

## The Role of Pragmatic Inferences in Interpreting Implicatures

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#### ABSTRACT

An inference is one of the pragmatic phenomena that has an important role in communication. It is defined as a process that leads to the interpretation of what a speaker or writer means or implicates. This study aims at studying the role of inferences in interpreting implicatures in literary texts. It hypothesizes that conversational implicatures cannot be interpreted unless they are contextualized and inferred. In this process, the reader or hearer relates intentions to what a speaker or writer means. So, the emergence of implicatures is related to the pragmatic inference that is considered reasonable conclusions. This research consists of four sections, (1) an introduction, (2) types of inference, (3) main distinctions between inferences, (4) relationship between an inference and literary texts, and (5) conclusions the study arrived at.

### 1. INTRODUCTION

The analysis of the speaker's intended meaning depends on the process of inference to access the interpretation or the connection between utterances. The inferential process is based on the participants' mental representations and factual assumptions about the world. For example, Pinto (2001, p.32) defines inference as

“the mental act or event in which a person draws a conclusion from premises”. Different types of inference result in specific conclusion as in (c), from specific premises, as in (a) via deductive inference. This can be applied to the following examples:

1.(a) It’s snowy, it’s cold.

(b) It’s snowy.

(c) So, it’s snowy.

The use of inference is like the other pragmatic concepts such as implicature, presupposition and reference are implemented to show the relationship between the participants in communication and the elements used in communication. It should be mentioned that inference as a pragmatic concept is closely related to the context in which communication occurs (Brown and Yule, 1983, pp.33-5). Yule also (2010, p. 131) indicates the importance of inference as supplementary information derived by the hearer to have a connection between what is said and what is meant, as in the following example:

(2) A: Can I have a look at your Shakespeare?

B: Sure, it’s in the bookcase.

One cannot understand such utterances without the process of inference. The speaker in this example intends to look at one of Shakespeare’s plays.

As far as implicatures and inferences are concerned, one should distinguish between the two phenomena. An implicature is defined as the speaker’s meaning that goes beyond what is said. In contrast, inference is the cognitive process used by participants to derive the meaning beyond what is said (Haugh, 2012, p. 2658). Implicatures, conversational implicatures, introduced by Grice (1975), are associated with features of discourse. These features involve particular expectations and knowledge shared by the participants. Speakers and hearers can make inferences about what is communicated by these expectations. The inference made is always

rational and purposive. In addition, Levinson (2000, p. 45) indicates that conversational implicatures are not coded, but inferred relying on some assumptions regarding the rational nature of conversation behaviour (see, Senft, 2014, p. 33).

Culpeper and Haugh (2014, p. 110) confirm that the logical form of an utterance does not contribute in the formation of implicatures. Instead, they result from inference. On the other hand, relevance theorists use the term of the logical form of the utterance over the Gricean notion of what is said. Notably, logical form is derived from word meanings and syntactic structure of the utterance. Culpeper and Haugh also (2014, p. 134) explain how meaning in pragmatics is understood by inference. According to it, hearers relate an intention to what speakers mean. Moreover, they refer to the types of inference in utterance processing. In relevance theory, deriving explicatures and implicatures depends on the amount of inferential work. These inferences can be logical or pragmatic.

1. Logical inference: It is concerned with the truth of the premises that ensures the truth of the conclusions which leads to entailment as an example.
2. Pragmatic inference: It is concerned with the conclusions that might be necessary reasonable or permissible. However, one cannot guarantee their truth. This results in the emergence of implicatures.

Relevance theorists recently proposed another distinction between intuitive and reflective inference. The intuitive inference occurs when conclusions are accepted by a user without relying on reasons. This process is representational. On the contrary, the reflective inference is represented by conclusions derived from assumptions or premises through reasoning.

Davis (2016, p. 51) confirms that what is implicated by someone should be inferred by the addressee/ listener. For this reason, implicatures are characterized as inferences. However, the process of producing implicatures is not itself inferring. The inference is based on evidence. The evidence differs from one case to another. For example, the inference of all speech acts is inferred from contextual evidence, what

is said and what is uttered. The addressee's recognition of what is meant is automatic, whether it is said or implicated.

In Gricean theory (1975), the general idea is concerned with how inferences are made by addressees. Recently, the focus in pragmatics is on works that consider pragmatic inferences in interpreting utterance. As for relevance theory, it deals with both implicatures and explicatures in a deeper way. The pragmatic inference is implemented to derive explicatures. According to relevance theory, the key point is that what is communicated is either more or less strongly. Relevance theory considers only one assumption of Grice, the pragmatic inference, ruled by the same communicative principles whether it influences the truth-conditional content of the utterance or is a different implication assumption. The difference between the Gricean theory and relevance theory is that the inference based on maxims arises from communicative use of expressions that are related to the non-conventional implicatures. As for what is explicitly communicated, Grice follows the code theory (Carston, 2002, p. 102; and Clark, 2020, p. 429).

Regarding Levinson (2000, p. 27), he argues that generalized implicatures are default inference or interpretations in the sense that they are defeasible, but probable. This feature can be applied to many implicatures, but not to generalized metaphors, or sentences that have multiple interpretation, since the literal interpretation would be the default (see also, Davis, 2016, p.65). For example,

3. Some students are late.

This sentence has three interpretations:

- (a) Not all students are late.
- (b) Not many students are late.
- (c) It is unknown whether all members are late.

The three interpretations are not default. So, one can infer what the speaker means by finding the information about the specific context of the utterance. Accordingly, the default inferences are related to what is said as a part of it (truth-conditional content), entailments or contextual assumptions. This has an impact on the way regarding the perception of pragmatics, including the two types of conversational implicatures: the generalized conversational implicatures are concerned with default inferences, whereas the other one (particularized conversational implicatures) is concerned with the derivation of implicatures that are context-based. The two types have different modes of inference. The first one belongs to the theory of grammar. The second one depends on reasoning (see also, Carston, 2002, p. 101).

In the same respect, Neo-Griceans claim that the inferential processes are pragmatic represented by lexical expressions such as *all*, *and*, *some*, *not* etc. that have a role in the derivation of the overall meaning of an utterance (Bianchi, 2013, p. 129). These processes result from the pragmatic effects and are formed as generalized implicatures. For example:

4. George has four bicycles.

This example is considered a scalar implicature which has a default inference. The implicature licenses that *John has exactly four bicycles*. Scalar inferences belong to two different approaches: the neo-Gricean approach that deals with the scalar implicatures to be generalized implicatures that are automatically triggered; and the post-Gricean approach that deals with scalar inferences as ordinary inferences that are only triggered in particular contexts to satisfy the hearer's expectations of relevance (see, Degen and Tanenhaus, 2011, pp. 3299-3300).

Dealing with Levinson's maxims (1987) informativeness and quantity. As it has been mentioned earlier, informativeness provides the enrichments of literal meanings which depend on stereotypes and assumptions. This can be applied to generalized conversational implicatures. As for the quantity maxim, it is concerned with providing the most informative statement the speaker believes is true. This maxim is based on comparisons between what the speaker chooses and what the

speaker would be used as alternative forms, but intentionally avoided. The compared forms must be different in informativity.

In a word, the neo-Gricean approaches emphasize the inferences that are normal. The generalized conversational implicatures are derived relying on the speaker's intentions. On the part of the addressees, they need to consider the stereotypic assumptions related to the specific linguistic forms; therefore, the addressees do not have to assess the speaker's intentions.

Bach and Harnish (1979, pp. 4-5) deal with communication as inference-based. By what is said, the speaker provides "a basis for the hearer to infer what the speaker intends to be thereby doing". They apply the inferential analysis to speech act production and recognition (Sbisà, 2013, p. 41).

There are three stages of inference: lower-level explicatures, higher-level explicatures, and implicatures. Lower level explicatures are lower representations in communication. Phatic communion is a lower-order (public) representation, such as

5. How are you?
6. Nice weather, isn't it?

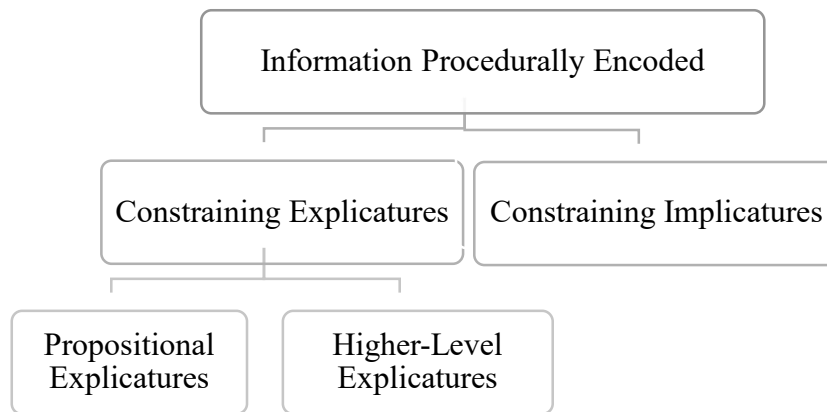
Higher level explicatures are complex propositions conveyed by an utterance and formed by the proposition expressed by a speech act or a propositional attitude description. Such type of propositions is truth evaluable, but they have no impact on the truth conditions of the utterance. This is a private representation in communication. As in meeting a person who has the same or lower status than the speaker. The speaker knows him/her has not seen him earlier in the day. The speaker may greet him by saying

7. How are you?

Or when someone says:

8. Mark is at home. His bicycle is in the garage.

It is considered as higher-level explicature, since the speaker concludes that Mark is at home depending on the sentence that follows (Iten, 1998, p. 71 and Escandell-Vidal, 1998, pp. 171). As for implicature, everything else of an utterance is communicated implicitly. Accordingly, these stages are affected by different procedural expressions. The following diagram shows the scope of procedurally encoded information adapted from Wilson and Sperber (1993, p. 3):



Wilson and Sperber (1993)

Sperber and Wilson (1987, p 701) define inference as “the process by which an assumption is accepted as true or probably true on the strength of the truth or probable truth of other assumptions”. There are two types of inference: demonstrative and non-demonstrative. It should be known that the process of inferential comprehension is non-demonstrative, since what is communicated by the speaker never amounts to the informative intention (see also, Li, 2008, pp. 123-4).

Both Gricean and Neo-Gricean accounts of this phenomenon have the same idea in common. For example, they agree that there are default inferences related to certain expressions in an utterance. This point is based on Grice’s view that generalized conversational implicatures are produced by default. That is to say, they are generated without contextual or linguistic indications that might rule them out

(Clark, 2013, p. 191). In regard to generalized and particularized implicatures, Levinson (2000) clarifies the distinction between the two types of implicatures by the following example to show the interpretation:

1. A: What time is it?

B: Some of the guests are already leaving.

It must be late. (Particularized Conversational Implicature)

Not all of the guests are already leaving. (Generalized Conversational Implicature)

In this example, there is a violation of a maxim, but the hearer is still cooperative in terms that B's utterance is concerned with matters of time. On the other hand, the generalized conversational implicatures are independent of context and speaker's intent. So, the default inference is constructed as

Not all of the guests are already leaving. (see, Arundale, 2005, p. 54).

On the contrary, relevance theory rejects the assumption of default inference and relates to it that there is a distinction between generalized and particularized conversational implicatures. Sperber and Wilson (1986, p. 69) state that the processes of understanding each other can be seen as a type of evidence-based inference. In other words, it is a kind of "suitably constrained guesswork". The key point in this aspect is that the hearer/addressee depends on the relevance-guided comprehension heuristic. The aim is to know the interpretation of communicative acts whether verbal or nonverbal. They argue that a sentence may have different meanings relying on the participants, their intentions, the situation in which it is uttered. In other words, the context of the utterance. As far as relevance theory is characterized as a cognitive theory, conversational inference is an essential element in this theory. There are two aspects involved in ostensive-inferential communication: stimulus and the listener's inference. Accordingly, an inference is derived by a deep cognitive principle that leads to derive maximal information from what is said, i.e., a stimulus. The listener gets new information through the speakers' hints and their cognitive contexts. For this reason,



communication is a cognitive process and ostensive-inferential communication. To clarify that, let us consider the following example:

6. A: Would you like to have dinner with us tomorrow?

B: I am invited to my friend's birthday.

In this example, it is obvious that B does not refuse A's invitation directly. B provides informative information by saying that he is invited to someone's birthday. Hence, B wants A to realize that he/she has another intention. So, B wants A to get information by what is expressed. The A's invitation is the communicative intention, whereas B's act is the ostensive behaviour. This is the process of ostensive-inference communication. As in this example where A infers that B cannot come for some reasons (Bo, 2015, p. 36).

Relevance theory differs from the Gricean and the Neo-Gricean approaches in dealing with inferential interpretation. Relevance theory considers the linguistic expression used by speakers as a source of assumptions for additional inferential process concerned with implicatures. However, they are not conclusive or exclusive. It should be taken into consideration that the relevance theoreticians do not consider all the pragmatic inference intended by the speaker as implicatures whether implicit or indirect. According to Sperber and Wilson (1986) even what is explicitly communicated may be derived by inferences. On the other hand, the other two approaches deal with inferential interpretations as complementing and adding to the linguistic decoded interpretations. The neo Griceans deal with the literal, explicit meaning or what is said to be enriched grammatically. This makes it close to the linguistic semantic meaning that differs from the idea in the relevance theory that the literal meaning is partly inferred (Ariel, 2010, p. 134-5).

Regarding speech acts, Searle's view (1975) of interpreting indirect speech acts depends on Grice's cooperative principle, mutual knowledge and general powers of rationality. Indirect speech acts are regarded as a subtype of conversational implicature. As for the hearer's inference, it is also considered as a subtype of

conversational inference relying on Gricean maxims. This can be explained in the following example:

7. A: Let's make some sweets.

B: I have to leave now.

One can infer from B' answer that B is rejecting A's proposal.

Searle (1979c) relates the performance of an illocutionary act to the activation in the hearer of an inferential way including assumptions that the speaker is cooperative, the speaker is performing speech acts that are not pointless, assumptions that belong to speech act theory such as the preparatory conditions, and contextual assumptions. This can be said when there is a mismatch between the intended illocutionary act type and the syntactic structure of the utterance. Let us consider the following example:

8. Can you pass the sugar?

If this utterance is considered as a question, it would be pointless, simply, because the speaker is not interested in knowing whether the hearer is able to pass the sugar or not. The speaker's aim is to see how the hearer behaves. The speaker is not asking a question and assumed to be conversationally cooperative; therefore, the hearer's ability comply with the request is one of the preparatory conditions. But if the speaker says:

9. I like tea with two spoons of sugar.

This utterance is neither about the addressee nor about the sugar container on the table. Depending on the contextual assumptions, it can be understood as an indirect request to pass the sugar (Sbisà, 2013, pp.53-4).

Searle (1979, p. 32) considers speech acts, cooperative conversation and mutually shared factual background information of the speaker, the hearer, and the hearer's ability to make inferences to understand an indirect speech act.

Birner (2013, p. 141) states that it is not possible to interpret an utterance without the use of inference. In addition, the relationship of inference to the rest of the linguistic aspects should be considered, such as phonetic, phonological, morphological aspects and so on.

Huang (2014, p. 67) explains three theories of inference. They are as follows:

1. Default inference theory.

It is concerned with conveying default meaning that does not require inferential processes as Horn's theory (1983) and Levinson's theory (1987).

2. Contextual inference theory.

It deals with meaning that is essentially inferred contextually as relevance theory.

3. Structural inference theory.

This is a recent theory that deals with deriving Q-scalar implicature depending on structural factors. According to this theory, it is assumed that Q-scalar implicatures are formed compositionally. It is related to semantics and grammar, since this type of implicatures belongs to the tree diagram and compositional semantics.

To conclude, an utterance can be understood relying on the hearer's ability to infer the intended meaning. Both implicature and inference are made to understand and interpret what is meant, since the speaker intends to implicate something and wants the listener to infer it. An important point to be mentioned is that inference depends on the degree of shared knowledge between the speaker and the listener. The importance of both implicature and inference makes them the central topics in pragmatics. So, defining them can be seen as defining the pragmatic field itself.

## **2. Types of Inferences**

Inference has been defined and viewed by different scholars and approaches. Types of inferences can be classified according to these views. Oswald and Maillat (2018, p. 615) identify two types of inferences: pragmatic inferences and

argumentative inferences. The pragmatic inferences deal with processes of comprehension, whereas the argumentative inferences are considered in terms of the mechanism of argumentative processing and especially evaluation. In what follows, these types will be explained:

1. Pragmatic Inference

Grice work on meaning is based on this type of inferences. It can be found in his model of communication and the cooperative principle. According to his model, to derive an interpretation of someone's utterance, one should infer the speaker's meaning which results in recognizing a communicative intention. So, implicatures are the outcome of what a speaker means implicitly and what a hearer derives inferentially. For this reason, the type of inference offered by Grice is not argumentative, simply, because the pragmatic inference is concerned with a process that leads to implicit contents (Ahmed, 2011, pp. 63-8; and Oswald and Maillat, 2018, p. 619).

The main features required for specifying the pragmatic inference are as follows:

1. Sperber and Wilson (1995, pp. 65-71) refer to the type of relationship of pragmatic inferences as non-demonstrative.
2. The interpretation of speaker meaning is derived by inference, since the main goal of inference is interpretive.
3. The pragmatic inference is based on verbal and contextual material used as the input, whereas the output of the pragmatic inference represents the speaker's meaning. The following example clarifies what has been said:
  1. Nicolas: Do you want to go to the cinema tonight?

Mark: I have an exam tomorrow.

One can understand Mark's answer as a refusal. However, this interpretation is based on Marks utterance combined with background assumptions that having an exam the next day is related to studying the previous evening.

## 2. Argumentative inference

The argumentative theory introduced by Mercier and Sperber (2009) deals with the emergence of reasoning and provides an explanation of argumentative inferences. According to this model, argumentative tasks are cognitively encountered by an argumentative module, i.e., processes related to managing argumentative data for argumentative purposes. The module is concerned with the production and evaluation of arguments. The function of this module is to perform argumentative inferences. Mercier and Sperber (2009, p. 154) explain the inferential nature of the process result from the argumentative module:

*What argumentative module does then is to take  
as input a claim and, possibly, information relevant  
to its evaluation and to produce as output reasons  
to accept or reject that claim.*

Mercier and Sperber (2009, p. 154)

The argumentative module represents the relationship between a conclusion and reasons to accept it. For this reason, argumentative inference is concerned with not only the generation of arguments, but also with the accessibility of a justificatory link, i.e., the accessibility between premises and conclusions.

The main features of argumentative inferences are:

1. There are various types of relationships: normative standards and types of argument schemes.
2. The purpose of this type of inference is evaluative, since it is related to reception search for the quality of argumentation.

3. Regarding the input and output of this type of inference, the former is the representation of what a speaker means, whereas the output is an evaluative representation concerned with the relationship between a conclusion and the reasons to accept it.

Another distinction has been made between deductive and non-deductive inference. For example, Clark (2013, p. 123) states that the deductive inferences are found in formal logical language. This type of inference is characterized by the conclusions made by this process. In addition, they are true as long as the initial premises are true. Another type of inference is the non-deductive. This type of inference, is generally, but not totally, reliable, since in some cases the premises are true, but the conclusions are false. These varieties or types of inferences are explained by Clark (2013, p. 126) as follows:

## 2. Deductive Inference

The ancient philosophers were interested in logic because of the validity of arguments. One can debate a complex argument by arguing with the initial premises or by arguing with the logical steps. The idea of classical logic was true premises are followed by true conclusions. A valid argument results from valid inferential stages. However, false conclusions would occur if one or more initial premises was false. Briefly, this type of inference is described as a safe or reliable process by which true premises lead to true conclusions. In this type of inference, deductive rules are applied to an initial set of premises and generate interesting conclusions. Wilson and Sperber and Wilson (1991, p. 377) claim that deductive reasoning contributes crucially to the non-demonstrative inferential processes that is used spontaneously to interpret an utterance. Accordingly, they view spontaneous inference as a non-demonstrative process that includes deductive devices (see also, Escandell-Vidal, 2004, p. 365).

Márquez (2000, p. 53) confirms that the deductive rules are used as the only logical processes that occur in spontaneous inferential comprehension. A deductive rule is considered a logical implication. What distinguishes the deductive rule or

logical implication is that the conclusion is always true if the premises are true. Sperber and Wilson (1995, p. 84) explain the following example:

1. Input: Apples grow in orchards and grapes grow in vineyards.

Output: Apples have grown in orchards.

All deductive rules are entailments, simply, because they guarantee that.

In relevance theory, two modes of communication are distinguished: a conventional one known as the code model and an inferential one called the ostensive model. Sperber and Wilson (2013, pp. 228-9) view inferences in terms of implicatures. They consider implicatures as a paradigm case of non-demonstrative inference. Unlike some views that claim that non-demonstrative inference cannot contain a deduction. On the contrary, relevance theoreticians claim that deduction-making assumptions is essential in non-demonstrative inference. Taking into consideration, the type of formation of such assumptions is spontaneous and unconscious. A deductive device is described as an input of assumptions that deduces all the conclusions that can be formed.

## 2. Non-Deductive Inference

This type of inference refers to inferential processes that lead to conclusions which are logical, but not guaranteed. It includes varieties of inference as inductive, probabilistic and statistical reasoning. In addition, it clarifies some inferences that are made naturally and evidence-based which sometimes true premises result in false conclusions. The following example shows how friends share impressions with each other after returning from a trip:

3. The bus drivers in Barcelona are so nice. They are really helpful and friendly.

Another example to be considered is about the dangerous driving. As:

4. Taxi/bus/cyclist drivers are reckless.

The friend's impression of the bus drivers and their helpfulness is not based on sufficient evidence. It might be very little evidence as one ride. For this reason, one cannot make such general conclusion. Similarly, if there is a negative opinion about the road users is not based on any systematic observation, but on subjective beliefs. Both examples share the same point in common: the speaker has made a generalization relying on a small number of instances. However, despite the observed instances, it is not sure that the generalizations made are true. There are various proposals regarding the confirmation phase in terms of utterance interpretation. According to Grice, these proposals are assumptions involved in a communicative behaviour as coherent, cooperative, and relevant (Breheny, 1998, p. 108; and Ramos, 1998, p. 315).

The comprehension of an utterance depends on deductive inference (non-demonstrative). There is a difference between deductive and non-deductive inferences. For example, the demonstrative one can be valid in all contexts, since they require a fixed set of premises and are context-free, whereas the non-demonstrative one cannot be valid in all contexts. However, it is regarded as likely to be right (see, Márquez, 2000, p. 51). Let us consider the following example:

5. A: Are you going to the workshop?

B: It's on Linguistics.

The interpretation of the utterance 'it's on Linguistics' relies on the assumptions that constitute part of the general representation of A. This utterance has the following non-demonstrative inference:

6. The workshop is on Linguistics. (premise)

If someone is interested in Linguistics, he/she will go to a conference on Linguistics. (premise)

B is interested in Linguistics. (premise)



B will go to the conference. (conclusion)

Understanding an utterance is the outcome of both decoding and inference. It is a combination of linguistic information encoded and contextual assumptions to have a hypothesis of the speaker's intention. Inferences can either be deductive or non-deductive. The deductive inference is used as a logical process to comprehend an utterance spontaneously. As for the non-deduction inference, it is concerned with conclusions that are logical, but not guaranteed such as induction.

### **3. Inference in Literary Works**

It is well-known that literary works, such as narratives consist of events. Inference is made to connect these events, getting additional information regarding what is not stated or said and allowing further interpretation of what is stated or said. The assumption-making processes are revealed by writers. These processes make characters understand or recognize the state of affairs. It should be known that readers of a literary work aim to infer both explicatures and implicatures. In reading a text, a reader makes inferences in order to have a coherent text. The reader's ability to understand a text, leads to efficient written communication, simply, because a text does not provide a description, but also provides a hint for readers to make and expand inferences. Narratives are based on actions and events. Narrative texts contain both actions and state. However, one should consider tracking actions, because the studies have shown that readers remember actions better than states (Seifert, et al., 1985, pp. 405-6). Short (1998, p.6) argues that the aspects of a play are a play-text, production and performance. The production and performance are based on inferences derived from reading the text.

Hasegawa (2007, pp. 59-60) refers to two types of inferences that can be drawn during reading a text. These inferences are bridging and elaborating. The bridging inference is always necessary to fully understand texts, such as anaphoric or referential inferences and antecedent inferences. As for the elaborating inference, it makes the readers go beyond the explicit content of the text. The bridging of inferences is concerned with how a reader connects the sentences logically. In

contrast, the elaborat would be used to solve issues that are related to implicit information (see also, Arundale, 2005, p. 54).

It should be known that there are two levels of comprehension processes: low and high. The lower-level processes include word recognition, syntactic structures and semantic aspects. Regarding the higher-level processes, Grabe and Stollner (2011, p. 14) explain the constituents included in the higher-level process.

1. Forming the text model of comprehension.

It indicates the meaning the writer intends to convey through the text.

2. Situation mode refers to the reader's interpretation.

This interpretation is affected by the purposes of reading the text and the readers background knowledge.

In literary works, there is some information that cannot be found, the reader has to infer it, since it is intended. The interpretation depends on conclusions from the text and the context, because reference does not occur only in the text. The meaning of the text can result from the interaction of the text with particular readers. So, there must be a balance between the two views of interpreting a text: the meaning of the text is found in the text itself or it is in the reader's mind (Leech, 2008, p. 193).

It is assumed that the author of a literary text shares with his/her readers common knowledge and experience. This background knowledge is necessary for the interpretation of the simplest sentences. It is important to know that this knowledge does not include only common inferences such as when someone stops breathing, he dies, but also knowledge of particular historical events and literary works. Accordingly, the reader who hypothetically shares with the author not only the background knowledge, but also presuppositions, and standards of what is good and bad, right and wrong etc. is called the implied reader or the mock reader (Leech and Short, 2007, pp. 207-8).

The use of pragmatics and cognitive in stylistics has made sense on some level. The two frameworks try to move the study of language and literature beyond the structure of the text. It should be taken into consideration that pragmatic concepts such as inference and implicature are also assumptions about cognitive processing. The cognitive-pragmatic approaches to stylistics have influenced the study of mind style and characterization. In order to indicate the figures that exist in literary and dramatic works, relying on the characters speech and represented thoughts, one can infer their attitudes, goals, intentions and desires etc. This relies on the readers' ability to find out through the character's communicative behaviour the repetition of flouting of a maxim or any deviation from the conceptual way of normal linguistic behaviours (Warner, 2014, p. 375).

The importance of inference is not restricted to the natural language implemented in an ordinary conversation, but it can be also applied to the analysis of literary works.

#### **4. Data Analysis**

In this section three dramatic texts selected from Ibsen's plays (A doll's House, Hedda Gabler, and Ghosts) will be analyzed by applying the communicative principle of relevance theory.

##### **Text (1)**

##### **Step (1): Exchange**

**Nora:** But, Torvald, surely this year we can spread ourselves just a little. This is the first Christmas we haven't had to go carefully.

**Helmer:** Ah, but that doesn't mean we can afford to be extravagant; you know.

(A Doll's House, Act One, p.2)

##### **Step (2) Context and Interpretation**

Nora asks Helmer to go out and see what she has bought. He starts blaming her for spending money on that stuff. Nora, then, argues that they should be a little bit

extravagant, because he is getting a good salary. Although she tries to convince him, Helmer does not agree with her and he considers that as a spendthrift.

**Step (3): The Conversational Rules**

**1. Explicature**

**2. Implicature:**

- a. Implicated Premise
- b. Implicated Conclusion
- c. Strength:

- 1. Weak
- 2. Strong

**3. Types of Inference:**

- a. Pragmatic
- b. Argumentative

**Step (4): Analysis of the Exchange**

By adopting the communicative principle of relevance, this exchange is analyzed as follows:

**1. Explicature:** Ah, but that doesn't mean we can afford to be extravagant; you know.

**2. Implicature:**

**a. Implicated Premises:**

- 1. They do not have enough money to buy the Christmas stuff.
- 2. He indirectly refuses to afford for buying the Christmas stuff.

**b. Implicated Conclusions:**

Helmer does not agree with Nora's idea of spending money on the Christmas stuff.

**c. Strength**

Since there is more than one interpretive possibility, the implicature in this example is weak.

**3. Types of Inference:**

- a. Pragmatic: ✓
- b. Argumentative: X

**Step (5): Discussion**

According to the exchange between Nora and Helmer, Nora decodes Helmer's utterance as an assertion that they cannot spend money excessively. However, his utterance is not the expected response to Nora, i.e. as an agreement or direct refusal to her idea. Thus, she relies on his statement to derive the implicated conclusion. So, she uses the assumptions to draw an inference that would be relevant to Helmer's utterance. These assumptions are:

- 1. They do not have enough money to buy the Christmas stuff.
- 2. He refuses to afford for the expenditure of Christmas.

**Step (6): Finding**

From the analysis of this exchange, one can conclude that Helmer's utterance is an indirect refusal to Nora's attempt to buy and enjoy Christmas without any financial limitations. Helmer's statement is used to make a pragmatic inference from the weak implicatures.

**Text (2)**

**Step (1): Exchange**

**Mrs. Alving.** They'd taught me various things about duty and such-like, and I'd simply gone on believing them. Everything seemed to come down to duty in the end-my duty and his duty and ... I'm afraid I must have made the house unbearable for your poor father, Oswald.

**Oswald.** Why did you never write to me about this?

**Mrs. Alving.** Until now I've never regarded it as anything, I could bring myself to talk about to you- his son.

(Ghosts, Act, Three, p.155)

### **Step (2) Context and Interpretation**

This conversation is between Mrs. Alving and her son Oswald in the dining room. They discuss matters concerning his father and their duties toward each other. Oswald asks his mother about keeping this all that time without telling him. Nevertheless, Mrs. Alving considers it as something very normal that does not deserve to be told.

### **Step (3): The Conversational Rules:**

- 1. Explicature.**
- 2. Implicature:**
  - a. Implicated Premise
  - b. Implicated Conclusion
  - c. Strength:
    1. Weak
    2. Strong
- 3. Types of Inference:**
  - a. Pragmatic
  - b. Augmentative
  - c.

### **Step (4): Analysis of the Exchange**

By adopting the communicative principle of relevance, this exchange is analyzed as follows:

#### **1. Explicature:**

Until now I've never regarded it as anything, I could bring myself to talk about to you- his son.

#### **2. Implicature:**

##### **a. Implicated Premises:**

Mrs. Alving has never considered it as a big issue to tell Oswald about.

**b. Implicated Conclusion:**

It wasn't a big problem to me to consider it and tell you about.

c. **Strength:** Strong

**3. Types of Inference:**

a. Pragmatic X

b. Argumentative ✓

**Step (5): Discussion.**

The analysis of this exchange between the two participants is based on what Mrs. Alving's utterance. Oswald asks his mother a question, she tries to answer him by giving a reason. This reason is the explicature that would lead Oswald to make premises and then draw a conclusion.

The premise is:

Mrs. Alving has never considered it as a big issue to tell Oswald about.

The implicated conclusion would be:

It wasn't a big problem to me to consider it and tell you about.

**Step (6): Finding**

The implicature made is strong, since there is only one assumption. As for inference, it is argumentative, because there is an elliptical argumentative indicator which is "*because/since*".

**Text (3)**

**Step (1): Exchange**

**Tesman.** Have you heard anything of Ejlert? Since I went off, I mean.

**Miss Tesman.** Only that he's supposed to have published a new book.

(Hedda Gabler, Act One, p.175)

### **Step (2) Context and Interpretation**

This exchange occurs between Tesman and his Julle in the drawing room where they discuss different issues in their life. Later on, Tesman asks about Ejlert (his rival) and his aunt replies by saying that he is going to publish a new book. Her response is not just a normal answer by saying yes or no.

### **Step (3): The Conversational Rules**

- 1. Explicature**
- 2. Implicature:**
  - a. Implicated Premise
  - b. Implicated Conclusion
  - c. Strength:
    1. Weak
    2. Strong
- 3. Types of Inference:**
  - a. Pragmatic
  - b. Augmentative

### **Step (4): Analysis of the Exchange:**

By adopting the communicative principle of relevance, this exchange is analyzed as follows:

- 1. Explicature:**

Only that he's supposed to have published a new book.
- 2. Implicature:**
  - a. Implicated Premises:**
    1. He is going to publish a new book.
    2. She did not hear anything about him. Only he will publish a paper.



**b. Implicated Conclusion:**

I don't know anything about him except the publication of his new book.

c. **Strength:** Strong

**3. Type of Inference:**

a. Pragmatic ✓

b. Argumentative X

**Step (5): Discussion**

Tesman asks his aunt about his rival and if she heard anything about him since he left the city. However, Miss Tesman response's is not expressed as expected by yes/no. She replies by using an utterance that implicates the answer. Her utterance explicates that

She has no idea about him and the only thing she knows that he is going to publish a new book.

This is the input for Tesman to draw assumptions that his aunt has no idea about him. However, she knows that Ejlert is Tesman's rival, she tells him that he is going to publish a new book. Accordingly, the implicated conclusion that can be derived from these premises is:

I didn't hear anything about him, but he is going to publish a new paper.

**Step (6): Finding**

The implicature made by Tesman is strong, since there are no various interpretations.

**5. Conclusions**

The main results of the current study are as follows:

1. Our definition of inference is that it is a process through which implicatures are understood and inferred.
2. The inference of the intended meaning of an utterance is based on the hearer's ability and context.
3. Both implicature and inference are made to arrive at what is intended.

4. An inference can be either pragmatic or argumentative. The pragmatic inferences are non-demonstrative, whereas the argumentative inferences are evaluative.
5. Relevance theory considers what is said by speakers as part of assumptions in the process of inferring implicatures.
6. An inference as a pragmatic concept has been considered in stylistics to analyze literary texts such as drama relying on the characters' speech, thoughts etc., to understand their goals, intentions or desires.
7. As for the analyzed texts, the implicatures derived are based on the implicated premises and conclusions. The texts have shown that some implicatures can be weak or strong.
8. The inferred meaning depends on either the pragmatic or argumentative inference.

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## رۆلی دهرئه نجامه پراگماتیکیه کان (ئینفره نس) له لیکدانه وهی واتای وهرگیراو (ئیمیلیکیچه)

### پوخته:

دهرئه نجامه یه کیچه له وه دیارده پراگماتیکیه کانیه که رۆلیکی گرنگی هه یه له په یوه ندیکردندا. وه که پرۆسه یه که پیناسه ده کریت که ده بیته هۆی لیکدانه وهی نه وهی که قسه کهر یان نووسه ر دهی ده بریت و مانای چیه یان په یوه ندی به چیه وه هه یه. ئەم تووژینه وهیه ئامانجی لیکۆلینه وهیه له رۆلی دهرئه نجامه کان له لیکدانه وهی واتای وهرگیراو له ده قه ئە ده بییه کاندا. وه گریمانیه ئە وه ده کات که ناتوانریت واتای وهرگیراو گفوتوگۆکان لیکبدریته وه مه گه ر به کۆنتیکست و دهرئه نجام نه بیت. له م پرۆسه یه دا خوینهر یان بیسه ر مه به سته کان به وه وه ده به ستیتته وه که قسه کهر یان نووسه ر مه به سته چیه. که واته، سه ره لانی واتای وهرگیراو په یوه ندی به وه دهرئه نجامه پراگماتیکیه وه هه یه که وه که دهرئه نجامه مه عقوله کان داده نریت. ئەم تووژینه وهیه له چوار به ش پیکهاتوو، (۱) پیشه کییه که، (۲) جۆره کانی دهرئه نجامدان، (۳) جیاوازییه سه ره کییه کانی نیوان دهرئه نجامه کان، (۴) په یوه ندی نیوان دهرئه نجامیک و ده قه ئە ده بییه کان، و (۵) ئە وه نه نجامانیه که لیکۆلینه وهیه که پیی گه یشتوو.

## دور الاستدلالات التداولية في تفسير الاقحامات اللغوية

### الملخص:

الاستدلال هو إحدى الظواهر التداولية التي لها دور مهم في التواصل. يمكن تعريفه على أنه عملية تؤدي إلى تفسير ما يعنيه أو يشير إليه المتحدث أو الكاتب. تهدف هذه الدراسة إلى دراسة دور الاستدلالات في تفسير معاني الاقحامات اللغوية في النصوص الأدبية. إذ إنها تفترض أن الاقحامات في الحوارات لا يمكن تفسيرها ما لم يتم وضعها في سياقها وربطها باستنتاجاتها. في هذه العملية، يربط القارئ أو المتلقي المقاصد بما يعنيه المتحدث أو الكاتب. لذا، فإن تفسير الاقحام اللغوية يرتبط بالاستدلال التداولي الذي يعتبر بمثابة استنتاجات منطقية. ويتضمن هذا البحث أربعة مباحث: (1) مقدمة، (2) أنواع الاستدلال، (3) الفروق الرئيسية بين الاستدلالات، (4) العلاقة بين الاستدلال والنصوص الأدبية، و (5) الاستنتاجات التي توصلت إليها الدراسة.