



Strategies Utilized by Iraqi EFL Students in Inference Resolution

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ABSTRACT

Iraqi EFL students are often observed to find difficulties in solving problems related to pragmatic issues (including inference). This is due to fact that in the interpretation and production of any pragmatic aspect, students are required to resort to, in addition to linguistic knowledge, socio-cultural background. This paper aims to detect students' processing of inference resolution, focusing on reasons behind their failure in the interpretation and production of inference. A test consisting of eight items (related to students' inference resolutions) has been administered to 40 students of the Department of English, College of Arts, Mustansiriayah University. The answers to the test have been collected and pragmatically analyzed in terms of Kecskes' (2019 and 2021) model of processing pragmatics. The paper reveals that Iraqi EFL students resort to sematic analyzability and compositionality to arrive at the interpretation and production of inferences.

Key words: Strategies, EFL students, Inference, Resolution

INTRODUCTION

It is a known fact that pragmatics requires a consideration of how language users create their utterances in terms of who they are talking to, where and when under what settings. That is, pragmatics is the study of contextual meaning rather than linguistic meaning. In this respect, it considers how listeners can make inferences about what is uttered so as to get at the interpretation of speakers' envisioned meaning (Yule, 1996). Through considering the context in which utterances take place, listeners/readers can infer the expected meaning exactly, lessening misperceptions (Ziran & Xinren, 2004, pp.118-121). Thus, inference can be viewed as a contextual production employed to make senses of what is intended by the speakers.

In correlation with above discussion, Iraqi EFL learners are commonly expected to face difficulties in solving problems related to pragmatic issues (including inference resolution). Mostly, these difficulties are ascribed to the idea that those students rely on the structural basis more than socio-cultural grounding when interpreting and producing inferences. So, they create awkward, fuzzy and inappropriate inferences. Thus, the purpose of this paper is to explore how Iraqi EFL respond to situations where inferences are required to be given, providing reasonable justification for their interpretation and production of inferences. However, before embarking on

doing so it is essential to give some theoretical background about the term inference as an offspring of pragmatics.

PRAGMATICS AND CONTEXT

Pragmatics is often identified as the study of speaker meaning. This type of study involves the interpretation of what people mean in a particular context and how context influence what is said. The perception of interpretation revealed in Yule's definition bears the supposition that pragmatics has to do with the analysis of what people mean by their utterances than what the words or phrases in those utterances mean by themselves. In this sense, Yule (1996) demonstrates that " *pragmatics is concerned with the study of meaning as communicated by a speaker or writer and interpreted by a listener or reader*". It necessitates a consideration of how speakers establish what they want to say in accordance with who they are talking to, where and when under what settings. Pragmatics is then the study of contextual meaning. This approach also explores how listeners can make inferences about what is said in order to arrive at an interpretation of the speakers intended meaning (pp.3-6).

Thus, context plays a crucial role in pragmatics since it helps understand how language is used in different situations and how meaning can be inferred beyond the literal words spoken. Without context, it would be challenging to grasp the intended meaning behind communication. The connection between context and cognition is particularly significant, as our understanding of language often relies on our ability to interpret context cues. Context can be categorized as factors abstracted from concrete situations and as shared background knowledge. In the sense of the former category, context refers to the specific circumstances, environment, and conditions surrounding a particular interaction or event. These factors can include physical surroundings, social dynamics, cultural norms, and temporal elements. Understanding these contextual factors helps participants interpret the meaning and intent behind communication more accurately. In the sense of the latter, the context emphasizes the information, experiences, beliefs, and assumptions that individuals have in common within a given social or cultural group (Poznan, 2004, p.45).

Malinowski's concept of the "context of the situation" revolutionized the way that scholars understand the relationship between language, culture, and meaning. He highlights the intricate interplay between language and culture. Additionally, his notion of the "context of culture" expands this understanding even further, recognizing that broader cultural factors also shape the interpretation of linguistic symbols and behaviors, (Wolf, 1989, p.259).

Halliday's framework of the context of situation is an essential component of his systemic functional linguistics theory. The three elements field, tenor, and mode are crucial for analyzing and understanding the context in which language is used. Field deals with the subject matter or what is happening in the discourse. The field could be a conversation about politics, education, or sports. Tenor focuses on the participants involved in the communication, their relationships, roles, and statuses. It explores who is speaking or writing to whom and how their social identities influence the language used. Tenor also considers factors such as power dynamics, familiarity between participants, and social distance. Mode refers to the medium or channel through which communication occurs and the functions that language serves within that medium. It involves analyzing whether the communication is spoken or written, formal or informal, and the expectations regarding language use within that context. Mode also considers factors such as the level of formality, register, and the purpose of communication, (Halliday, 1985, pp.9-11).

In relevance theory, the process of context selection is indeed crucial for effective communication and interpretation. In case of maximizing relevance, individuals select a context that maximizes the relevance of the information being processed. This means that they choose assumptions that are most likely to help them understand and interpret the incoming information effectively. In case of available information, individuals rely on the information readily available in their memory. When individuals evaluate which assumptions are most relevant to the current situation or communication task at hand, they are in the realm of relevance considerations. When the initial set of assumptions does not lead to the optimum relevance for interpreting the incoming information, individuals may extend the context. This involves considering additional information or adjusting existing assumptions until the interpretation process becomes more relevant and effective. This process is called optimum relevance. When individuals continually update and revise their assumptions based on the evolving context and their understanding of the incoming information, they are processing dynamic process (Luchjenbroers, 1992, pp.603-604).

Substantially, not only from the speakers' perspectives but also from audience's ones, context plays a pivotal role in the expression and interpretation of meaning within communication. It is not a standalone element but rather a dynamic force that interacts with various aspects of communication. Context leads speakers to pick what to express grounded on the purposes and intentions behind the communication. It also outlines the style of speech acts by bearing in mind the setting or scene. Moreover, Context impacts the choice of communication channel grounded on the situational dynamics. From the audience's perspectives, context services the audience in understanding and assigning references within the communication. It also serves as an anchor to elucidate any pragmatic vagueness in the message. By seeing the context surrounding the communication, the audience can infer the projected meaning precisely, reducing confusions (Ziran & Xinren, 2004, pp.118-121). Consequently, inference is contextual production manipulated to make senses of what is implied in language.

PRAGMATIC INFERENCE

Inference is a process of accepting a statement or proposition called the conclusion on the basis of the acceptance of one or more other statements or propositions called the premises. Inference includes deduction, induction, and abduction. People use two general types of inferences: local and global. Local inferences are tied to particular words or phrases, and these inferences are important for understanding the meaning of these words or phrases. People comprehend a word or phrase by relating it to the information found elsewhere in the text, and local inferences are an essential part of understanding information. However, local inferences sometimes involve misinformation or misunderstanding the text information, and this leads to confusion or incorrect conclusions about text information. Global inferences, on the other hand, go beyond the text; readers and listeners use the information stated or suggested in one part of a text to make inferences that have implications or presuppositions for the information in other parts of the text (Stepnisky, 2004, p.1).

Inference is indeed a cognitive process that involves understanding and interpreting language beyond its explicit expression. Sperber (1995) highlights the difference between the everyday concept of reasoning and the psychological concept of inference. While reasoning often implies a watchful, conscious process that occurs occasionally and slowly, inference denotes a more continuous, unconscious, and rapid mental activity. This broader understanding of inference includes the constant stream of unconscious deductions and associations that our minds make effortlessly as we navigate the world (p. 194).

Inference also denotes the process of reasoning from known information to draw conclusions. They can involve broader reasoning processes. Unlike reference whose preoccupation is the speaker or writer who involves directing the listener or reader towards something specific, inference involves the listener or reader making connections and understanding the implied meaning based on the information provided. Reference is demarcated as a thing that speaker says or writes those remarks something or somebody else. Yule (1996) defines it as an action in which communicator exploits a linguistic form to direct listeners into identification of something. If reference is done by and relies on speakers' goal, inference is listeners' mission to determine the association between articulated entities with the words. It is also defined as 'making assertion' using what listener or reader catch from speakers' or writers' linguistic expression, and accepted as truth even it was clearly stated. It is clearly a cognitive process happening inside the human (listener/reader) mind, transforming available and explicit information to create understanding. One essential fact of inference is that it transfers the original meaning or information, directing into something which explicitly unstated. Inferences can be made based on entailment, but they are not limited to it.

LEXICAL INFERENCE

Lexical inference denotes the courses involved in constructing knowledgeable deductions as to the meaning of a word in light of all available linguistic prompts in amalgamation with the learner's general knowledge of the world, his/ her consciousness of the co-text and his/her relevant linguistic knowledge (Haastrup, 1991, p.13). The inferential strategic competence is suggested to consist of at least four main components: adequate linguistic knowledge, relevant background knowledge, penetrating motivation and continuous cognitive effort during the inferencing process. It is revealed that learners with a better depth of vocabulary acquaintance verified higher rates of effective inferences (Qian, 2005, pp. 34-53).

Haastrup (1991) finds that knowledgeable learners make use of a combination of different strategy types, in particular, a more frequent use of the wider context and syntactical cues. Kintsch (2004, p.1270) argues from a psycholinguistic view that an inferencer must build a situation model in which the information is provided by the text and the schemata. Kintsch proposes that there are at least two ways in which the meaning selection could occur: one is that the schema acts as a filter in a top-down manner and the other is that the meaning

selection takes place in a bottom-up manner. In the former case, the context suppresses irrelevant information due to its mismatch with the contextual meaning.

INFERENCE AND RELATED TERMS

Inference, entailment, implicature, and presupposition are all concepts in semantics and pragmatics, but they represent different kinds of relationships between sentences or propositions. Entailment is essentially semantic in nature. Presupposition overlaps the semantics-pragmatics boundary, resulting in semantic and pragmatic presupposition. While conversational implicature is pragmatic in nature, conventional implicature can be categorized either as semantic or pragmatic, depending on how the distinction between semantics and pragmatics is drawn.

ENTAILMENT

Entailment is a relationship between two sentences where the truth of one necessarily implies the truth of the other. In other words, if sentence A entails sentence B, it means that if A is true, then B must also be true. For instance, "John is married" entails "John is not a single." If John is married, then he cannot be a single (Lyons, 1977, p.85). Levinson outlines semantic entailment stating that A semantically entails B if every situation that makes A true also makes B true, emphasizing the essential connection between the truth values of propositions. Entailment, he adds, reproduces a static truth relation between sentences regardless of the experiential truth of the sentences. Thus, this true relation highlights how entailment operates on a purely logical level, abstracted from the particular context or real-world circumstances in which the sentences might be uttered or interpreted. This feature underscores the robustness and universality of entailment as a semantic relation (Levinson, 1983, p.174).

Saeed (1997, p.90) validates the concept of truth entailment in logic stating that when we say that sentence P entails sentence Q, it means that the truth of P guarantees the truth of Q, and conversely, the falsity of Q guarantees the falsity of P. This relationship holds regardless of the empirical truth of P and Q; it is purely a logical inference. Entailment can indeed arise from both lexical (word meaning) and syntactic (sentence structure) sources. Entailment is, thus, a semantic relation recognized as logical consequence unlike implicature which is regarded so as to comprise extra meaning attached to utterances in interactional situations.

IMPLICATURE

The term implicature is often taken to mean the additional meaning associated to, but different from, the sense of the utterance. It, consequently, designates what a speaker implicates (as contrasting to what he actually says) and its approximation arrived at by the hearer by utilizing some inferences mechanism. Grice alienates implicatures into two discrete categories-conventional implicatures and conversational implicatures. In a conventional implicature, what is implicated arises from the conventional meaning of the words used. Nevertheless, the main concentration of Grice's investigation is to identify and explain conversational implicatures. Moreover, Grice classifies implicatures into two categories: generalized implicatures and particularized implicatures, (Grice, 1989, p.25).

Implicatures own certain shared features to recognize and distinct them from other sorts of inferences. They are committed to the semantic content rather than to the linguistic form of what is said. Implicatures cannot be detached from an utterance by altering the words of the utterance for synonyms, while presuppositions are attached to the form rather than to the meaning of what is said. Therefore, they are detachable. Moreover, implicatures are calculable as the occurrence of a conversational implicature is capable of being worked out (Grice, 1989, p.31). An implicature is not part of the conventional meaning of the utterance which generates it, rather an utterance is true even if its implicature is false, and vice versa. An expression with a solo meaning can arise diverse implicatures on different instances, and on any instance the set of related implicatures may be not be precisely determinable (Levinson,1983, p.118).

In the Gricean outline, implicature is considered as a class of inference, separate and unlike entailment and presupposition. Though implicatures share some of the features of presuppositions, they vary from presuppositions in many respects. While presuppositions are inferences concerning background assumptions against which the main argument of an utterance is proclaimed, implicatures are inferences arrived at by involving the contextual assumptions to the principles and maxims of standard conversational practice. Moreover, implicatures are non-detachable and attached to the semantic content of an utterance. Conversely, inferences are detachable and built into the linguistic structure of sentences that give rise to them.

PRESUPPOSITION

The concept of presupposition emerged from philosophical inquiries into reference and referring expressions, highlighting the foundational role of presupposition triggers in linguistic analysis. Levinson (1983) and Yule (1996) both offer insights into the diverse sources of presuppositions, ranging from lexical to syntactic elements. Linguistically, presuppositions arise from a variety of lexical and syntactic sources called presupposition triggers. Yule (1996, pp. 27ff) speaks of presuppositions due to lexical and structural sources such as factive, non-factive, counter-factual presuppositions; existential presuppositions and presuppositions generated by WH-questions, etc. To name but a few, simpler or compound referring expressions give rise to presuppositions of existence. Tom is a vegetarian. >>Someone called Tom exists. Factive verbs like *know*, for instance, presuppose the truth of the complement clause. Change of state verb like *start* gives rise to a kind of 'switch' presupposition. Such a verb describes a new state and presupposes that the recently designated state of affairs did not exist prior to the change. Samira started joining seminars. >>Samira did not use to join seminars. Presuppositions are not just inferences selected due to some procedural characterizations. There is, however, a spontaneous intangible unity to this set of inferences, specifically that they are all inferences concerning the background assumptions against which the main import of an utterance is to be judged (Levinson, 1983, p.180). In summary, while entailment involves a logical relationship between propositions, inference is a broader process of reasoning. Implicature deals with additional meaning conveyed indirectly, often through conversational context, while presupposition involves assumptions taken for granted in discourse.

PRAGMATICS IN EFL CLASSES

Teaching pragmatic skills, especially in a foreign language context, is crucial for effective communication. Cohen (1996) highlights the importance of pragmatic competence in language learning. He states that even if language learners possess good amount of syntax and an extensive vocabulary, they may still struggle to efficiently send their intended message if they lack the required pragmatic skills. Without pragmatic competence, language learners may encounter difficulties in understanding or being understood in real-life communication scenarios. They may misinterpret social cues, use language inappropriately, or fail to convey their intended meaning effectively, leading to breakdowns in communication despite having a strong grasp of syntax and vocabulary.

Barron highlights three crucial components for pragmatic competence: knowledge of linguistic resources, understanding the sequential aspects of speech acts, and awareness of appropriate contextual use. He stresses the importance of both knowing what linguistic tools are available for expressing intentions and knowing how to use them effectively within specific social contexts, (2003, p.10). Widdowson also defines that the communicative competence, is:

“not a matter of knowing rules for the composition of sentences and being able to employ such rules to assemble expressions from scratch as and when occasion requires. It is much more a matter of knowing a stock of partially pre-assembled patterns, formulaic frameworks, and a kit of rules, so to speak, and being able to apply the rules to make whatever adjustments are necessary according to contextual demands. Communicative competence in this view is essentially a matter of adaptation, and rules are not generative but regulative and subservient” (1989, p.135).

For second language learners, growth of pragmatic competence should occur in instructional settings. However, instructional settings are restricted in many ways. Classroom environments are usually teacher-centered, controlled to complete the syllabus with little time. The occasions of using the target language in circumstances that approach real world conversation are limited as well. Moreover, micro-level grammatical correctness takes precedence over macro-level pragmatic appropriateness due to the dominance of structural syllabus (LoCastro, 2012, p.130) Within the EFL classroom, language is also treated as an object rather than a means of communication.

Finally, within the EFL context, teachers serve as a primary source of input for EFL learners. Nevertheless, non-native teacher talk can be characterized by a number of features: first, it is replete with direct strategies as

teachers are often in a state of power, and this “asymmetrical power relationship” between the teacher and the students might influence the pragmatic aspects of teachers’ talk (Nikula, 2002, p.454).

PRAGMATIC FAILURE

Thomas (1983) states that pragmatic failure occurs when there is a mismatch between what a speaker intends to convey and what the hearer observes. This mismatch can arise when the hearer interprets the force or meaning of the speaker's utterance differently from what the speaker intended. This misunderstanding often stems from differences in the knowledge or beliefs between the speakers and the hearers. So, even if the speakers’ intentions are clear to them, if the hearers don not share the same knowledge or beliefs, pragmatic failure can occur. Concisely, Thomas (1983) defines pragmatic failure in cross-cultural pragmatic failure as “the inability to understand what is meant by what is said” (p. 94). He Ziran (1997) states that pragmatic failure designates “failure to achieve the desired communicative effect in communication”. He adds that such failures are not “the errors in diction, but those mistakes failing to fulfill communication because of infelicitous style, incompatible expressions, and improper habit”.

Thomas (1983) classifies pragmatic failure into two main categories: pragmalinguistic failure and sociopragmatic failure. He clarifies that “pragmalinguistic failure occurs when the pragmatic force mapped by the speaker onto a given utterance is systematically different from most frequently assigned to it by native speakers of the target language, or when conversational strategies are inappropriately transferred from the speaker’s mother tongue to the target language” (p.96). Sociopragmatic failure, on the other hand, is a consequence of different cultural standards and pragmatic values that direct linguistic behaviors in different cultures. Subsequently, speakers with diverse cultural backgrounds acquiring different considerations of the appropriateness of linguistic behavior may face barriers to effective communication.

Another classification elaborating existed categories and adding another one is suggested by He Ziran (2004) who claims that pragmatic failure can be categorized into pragmalinguistic failure, sociopragmatic failure and pragmatic failure in cross-cultural communication. In his classification, pragmalinguistic failure can occur from both the speaker and listener sides. The speaker makes pragmatic failure due to taking for fixed that the listener is capable of understanding his meaning. On the part of the listener, he makes pragmatic failure by inferring the meaning of the speaker’s utterance inaccurately. Sociopragmatic failure arises when the speaker does not give apprehension to the identity and societal status of the listener during the conversation. To illustrate, pragmatic failure happens by addressing a distant person of a sophisticated social status with a friendly form.

Regarding pragmatic failure in cross-cultural communication, He Ziran highlights four factors that contribute in misunderstandings between communicators from different cultural backgrounds. Different cultures have distinct beliefs, values, and customs, which can affect what topics are considered appropriate or taboo in conversation resulting what is called inappropriate topic selection. Another factor that leads to pragmatic failure in cross-cultural communication is called misinterpretation of expressions. Terminologies and signs can carry different meanings across cultures, leading to miscommunication or unintended implications. When speakers from different cultural backgrounds try to communicate in a second language, they may unintentionally violate conventions, leading to misperception or misunderstanding falling into what is so called lack of conformity to language conventions. Inappropriate responses is another manifest factor caused by pragmatic failure in cross-cultural communication through which cultural differences in communication styles and social norms can result in inappropriate responses to questions or statements.

STUDENTS’ PROCESSING OF INFERENCE

It has been often observed that EFL students favor “semantic analyzability” to symbolic and formulaic language. Studies have recently shown that L2/FL learners favor “compositionality and semantically analyzable language to figurative and formulaic language”, believing the possibility of misinterpretation is subordinate if they limit to the collected senses of words (e.g., Kecskes 2007, p. 193). Kecskes (2019, p.137) argues that students’ improper processing of inference can be ascribed to two factors, *constancy* and *conventionality*. The former occurs due to “conventionalization and normativization”; it indicates “not only to the denotational meaning and function of linguistic signs but also to the way they are used by interlocutors”. In processing pragmatic issues (e.g. inference, implicature, ...etc.) EFL students regularly strive “to find, create, shape, and keep up constancy within language use, even where only little of that exists” (p.137). The

latter is grounded in vocabulary for EFL students to the extent that literal senses are sought. EFL Students “share the coded literal meaning” with others in terms with their competency.

By the same token, García-Gómez (2020) argues that “semantic analyzability” is a critical factor of learners’ L2 comprehension and production in intercultural interaction stating that EFL see “the linguistic code as core common ground”. Kecskes (2021, p.2) affirms that “implying one thing by saying something else” is not an effective strategy in L2 use simply because it can straightforwardly result in misinterpretations. He further explains that L2 learners frequently attempt to “implicate only what they say explicitly”, i.e. they do not often implicate whatever beyond the basic “linguistic meaning of expressions or utterances”.

More elaborately, Kecskes (2021, p.1) elucidates that certain factors necessary for comprehending and producing inference in L2 pointedly vary among L2 students; these are “linguistic knowledge, conceptual knowledge, encyclopedic knowledge and contextual effect”. Such factors are not anticipated to work in line with the conventions and customs of the social culture of “native English-speaking communities”. In L2 communication, learners are required to depend on not only “what is encoded in the linguistic signs” but also on “language-specific conceptual knowledge and/ or encyclopedic knowledge”. They often find difficulty in their interaction because literal meanings are not always of great no help in various social contexts.

To account for how L2 users process pragmatic comprehension and production of inference, Kecskes (2021) suggest a model based on association between “three factors: linguistic knowledge, conceptual knowledge and encyclopedic knowledge”. These three factors are placed on a continuum in which linguistic knowledge is placed on one side and “socio-cultural background knowledge (world knowledge) on the other side”. There is a persistent interface between the two edges. He illustrates that for investigative purposes, a distinction between “conceptual knowledge and encyclopedic knowledge” within the “socio-cultural background knowledge” is made. Consider Kecskes’ model

“Linguistic knowledge ----- Socio-cultural background knowledge (conceptual knowledge --- encyclopedic knowledge)”

Kecskes (2021, p. 6) adds that meaning is formulated in the dynamical interaction of “actual situational context and semantic content of lexical items, with context representing the actual, present, situational, ever-changing locus of socio-cultural background and the lexical item(s) encapsulating previous experiences, contexts and relations in the socio-cultural background. The lexical items with their semantic properties (linguistic knowledge) represent prior reoccurring experience (conceptual knowledge) and the actual situational context triggers the other part of world knowledge that has been called encyclopedic knowledge.”

EFL learners mostly take the definite “situational context-free” explanation, then, the most noticeable meaning will be the “literal meaning of the expression”. But, when they take “the actual situational context”, the most noticeable explanation will be the “figurative” one. In other words, students’ interpretation is generally based on common sense that is not influenced by any culture-specific issue.

METHODOLOGY

In this section, four pillars of the methodological consideration in the paper are taken (i) participants, students who are sat to take the inference test, (ii) Instrument, the administration of the main test to the subjects, (iii) Method, research method (mixed, qualitative or quantitative) followed in data collection and data analysis and (iv) Procedures, the step followed in carrying out the paper.

i. PARTICIPANTS

A sample of 40 fourth year EFL students of Mustansiriyah University, College of Arts, Department of English has been selected to represents the subjects of the study. Those subjects have been equalized in terms of age, education, parents’ standards and their previous scores on the test. All the participants have been exposed a written exam concerning items of inference; they were required to answer inferential questions. The choice of the fourth-year students is based on the assumption that they are supposed to have basic background knowledge of semantic and pragmatic issues, as they have spent four years studying topics related to pragmatic components, i.e. inference, speech acts and presupposition ... etc.

ii. THE TEST

The test consists of eight conversational utterances of different contextual environments. The target utterances have been chosen based on the principle that they go alongside with contextual surroundings and triggers with considerable significance for understanding the main ideas of these utterances. Second, these utterances are mostly familiar to EFL Iraqi students, particularly the lexical items these utterances consist of.

iii. METHOD

The researchers resort to the employment of a mixed research method (consisting of qualitative and quantitative practices). First, they begin with the qualitative procedure as it deals with the explanation and description of the under-investigated occurrences of the eight items of the test. They identify and designate “the complications of the topic, the effect of human behaviors, the alterations of thoughts on subjects and how the alteration has an influence on the results as well as the process of collecting the data” (Babbie and Mouton, 2001: 79-81). On the other hand, quantitative procedures are regularly accessible in terms of numbers of the occurrences of the items and different statistical practices and tables and figures. Tavakoli (2012, p. 33) illustrates that quantitative studies are interested in the consequences representing the overall population as it deals with “measurement or sampling bias”. However, the advantage of conducting a mixed method is due to the idea that it is a method to “inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks” (Creswell, 2014, p.32). In other words, the present paper is qualitative as it provides a descriptive analysis of the students’ answers to the test items, and quantitative in the sense that it encompasses numerical investigation organized in tables summarizing the consequences of the frequencies of correct answers of the eight items.

iv. PROCEDURES

The participants have been asked to read the text for comprehending and trying to infer the meanings of the given items. All the participants have been motivated and received sufficient instruction on how to give replies to the questions given. Answers to the items are collected, analyzed, described in terms of drawing inferences and then the frequency and percentage of correct answers is made and summed up in a table. Additionally, the pragmatic analysis of EFL students’ improper processing of inference is based on Kecskes’ (2019 and 2021) models which are based on the idea that students’ interpretations are due to their tendency towards the applications of the two principles “constancy and conventionality”.

DATA ANALYSIS

Iraqi EFL students are exposed to the eight items; they are required to reach inferences from identified realities and evidence observed in the given utterances. Presumably, they logically draw inferences in terms of “observations and prior knowledge” or reasoning (Levinson, 1983, p. 182). He affirms that readers or listeners (students) are mostly obliquely provoked by plain language constructions; therefore, they look for certain cues and rely on their previous knowledge to draw inferences. However, this is not sufficient to arrive at an appropriate inference, i.e. students are required to have socio-cultural and contextual knowledge to do so. The following is the description of the students’ answers to the eight items of inference.

Item 1. Andy: I just forwarded you that email about the meeting next week.

Beth: Got it.

For this item, only 7 fourth year students (with a percentage of %17.5) were able to provide the appropriate inference. It seems that students find difficulty in arriving at the inference resolution of the item. Examples of incorrect answers are “*some one prepare for a meeting*”, “*Andy want Beth to check the e-mail*”, “*give information about the meeting*” and “*The inference of this sentence is, Andy read the email*”. Other examples of correct answers are “*There is a meeting next week*”, “*We can infer that Beth has a meeting and want more information about the meeting*” and “*There is a meeting next week and he informs him that by email*”. Although these examples involve grammatical mistakes, they can be considered as predicting suitable inferences. The students’ failure may be owing to the factor of “semantic analyzability” in the comprehension and production of inference (García-Gómez ,2020).

Item 2: On a Tuesday at the office, A says to B.

A: Where could I find John?

B: John doesn’t come to work on Tuesdays.

Iraqi students also find difficulty in giving answers to this item as only 9 (constituting %22.5) were able to arrive at the appropriate inferences, such as “*John is absent*”, “*- he ask about John’s place. -He found John now. -Perhaps he is sick or he was late.*” and “*It means that john has a day off every tuesday*”. However, students’ improper answers are “*A asked B about some one doesn’t find him*”, “*It’s mean I want to see John for something. It’s mean John was very Busy*” and “*The inference of this sentence is, he asked about John,*”. The students’ inconsistency may be due to idea that EFL students, in processing inference, endeavor to “find, create, shape, and keep up constancy within language use, even where only little of that exists” (Kecskes, 2021, p.137). They resort to the literal senses in correlation with their linguistic background knowledge.

Item 3: Feeling excited, he packed his swimming trunks, sunglasses and sun cream into the suitcase and was good to go.

For this item, more the half of the students were able to give appropriate inferences; 21 (with a rate of %52.5) students were able to provide proper answers. Some appropriate answers are “*He’s going on a Summer holiday on the beach*”, “*going to beach*” and “*We can infer that someone is going to the beach*”. On the other hand, some improper answers are “*this means he went to a hot place*”, “*resting on the beach*” and “*a person going toa trip*”. Students’ relying on the literal interpretation of the given question leads them to yield unsuitable inferences.

Item 4: Where did John find his stolen bag?

Obviously, this question entails two inferences, either he lost his bag or he found it. However, only 19 (%47.5) students were able to give the appropriate inference. Other possible inferences, as given by students, are possible, such as “*We can infer that John got robbed*” and “*john’s bag was stolen*”. In spite of all these possibles, some students were unable to give suitable inferences such as “*John got his bag kidnapped*”, “*That’s mean he was looking for it*” and “*her explaining when the bag would find*”. Relying on the literal interpretation of the lexical items leads students to interpret the given question improperly and consequently, produce unhappy inferences.

Item 5: Mary accused John of not painting the portrait with traditional techniques.

Only 9 students (constituting %22.5) were able to arrive at the proper interpretation that “John painted the portrait”; therefore, they give unfitting inferences such as “*Mary tell John dont mention about her portrait in old way*”, “*He is not good painter*”, “*John painted the portrait with traditional technique*” and “*Mean John doesn’t do his work on traditional way*”. Very few students were able to produce fitting inferences, e.g. “*John didn’t painting in the right way, and Mary blame him.*” and “*means John painted with modern techniques*” and “*John was painting the portrait in modern techniques*”. Students’ failure seems to refer to the fact that students are mislead by the lexical items given in the question, particularly, the negative particle “not”. Due to the presence of ‘not’, students gave the inference that the painter (*John*) did not pain the portrait at all.

Item 6: A. Where is the spinach salad sitting?

B. He is sitting by the window.

Only 18 students (with a rate of %45) were able to arrive at the successful interpretation and produce the appropriate inferences. This item seems to be somehow familiar to students in a way that nearly half of the participants were able to give an appropriate interpretation and produce successful inference. Instances of appropriate inferences are “*There is someone ordering a spinach near of it*”, “*the waiter asked some one about the man was want a spinach salad*” and “*The waiter is asking where is the person who ordered the spinach salad sitting.*” Nearly, the situation implying the utterance is the same in both L1 and FL culture. Therefore, EFL students find less difficulty to arrive at effective inference. However, some unsuccessful inferences are “*I orded a spinac salat. The salad is not on table nearby the window.*”, “*He asked about the salad place. He pointing where he is found it.*” and “*Customer has a meal.*” Logically, the students’ inappropriate inference can be attributed to the fact that in their producing inference they relied heavily on the literal knowledge, less on conceptual or encyclopedic knowledge and contextual influences (Kecskes, 2021, p.1).

Item 7: A. Can I borrow your Hamlet?

B. Sure, it is on the shelf over there.

This item seems to be the easiest one as 28 students (constituting %70) were able to give fitting inferences. This is simply because EFL students are familiar with specifying *Hamlet* as a book; it is on of the plays that they take in Drama-subject in third year. Examples are “*It’s mean book’s Hamlet*”, “*He asks to borrow the play of Hamlet*”, “*He borrow your book Hamlet.*” and “*He means the book of Hamlet.*” Nevertheless, some students were unable to give suitable inferences, they produce utterances such as “*A borrowed the hamlet from*

B", "Asking to borrow Shakespear's Hamlet" and "He love reading plays and novels". The reason behind the failure to resolve inferences is ascribed to the idea that EFL students rely on the semantic/literal interpretation of the given question and thus create unhappy inferences. The mostly neglect the context in which this utterance is given: therefore, their deductions are not convincing.

Item 8: In a hospital you hear: "The heart attack mustn't be moved".

Sixteen 4th year students (with a percentage of %40) were able to get at successful interpretations and produce happy inferences. Mostly, failed students produced inferences which do not match the question instruction, e.g. "No interaction needed to treat a heart attack", "We can infer that the doctor want to do his job and warn the other doctors" and "He had a heart attack before because he dosnt care about(sports)". Nevertheless, some students succeeded in giving the right inferences, although some of their utterances imply grammatical or spelling mistakes, such as, "The inference of this sentence is, the patient who was got The heart attack, he must stay in a hospital", he means that the patient is having a heart attack" and "Someone got heart attack and he is getting spical care. Still the reason behind students' failure may be attributed to fact that they relied on heavily on linguistic knowledge rather than on contextual one to solve problems of arriving at appropriate inferences.

Overall Results

The pragmatic analysis of the Iraqi EFL 4th year students has demonstrated that students generally face difficulty in understanding and producing inferences as the total correct answers are 127 out of 320, constituting a percentage of %39.68. More elaborately, item no. 7 seems to be the easiest one (with 28 correct answers, a rate of %70), while the first item appears to be the most difficult one as only 7 students were able to produce successful inferences. Simply speaking, students seem to be more familiar with item 7 than with item 1.

Item No.	Correct Answers	Percentage
1	7	%17.5
2	9	%22.5
3	21	%52.5
4	19	%47.5
5	9	%22.5
6	18	%45
7	28	%70
8	16	%40
Total	127	%39.68

Table 1: Students' Appropriate Inferences

Conclusion

Iraqi EFL students' replies to the items given revealed that they have encountered difficulties in interpreting and producing inferences. They often resort to linguistic competence, overlooking socio-cultural knowledge and contextual influences; therefore, their deductions are inappropriate. Furthermore, they rely heavily on semantic analyzability and compositionality (collective senses of the lexical items) in the interpretation and production of inferences. Based their common-ground senses, they stive to preserve constancy in language use. They offer successful inferences for the items occurred in contexts similar to that of L1. On the contrary, they produce unhappy inferences for items occurred in contexts that are not similar to that of L1. However, some linguistic mistakes (related to tenses, concord, spelling and punctuation) are observed in the data collected.

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Appendix

Q/ What kind of inference is involved in interpreting each of these utterances?

1. Andy: I just forwarded you that email about the meeting next week.
Beth: Got it.
2. On a Tuesday at the office, A says to B.
A: Where could I find John?
B: John doesn't come to work on Tuesdays.
3. Feeling excited, he packed his swimming trunks, sunglasses and sun cream into the suitcase and was good to go.
4. Where did John find his stolen bag?
5. Mary accused John of not painting the portrait with traditional techniques.
6. A. Where is the spinach salad sitting?
B. He is sitting by the window.
7. A. Can I borrow your *Hamlet*?
B. Sure, it is on the shelf over there.
8. In a hospital you hear: "The heart attack mustn't be moved".