreting riddles. The paper investigated the relationship between language and cognitive development, presenting the influence of metalinguistic awareness and cognition on solving riddles.

Solesa-Grijak concluded that there is parallel development between language and cognition. Other studies (Haring, 1974; Evans, 1976; Maranda, 1976; Glazier & Glazier, 1976; Green & Pepicello, 1984) focussed on the relation between cognition and the structural aspects of riddles to show that there is an intrinsic relationship between them.

Although previous research into the role of context has indicated that cultural, social, cognitive and linguistic factors can significantly influence the understanding of riddles, none of the studies provides any descriptive evidence of the actual role of cognitive context in the interpretation of riddles. The increasing interest in language comprehension and humour has highlighted the need for investigating a theory suitable to explain how riddles are understood. With the emergence of pragmatics as a theory of language use, there has been a growing body of literature on the role of context in utterance understanding; hence, there now exists a new perspective of the nature of context (Ruiz Moneva, 1999; Anderson, 2000; Adolphs, 2008; Maillat , 2013; Börjesson, 2014).

In this respect, among the many potential flow theories that seek to explain utterances is the cognitive context proposed by Relevance Theory (henceforth RT). RT is a cognitive pragmatic theory proposed by Sperber and Wilson (1986/1995). It appeared to reconceptualise context to be most appreciative of the possible effect of cognitive context upon the interpretation of riddles.

In the present paper, we investigate the role of cognitive context in the interpretation of riddles within the framework of RT. This study is concerned with how people understand riddles through investigating the role of cognitive context in the interpretation of riddles.

LITERATURE REVIEW

Relevance Theory and Context

Sperber and Wilson (1986/1995) argue that what people say is relevant in any given context. In this sense, the conversational implicature is understood simply when hearers select the relevant features of context, and recognise whatever speakers say as relevant to the conversation. When hearers/readers make sense of a text they interpret utterances by drawing on their own background knowledge of the world. The purpose of communication, then, is not to "duplicate thoughts" but to "enlarge mutual cognitive environments" (Sperber & Wilson, 1995:193, cited in Cutting, 2005:43). An individual's cognitive environment is "a set of assumptions available to him" (ibid.:140). That is, context, according to RT, is "the set of premises used in interpreting an utterance" (Sperber & Wilson, 1986/1995:p.15).

Accordingly, the speaker formulates his/her utterance so as to make it easy for the hearer to recover the intended interpretation (ibid.). This idea is well stated by Kearns (2000) in the following situation: Some of Tom's friends invited him to come with them to see an afternoon showing of a new film. One of the group, Jenny, says:

1. The movie ends at 3.50.

This utterance implicates the following assumptions available to Tom:

a. He has a lecture at 4.00.

b. It takes him 10 minutes to walk from the cinema to the lecture room.

Tom immediately infers that he can go to watch the film till the end and be back on time for the lecture. As a result, the utterance's implications in (1) interact with Tom's current assumptions. In particular, the new information interacts with the old information or assumptions, leading to new inference, the decision to watch the film.

Clearly then, RT can account for the way the hearer understands an utterance implicature in terms of cognitive information processing. The emphasis here is not so much on the external context in which an utterance occurs as on the internal context. The internal context refers to the hearer's assumptions, beliefs and hypotheses stored in his mind in a form of mental representations or propositions (ibid.).

In RT, therefore, the notion of context is a central one. The meaning of an utterance depends, not only on its semantic context, but also crucially on the contextual information with which it is inferentially combined (Gutt, 1998). This means that context, as Vidal (1996) stated, is "the set of assumptions that a hearer uses in the interpretation of a particular utterance" (p.637); that is, the hearer selects the context that yields the optimally relevant interpretation from cognitive environment.

In this regard, Sperber and Wilson (1990) state that an individual's cognitive environment can be modified by the addition

of a single piece of new information. Human information depends on the balance between processing effort and cognitive effect. The former is one relevant to the attention of memory and of reasoning, while the latter includes such things as adding new beliefs and canceling old ones, strengthening or weakening old information already held.

Relevance, in this sense, Kearns (2000) stated, is the property of utterances from the hearer's point of view used for understanding and for further inferences. As for the role of the speaker as a deliberate communicator, Kearns (ibid.) adds that implicature arises when the speaker makes an utterance highly relevant for the hearer to draw inferences. In normal successful communication, all utterances are relevant, as both the speaker and the hearer mutually recognise. If an utterance is relevant for the hearer, then the hearer will perform the required processing to achieve the anticipated cognitive effects, including the drawing of inferences.

Therefore, the above example (1) implicates the idea that Tom can see the film and be back in time for his lecture. The moderately low processing effort is justified by the cognitive effect. As Jenny, the speaker, is familiar with Tom's background assumptions, she can confidently anticipate that Tom will perform the required cognitive processing and that the utterance will be highly relevant to Tom. These assumptions are the distance from the cinema to the lecture hall and Tom's four o'clock lecture. In this respect, to achieve successful communication is to have the communicator's informative intention recognised by the audience (Sperber & Wilson, 1986/1995).

METHODOLOGY

The present study was a corpus-based qualitative analysis of riddles from a Relevance Theory perspective. The study adopted inferential analysis of riddles from the RT perspective to determine how they are understood within the framework of RT. Riddle processing requires extra cognitive effort as riddles are held to be based on ambiguity and the riddlee is misguided by some unnecessary additional information (Pepicello & Green, 1984). Ambiguity, according to Pepicello and Green, is of two types: linguistic ambiguity and metaphorical ambiguity. As past studies, mentioned above, paid more attention to linguistic ambiguity, metaphorical ambiguity was the main concern of this study. Therefore, the study was confined to one type of riddles, the metaphorical riddle. To this end, five metaphorical riddles were used from Pepicello and Green's 1984 'The Language of Riddles'.

Analysis of Riddles from a Relevance Theory Perspective

Riddles as a form of communication involve a coded and encoded message transmitted by the riddler and decoded by the riddlee as "a licensed artful communication" (Pepicello & Green, 1984). The message sent represents the riddler's intended meaning and the riddlee is required to grasp this message.

In the act of riddling, the riddler uses metaphor as a strategy in riddling to confuse

the riddlee as metaphor refers to different things according to different situations (Pepicello & Green, 1984). This will create ambiguity and the riddle will be subjected to multiple interpretations. This ambiguity is argued to be analysed and resolved within the framework of RT. RT suggests that every utterance creates in the addressee expectations or relevance. The riddlee will depend upon the related contextual information available to him to solve the ambiguity. That is, in disambiguation, "the first interpretation consistent with the principle of relevance is the only interpretation consistent with the principle of relevance" (Wilson, 1994). The riddlee, in this sense, will search for the appropriate context assumption that will produce sufficient contextual effect with least effort.

The analysis of metaphor, thus, will highlight the relation of the different meanings invoked from the metaphor with the cultural forms of expressions. This will enhance ambiguity "resulting from cultural troops that produce in riddling context surprising additional semantic structures for existing words or phrases" (Pepicello & Green, 1984, p.92). Accordingly, the riddler conveys a communicative meaning by using metaphors. That is, the concept the riddler intends to communicate is broader than the words he has chosen literally to communicate. In this vein, processing metaphorical riddles requires additional cognitive process or effort. The riddlee will construct different assumptions in terms of different contexts and search for the optimal one; that is, a set of background knowledge is activated (Yus, 2003). In this regard, it is important for the riddlee in solving a riddle with regard to metaphor to be pragmatically competent with the situational and sociolinguistic competencies of language.

Based on the above explanation, riddle processing entails the interaction of old and new information. This interaction causes the riddlee to make new inferences to reach the riddler's intention, the riddle interpretation. This cognitive process of interaction can be illustrated in three steps:

1. Retrieving old assumptions from the cognitive environment which represents the semantic context

2. Making inferences from old assumptions that leads the riddlee to the relevant cognitive context

3. Making new inferences when old assumptions interact with new assumptions to reach the optimal relevant context, hence riddle interpretation or resolution

To see how RT works in accounting for the way meaning is derived or the way riddles are interpreted and processed, let us consider the following examples quoted in Pepicello and Green (1984).

Riddle 1: What has a tongue and cannot talk? A shoe.

The riddle image here, that something "has a tongue and cannot talk," causes metaphorical ambiguity resulting in adding surprising semantic meaning to the word "tongue"; hence, pragmatic meaning is

achieved. This riddle image contradicts the old information stored in the cognitive environment of the riddlee that tongue is usually used for talking. As a result, the riddlee will exert extra cognitive effort in the process of interpreting the riddle to produce contextual implications. Therefore, in the first step, the following assumptions might be available for the riddlee from which an optimum potential relevant context is available as a resolution to the riddle unless a riddle implicates multiple contextual effects:

a. The tongue is an organ in the mouth of humans and animals and is used for talking in humans.

b. Something has a tongue but cannot talk.

c. Something cannot talk, yet has a tongue.

Therefore, in applying the second step, it is reasoned that the thing meant by the riddler:

d. Must not be a human being or animal either

e. Must be an inanimate thing

The third step of the riddlee's cognitive process is to search for a cognitive context in his cognitive environment for an inanimate thing that fits the above assumptions. In this step, the riddlee makes the main assumption that what the riddler means is a tongue-like thing that has an identical tongue role for the thing meant. One of the things, mostly relevant, that might be retrieved from the riddlee's cognitive environment is the shoe. The tongue is conceived to resemble a specific part of a shoe with the tongue-like function for this thing. Therefore, it has been

used metaphorically by way of metaphorical extension to refer to the shoe part. Thus, the riddlee reaches his optimal relevance, solving the riddle.

Riddle 2: What has teeth but cannot eat? A saw.

In this riddle there is something that "has teeth but cannot eat." The word "teeth" causes metaphorical ambiguity as semantic meaning is added to it; that is, a pragmatic meaning is achieved. The word "teeth" in the cognitive environment of the riddlee means something used for eating and cutting in humans and animals. In the first step, the riddlee will exert extra cognitive efffort in interpreting the riddle to produce contextual implications. The following assumptions might be available for the riddlee in searching for an optimally potential relevant cognitive context:

a. Teeth are solid bones in the mouth of humans and animals used for cutting, biting and chewing and for articulating human speech sounds.

b. Something has teeth but cannot eat.

c. Something cannot eat, yet it has teeth.

Therefore, the thing meant by the riddler, in the second step:

d. Must not be a human being or an animal

e. Must be an inanimate thing

In the third step, the riddlee will search for a suitable cognitive context in his cognitive environment that fits the ambiguity that something "has teeth but cannot eat;" that is, the main assumption made by the riddlee is

that the thing meant is associated with teeth as far as the tooth function is concerned. One of the cognitive contexts available to the riddlee's cognitive environment is the "saw". The saw is a serrated blade tool used for cutting wood, metal and other materials. The serrated part of the saw is called "teeth". Therefore, "teeth" is used metaphorically to refer to the saw, and thus, the riddle is solved.

Riddle 3: What has a mouth but does not eat? A river.

In this riddle, something "has a mouth but does not eat" is a metaphorical ambiguity caused by the extended meaning of the word "mouth". The old information stored in the cognitive environment of the riddlee is that the mouth is usually used for eating in humans and animals and speaking in humans. The riddler must refer to something else that has a mouth that is not used for eating. In the first step, the riddlee will expand extra cognitive effort in the process of interpreting the riddle. The potential assumptions available for the riddlee might be the following:

a. The mouth is in the face of humans and animals and is used for eating by both as well as for speaking in humans.

b. Something has a mouth but cannot eat.

c. Something cannot eat, yet it has mouth.

In the second step, then, the riddlee will conclude that the thing referred to:

d. Must not be a human being or an animal

e. Must be an inanimate thing

In the third step, the riddlee will search for a cognitive context in his cognitive environment for an inanimate thing that fits the above assumptions. The main assumption in this stage is that what the riddler means is something that has a mouth-like thing that has an identical mouth role for the thing meant. Therefore, he will search for something that has a mouth from which something springs. The available relevant cognitive context retrieved from the riddlee's cognitive environment would be the river. The river is envisaged to have a part called the "mouth", which has a mouth-like function from which water flows into another stream. Therefore, "mouth" is used metaphorically to refer to the river part. Thus, the riddlee reached his optimal relevance; hence, the riddle is solved.

Riddle 4: What is this that has got a heart in its head? A lettuce.

The riddle image that something "has a heart in its head" causes metaphorical ambiguity for the riddlee. This riddle image contradicts the old information stored in the cognitive environment of the riddlee that the heart is usually in the chest of humans and animals and provides blood to the body. In the first step, the riddlee will exert extra cognitive effort to produce contextual implications. The following assumptions might be available for the riddlee, from which an optimally relevant cognitive context will be reached as resolution to the riddle.

a. The heart is a human and animal body part in the chest used for providing blood to the body.

b. Something has a heart but it is in its head.

c. Something has a heart but it is not in its chest.

In the second step, the riddlee concludes that the thing meant by the riddler:

d. Must not be a human being or an animal

e. Must be an inanimate thing

In the third step, the riddlee will search for a relevant cognitive context in his cognitive environment for an inanimate thing that fits the riddle image. The riddlee will make the main assumption that what the riddler means is something that has a heart that is in its head. One of the possible relevant things, in the riddlee's cognitive environment is the "lettuce". The lettuce is a plant that belongs to the daisy family. It is described as having a heart, from which leaves grow, in its head. Therefore, it is metaphorically extended to refer to the source from which the leaves grow. In this way, the riddlee reaches his optimal relevance; hence, the riddle is solved.

Riddle 5: What has an eye but cannot see? A needle.

The word "eye" in this riddle image that something "has an eye but cannot see" causes metaphorical ambiguity; hence, new usage of the word is created. Old information stored in the cognitive environment of the riddlee is that the eye is an organ in the head of humans and animals through which they see. As a result, extra cognitive efffort is exerted by the riddlee to produce contextual implications. This is the first step

in the following assumptions that might be available for the riddlee to move to the second stage to search for optimal relevance as a resolution to the riddle:

a. The eye is an organ through which humans and animals can see.

b. Something has eyes but cannot see.

c. Something cannot see, yet it has eyes.

d. Something has only one eye.

The second step implicates that the thing meant by the riddler:

d. Must not be a human being or an animal

e. Must be an inanimate thing

Then, in the third stage, the riddlee searches for a relevant cognitive context in his cognitive environment for an inanimate thing that fits the above assumptions. The riddlee makes the main assumption that what the riddler means is something that resembles an eye in appearance or shape but which has a different function. One of the potential things or cognitive contexts available to the riddlee's cognitive environment is the needle. The needle is a slim piece of metal with a top at one end and a hole called the eye to hold thread at the other. Therefore, it is used metaphorically to refer to the needle part that holds thread, and this solves the riddle.

CONCLUSION

Within the framework of RT, riddling, as a form of communication, is cognitive-context dependent. Cognitive context, according to RT, is the set of background knowledge and assumptions available to

the communicators, the riddler/riddlee, in the act of riddling. These assumptions can contribute to the interpretation of riddles. This definition implicates that the riddlee chooses appropriate contextual information from his encyclopedic knowledge to reach the right interpretation of the riddle. This means that the mutual cognitive environments of the riddler and the riddlee represent a prerequisite for an appropriate resolution to the riddle; hence, there is successful communication. That is, when cognitive context operates well, the riddlee is able to reach optimal relevance; hence, interpretation of the riddle is achieved, and the riddlee will understand the riddle through searching for the optimal relevance from the cognitive contexts available. The riddler's role here is to constrain the contextual assumptions to cause the riddlee to choose the relevant one.

In this sense, riddle interpretation, according to RT, is an inferential process where cognitive context determines the interpretation of the riddle. Thus, cognitive context plays an important role in the interpretation of riddles, and the lack of contextual information will lead to communication failure or misinterpretation. The more the riddlee is pragmatically competent, the easier the interpretation of the riddle is. This relates to the fact that cognitive context is affected differently by different individuals due to various factors ranging from cognitive ability to social and cultural experiences.

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