

Strategies of Retrieving the Speaker's Meaning Based on Relevance Theory

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Abstract

Relevance theory as a pragmatic theory postulates its foundations on cognitive and psychological bases; it seems applicable for those who aim to arrive at the speaker's meaning and thereby can achieve a successful communication. In relevance version, to avoid the possible gap between what the lexicon proposes and its conditional truthfulness conveyed, inference appears as logical, plausible, and efficient. Three types of strategies that the relevance theory provides; inference-based intention, inference-based skills, and abilities (metarepresentations) and weight the utterance interpretation (disambiguation, reference assignment, enrichment, and ad hoc concept). These seem dynamic and influential to gap incompleteness and indirectness.

المخلص

نظرية الصلة كنظرية واقعية ينم عن أسسها على أسس معرفية ونفسية، يبدو أنها تنطبق على أولئك الذين يهدفون إلى الوصول إلى معنى المتحدث وبالتالي يمكن تحقيق التواصل الناجح. في صيغة ذات الصلة، لتجنب الفجوة المحتملة بين ما يقترحه المعجم والمعنى اللغوي الذي تقترحه، يبدو الاستدلال منطقيًا ومعقولًا وفعالًا. ثلاثة أنواع من استراتيجيات التي تقدمها نظرية الصلة؛ النية القائمة على الاستدلال، والمهارات والقدرات القائمة على الاستدلال (التمثيل الفوقي) واثراء التفسير الحرفي (اللغوي) (توضيح الغموض، الإحالة المرجعية، الإثراء ومفهوم مخصص). ويبدو أن هذه العوامل ديناميكية ومؤثرة لردم الهوة الناتجة عن حالات عدم اكتمال المعنى الناتج من عملية التفسير الحرفي او اتباع اسلوب الغير مباشر.

Keywords: relevance theory, strategies, speaker's meaning, Implicature

الكلمات المفتاحية: نظرية الصلة، استراتيجيات، معنى المتكلم، الاستلزام (التضمين)

Introduction

It is necessary for us to comprehend the communicative intention first. It has detected that the communicative intention can affect one's ability to introduce relevant premises and cannot help in deducing broad conclusions. Such strategies seem beneficial; they can contribute to turning each research into a scientific one.

Particularly, when the meaning analyzed and assessed in terms of either its compatibility with other utterances and relevant to the context or it is incompatible.

Moreover, because of the outcome inferentially processed, they seem helpful to test the hypothesis validity about the meaning of the utterance. They seem logical forms, and then we can apply this inferential logical process to the rest of the data. Another important thing is that we involve these logical forms due to their determinacy. That is, they draw a map for guiding the receiver to arrive at the exact interpretation of an utterance proposed; this is vital to reach the communicator's meaning. What encourages us more, we have found these logical forms as a "recursive system," as Kroeger (2019:54) views. In other words, by using limited numbers of rules, we can produce various principles, standards can be applied effectively, and this feature is very important, particularly in philosophy and logic. Notably, inference, in this regard, is not an arbitrary process, but it is "the logical pursuit of scientific investigation" (Beveridge 1957: 88, 2017: 5, Trusted: 1979: 1, Sperber et al. 2010: 33, Kroeger 2019: 54, Sperber& Wilson 1995: 69, Ajdukiewicz: 1974: 106-107). Logical, here, we mean a systematic method of comprehension derived from the connection between the reasoning or inference and what we intuitively recognize as the truth. Thus, the receiver can introduce premises by means of analogy or premises-based relevance without intuitive knowledge and mental representations. From this point, we followed several inferential processes to arrive the perfect interpretations:

1. Inference-based intention

The inference is basically deductive, or informed-postulate (Sperber& Wilson 1995: 68-69) since receivers cannot understand the communicator's ideas directly, so they seriously work to catch the message that the communicators intended to convey. Thus, the first step, to infer the speaker's intentions, which strike our mind while we are considering the communication via inference-making and categorize them into two headings: informative intention or communicative intention. The former concentrates on the content of the speaker's meme state. He intends to inform the addressee a message in which, with old knowledge interaction, the receiver infers new informative knowledge (see Scott-Philips 2015: 26). For instance:

A. Tom: *oh! No, who ate my chocolate.*

B. Lisa: *I do not, but I have seen John opened the refrigerator.*

Lisa's intention is informative; she integrates the old knowledge "John opened the refrigerator" with new knowledge "Tom's chocolate was eaten" then infers that 'John's has eaten Tom's chocolate,' this is informative since Tom recognizes or infers who has eaten his chocolate? Besides, informative intention (overt ostensive), on many occasions, it constructed mainly to be grasped cognitively in order to "make manifest or more manifest to the audience a set of assumptions" (Sperber& Wilson 1986:58).

The communicative intention, in turn, is the intention to inform the receivers about the informative intention, and the intention that the receivers will recognize it well. Therefore, the communicative intention is the speaker's intention to communicate, and receivers realized that, while informative intention, the speaker's intention to modify one's meme state or to activate cognitive mechanisms. This, in turn, might be seen as an 'overt ostensive communication,' which appears relevant enough to receivers.

The second step is how we can arrive at inferring the speaker's intentions correctly; then, logically, we can arrive at a suitable conclusion. In fact, for better comprehension of the communicator's intentions, two things required: the communicator's cooperation and the receiver must follow the best interpretation procedure. Cooperation is a part of communication, and no one achieved communication and considered successful without the concept of cooperation. Three advantages we singled out when the stimuli being cooperated: (1) less processing effort needed. (2) Select the issues of the mutual manifest. (3) Recursive Mindreading. For these reasons, Scott-Philips (2015: 112-114) procedure is identified more effectively, especially when he remarks that any cooperative stimuli should fall in one of the three sub-headings:

- a. **Communicative cooperation**, when the speaker's message presented in such a way that a receiver finds himself able to grasp it quickly. This occurs when the speaker selects utterances or words with apparent conditional truthfulness, mutually manifests, and avoids the indirectness. In contrast to some utterances, which seems ambiguous enough to make the receiver poses more than one interpretation. Furthermore, they are covertly stimuli resulted in difficult inference-making.
- b. **Informative cooperation:** The inference here, is a part of the speaker's intention to activate cognitive mechanisms, and it is viewed as proof of his claim. That means the speaker's cooperation is mainly existed to support evidence and valid argumentation toward a claim he conveys. So, the speaker's claim "*I am the legal caliph*," which means he intends to be informative, but when the claim appears incompatible (after the investigation, for example), it would be assumed for misleading rather than informatively cooperated. In this case, 'truth-saying' might be acted as a criterion to determine whether the cooperation is informative or not. If his informative intention is true, it will cooperate, or if his informative intention is 'untrue,' it would not be cooperated but deceptive and fake.
- c. **Material cooperation:** inference is possibly derived from the speaker's behaviour; that is, the speaker assumes a proposition with other additional attachments viewed as supplementary, helpful, and supportive. Explaining an utterance of vagueness, informing an event of relation, or offering a context of implications, all these and more are considered materialistic cooperation. Notably, these three types of cooperation might be met or departed based on the propositional introduced:

Table 1: the possible combinations of cooperation types

The proposition	Communicative cooperation	Informative cooperation	Material cooperation
To communicate only	✓	×	×
Telling lies (to hurt someone)	✓	×	✓
Telling lies (to save face or protect one's feeling)	×	✓	✓

As shown above, successful communication is constructed when only the inference derived from the communicative cooperation. Without this type of cooperation, inferences and interpretations seem difficult and unsuccessful. On the other hand, if the speaker intends to convey truth or facts by activating the mind-thinking, he needs to cooperate informatively. Even though he successfully communicated untrue messages, this would be a kind of communicative cooperation; it is not informative.

2. Inference-based skills and abilities (metarepresentations).

According to Sperber & Wilson, to infer what people are thinking about needs a particular set of skills and abilities. This opinion looks compatible with what Sperber & Wilson named “*theory of mind*” or “*mindreading*.” It refers that the communicators’ behaviours resulted from their mind ideas, concepts, and experiences. These mental abilities are not equal, but they differ from one person to another; what A perceives, feels, or thinks is not identical to what B perceives, feels, and thinks. Hence, since we are different in our mental activities, how can we communicate and understand each other? This is the central goal of this theory, and thereby, what relevance theory intends to confirm. It is said that the perception and interpretation of other’s stimuli are possible in terms of “*intention*” and “*mental state*” (Clark 2013: 349).

No doubt may arise when we say, people are acted as the “*agents*” or “*doers*” that make a particular effect or behave in such a way as goal-cognitive orientation. Thus, for the sake of interpreting other’s actions, we tend to fulfil several types of objectives. Hence, when we see someone rising his hands and waving, this may indicate that he (as an agent) intends to bring our attention (intention). This is by all accounts, talented development to deal with human collaboration. This type of inference can help us to go deeper and to grasp the essence of the letter’s content, so we perceive the current entities in terms of mental state and intention. In other words, we do not regard threats, for instance, as actions, and how the punishment would be severe, but we interpret them as a unity of proof, parameter, or manifestation about what is going on in the speaker’s mind. Since we believe that the speaker intends

something to convey, the necessity for a comprehensive inference raised, the successful inference, as mentioned, starts with how cooperative the speaker manifests. In the case of successful communication, the communicative cooperation the speaker should emphasize. This cooperative type is required first to realize their “*cognitive environment*,” which indicates that factual representations are the ability to function mentally and be taken as “*true or probably true*” (Sperber & Wilson 1986:39).

Accordingly, we can say that ‘*the content of the message sends*’ is of what the speaker mentally experienced or a part of his cognitive environment. Thus, the content of preaching, informing, explaining, is a reflection of his cognitive environment. The case is similar to the content of threats, and accusations, which their existence might be related to what his cognitive environment comprised. Identically to the situation when someone believes that the movie would start at 9 o'clock to be clear later, it would be started at 11. This issue is viewed differently since he constructs the belief as to be correct with no previous planning to make fake or deception.

Another important thing that makes the inference-based metarepresentations effective and interpretable is that people’s cognitive environment cannot be identical in all circumstances. However, there is a part of the share and mutuality between two persons or groups. Lies, deception, threats are concepts that depict various mental representations; what an individual has a view; it may be different from others. Notwithstanding, they probably share some general knowledge like lies, deception, and threats are ethical and religious deviation. This share part of the cognitive environment known as a “*mutual cognitive environment*” (Sperber & Wilson 1995: 41-42).

We infer conclusions dependent on the speaker’s overt stimuli derived from their mutual cognitive environment. In other words, the speaker’s communication views successful and interpretable when his stimuli are formulated in terms of mutual cognitive issues. Mutual cognitive offers direct access and clues to link between mind concepts and their representations. For example, this utterance is from a suspect to an inspector:

- ***If you look in your mind, you'll find me innocent.***

The concept is that “*think or activate meme state*” its representation or [the natural result will be that you can discover the truth]. Therefore, the interpretation and inference carry out on the basis that whether the stimuli seem mutual, manifest, and familiar, mainly when they connected to the mind that are accessibly available for both the speaker and the receiver. As a matter of fact, the expectation of “*mutual cognitive stimuli*” is not arbitrary, but it applies via various steps and realizations. One of them is that we need to pay great attention to the environment surrounding the speaker and the inference process derived based on skills and abilities in a way that sounds correspondence to what mindreading theory proposes. This, of course, occurs

followed by extra-things like; take the content proposed and categorize them into mutual or non-mutual manifestness. Then, we need to compare them as if how they evaluated by other communicators. Moreover, the inference can be advanced by the previous one, that is, making use of inferences that were carried out before, which is known as ‘*recursive mindreading*.’ This process characterizes by recursive rules application, general description, or recursive in methods of a successful outcome. The recursive mindreading is useful for observing and knowing other’s experiences and then comparing, evaluating, or contrasting.

3. Weighted the utterance interpretation

Here, we follow a cognitive method in interpreting utterances relying on “mutual cognitive adjustment,” which resulted in three kinds of information (1) interpretation of the explicit meaning of the utterance. It is encoded based on the code model; however, it emphasizes on the inferential model, but the code model is needed as the first step toward logical deduction, notably when enriched. It used to produce a comprehensive contextualized proposition (2) the interpretation of the communicator’s implied meaning (Implicature); this is achieved based on the inferential model. (3) The relevant contextual knowledge, which is necessary to interpret explicit and implicit meaning. According to Sperber& Wilson, human cognitive is dynamic enough to the extent that it can access any context and enriched various types of utterances. Particularly, the utterances that behave decisively and implicate conclusions without limitations except finding relevance connections (Yus 2006: 264). There are various strategies used in order to contextualize information, thereby, we are able to arrive at the interpretation of utterances:

1. Disambiguation.

Disambiguation strategy is used based on the context due to the purpose of completing the interpretation of the incomplete logical form decoded from an utterance (see Bublitz et al. 2011: 463-464). Bublitz asserts that the process of contextualization is informative; its application is necessary to illustrate expressions or utterances as a result of indeterminacy of semantic (or pragmatic) lexical unit. Moreover, disambiguation involves a single choice out of two or more inherent senses based on context limitations.

One may wonder, do lexicons appear ambiguous for the speaker or to the receiver or both? The answer relates to the fact that whether the communicator is careful to be cooperatively informative and materialistic. This, of course, reflects in his utterances selection. In contrast to the communicator who involves indirectness, the letters of uninformative content, the utterances of poetic effects, lexicons of violence, and the lexicons bear more than a single interpretation. Consider:

A. *Can you send me your book?* (the speaker is not cooperative enough)

B. *Can you send me your book again?*(the speaker is cooperative)

The ambiguity could be generated from either the sender who selects lexicons of vagueness or by the receiver who fails to grasp the utterance meaning. Additionally, the sender may be aware that these words would be vague. However, he intends the receivers to find matches and propose further entries from additional sources like encyclopedic knowledge and factual events to compare or activate meme states.

Most disambiguated utterances can be labelled under two types; unconscious/automatic disambiguation and conscious/activated disambiguation. Consciousness needed when the context is not accessible or includes limited contextual assumptions, in this case, we follow alternatives ways like comparing the letter's content, link clues of the contexts with others that have not (particularly when they are similar in content) or use such related historical events and encyclopedic knowledge. Consider:

A. Which car is yours? Ford, Mercedes, or Toyota.

B. I cannot buy expensive cars.

In this example, we cannot recognize which car the speaker means without retrieving such information from memory as well as encyclopedic entries.

2. Reference assignment

Reference is mainly viewed as a pragmatic process typically involves the communicator's intention and the receiver's inference. Reference in this regard is not possible to be determined semantically, but it accomplishes by assigning suitable contextual clues to the referring and anaphoric items tend to be optimal relevant (see Sperber & Wilson 1995:187, Huang 2017:24). According to Sperber & Wilson (1995:187), the reference-constructed hypothesis from expressions of referring is almost hard to recover by means of decoding only. Meanwhile, Blackmore (1992: 69) states, reference assignment is a matter of 'mental state' in terms of relevance concept that is, it generally includes referring expressions for individuals, events or objects involves retrieval and interaction process between mental concepts and its representations to arrive at reference intention:

- ***Why are you instilling your blames on me while the team who selected john captain?***

Another thing, for the sake of the communicator constructing a recoverable hypothesis and the receiver, expects this hypothesis, referring or anaphoric expressions must be chosen in terms of cooperation and mutual cognitive adjustment. In the case of cooperation, the communicator needs to focus on the words the receiver already knows or at least characterizes of being familiar, and also be aware enough to the mutual aspect of mentality. In this regard, the receiver finds himself capable of accessing the context and, thereby, to grasp what the communicator refers. In relevance theory, both the communicator and the receiver should share the knowledge; furthermore, the communicator requires to be skilful enough in retrieving the knowledge that makes the receiver able to find matches with confidence and trust.

- *I am the man who (you) realized and around me those whom you knew.*

3. Enrichment

Enrichment is the third strategy involved in interpreting in general and recovering the communicator's meaning in particular. It is a process in which the message conveyed by specific utterance seems to include various types of elements that are implicated contextually, but they are not participated in what the utterance expresses literally (Recanati 2010.1). The enrichment process is the completion of logical form resulted from the decoding process. It is not confined to an overt indexical or covert semantic slot of uttered utterance, but there is an overt need for conceptual enrichment to the outcome of the decoding process. Nagai mentions four types of enrichment in his article entitled “*Processes for the retrieval of explicature*” (2009:110):

1. It involves additional information and supplemental content to the utterance assumes trivial truth, as when we hear the utterance:

- *I guess the distance is too far.*

That means the speaker intends to convey that “the distance is too far from here.” This type also involves the process of “*lexical narrowing*” in which a word can be applied for a range of meanings than a specific one and becomes less general and specific (Carston & Wilson 2007: 6 cited in Nagai Ibid: 111)

2. In this type, the receiver involves the expanding or narrowing “*the atomic meaning*” of the utterance’s meaning uttered. (See Carston 2004a: 14) that is, the receiver inserts some items which inferred pragmatically and dependent on the context within the words of an utterance in order to comprehend its atomic meaning. Unlike the first type, this type of enrichment comes with the receiver’s regard to comprehending the atomic or the inner meaning of the words within the utterance, while the first type, the receiver tends to comprehend the common meaning that the utterance assumes. Consider:

- *Marry, and Bill bought souvenirs from [the same] supermarket. [Atomic meaning]*
- *Hurry up! John will eat everything [in the party] [trivial truth]*

3. “*Subsentential utterances*” type of enrichment (Hall: 2009:237-238), these Subsentential utterances are sometimes worthy of making the receiver assumes some propositions or contents fit the slots unarticulated so far. In general, this comes from being common, mutually manifest or cognitively processed; therefore, when a person hears:

- *If you want to get better, take these pillars twice a day.*

He may spontaneously say; it must be a doctor to a patient. According to Carston (2004:22), this type is viewed as “*Compelling evidence*” in order to apply free enrichment because these utterances can be represented the primaries of the logical form (see also Ludlow 2005). Hence, the enrichment process depends on the utterance state so that the ways of recovering them are diverse based on whether they are sentential or nonsentential. As a matter of fact, the syntactic operation and sentential context play a crucial role in recognizing the words, when these two

methods are employed in one paradigm, it may be used to identify how and when the sentential and lexical context interacts to affect the lexical access.

4. This type involves “*unarticulated constituents*” (Stanley 2000, Carston 2002a) in an utterance in which it is a process that is entirely pragmatically- motivated to infer constituents underlying the content assumed. Consider:

- *It is raining. {in Granada}*
- *I have eaten. {supper} c.*
- *Every bottle is empty. [in the fridge] (Carston ibid: 13)*

In the above examples, there are no obvious articulated elements to indicate the meaning between brackets; however, the existence of indexical elements is taken a logical form in linguistics: so that A is a spatial variable B an object of behaviour and C is a field variable. Therefore, unarticulated components can be communicated by an utterance, including indexical constituents, the receiver, in turn, has to identify the purpose occasion of particular value for the variable. This is supportive because the linguistic forms (it, there, I) employed for a specific value, not a mere a lexicon expressed.

Notably, the word “*unarticulated*” refers to something sounds to be dissimilar from “*Covert*” in grammar (Allot 2010: 191). In other words, these constituents are not pronounced, and they show no accordance with any elements of linguistic structure; therefore, they are a freely pragmatically-motivated process of inference. From indexicalists' viewpoint, any component of a message assumed must be in accordance with the linguistic structure of the utterance proposed (Allot ibid). Thus, free enrichment is regarded as ellipsis or pragmatic inference of value for overt variables, so when the proposition assumes ‘the car is small,’ the intention identified to have a variable that is contextually enriched as (it is small to fit us since we are just seven).

On the other hand, the utterance ‘it is raining’ must indicate the variable of place, specifically the place where the speaker is. To detect the values of unarticulated constituents, there must be a sense of contextual binding and a corresponding to linguistic structure; in this regard, they could be the representations of logical form whether they are linguistically decoded or pragmatically inferred, nonetheless, they are mainly the pragmatically-inferred process.

4.AD HOC CONCEPT

Ad hoc concept (AHC), in turn, is a process to bridge the gap between what the concept of specific word encoded with and the concept assigned by the communicator (see Sperber& Wilson 2006, Carston 2007). In this regard, the context attends to play a crucial role in determining the utterances’ truth-conditions and other context-sensitive words. So, it is not linguistically given, but it is pragmatically inferred due to relevance expectation assigned in a specific context. According to Carston (2002: 322), ad hoc concept is contextually accessible in terms of spontaneous inference that seems to be distinct from the concept accessibility resulted

in lexical decoding, ad hoc concept in this regard is “*context invariant*” (ibid: 323). Thus, the word meaning is determined contextually by two ways broadening and narrowing the word sense, indicating by the word itself.

- *You must be avoiding to direct square up the fierce lions and the deadly snakes.*

In This example, the utterance proposes with confusing content, the source of the confusion resulted from the way that the sender’s intention affects the meaning proposed by expressions in the context. Or maybe not, the meaning conveyed by expressions in the context may shape the way that we are involved in understanding the intentions. However, what the sender conveyed lexically involves on the context, the expressions (the fierce lions and the deadly snakes) accept various interpretations like [you must be avoiding the fierce lions and the deadly snakes] where they appear with an extension and various senses. The consideration here, is an ad hoc concept concerns with the metaphor. This can help to illustrate how the sender and receiver are coordinated to arrive at what the meaning he intends to convey by the expressions used in a given utterance. In this regard, the extension of the expressions used in utterance seems less than the extension of the sense resulted from the lexical encoded process, where he means by (fierce lions and deadly snake) the courageous of his soldiers. This seems the proper match for the proposition that is assumed relying on two things (1) the general perception of the context at which he intends to threaten, not in the way that he informs him by this kind of animal. (2) Encyclopedic knowledge, which these expressions commonly used to signify their bravery \in the war. Accordingly, this narrowed meaning of expressions seems in accords to what the lexicons assume.

CONCLUSION

These strategies are possible for all and in various situations, particularly those who feel unrestricted to follow an interpretation path out of many based on Contextual implications. These implications are information that can be inferred from the interaction between what the utterance assumes and what the receiver has of knowledge. On some occasions, they act as motivations for more premises generation. The inference can be deduced as a meme state activation derived from the action of reactions when they are socially motivated and mutually manifested. Importantly, such inference like this would not be possible without insights of “metarepresentations” or “mind-reading,” which means the ability to construe the behavior of others to grasp underlying intentions and meanings. Mindreading offers opportunities to infer what others thinking about, postulate their behaviours, and compare their behaviours with ours. The importance of mindreading arises since the communicator only produces clues of his meaning partially, so interpretation seems heavily involved in mindreading skills to draw an inference. Metarepresentations are viewed as necessary in Implicature generation. This view also disregards the claim that relevance theory is a matter of individuals. This is because mindreading reveals an act of interaction since it involves a precise awareness of others' behaviours to

arrive at their mental state, and this, in turn, denotes how relevance theory is socially enacted.

However, through inference, relevance theory can offer cognitive and psychological insights for what implicated nature and the role of both pragmatics and semantics. Thus, the code model of communication is concerned with a form of logic and some “concepts of representations” which they regarded as the primary steps for inference. Even if inference such interpretation sounds not clear enough, enrichment is needed to bridge the interpretation gaps by using disambiguation, reference assignment, ad hoc concept of free enrichment.

REFERENCES

- Ajdukiewicz, K. (1974). *Pragmatic Logic* [trans. O. Wojtasiewicz]. Dordrecht/Boston/Warsaw: D.
- Allott, N. (2010). *Key terms in pragmatics*. Bloomsbury Publishing.
- Beveridge, W. I. B. (2017). *The art of scientific investigation*. Edizioni Savine.
- Blakemore, D. (1992). *Understanding utterances*. Oxford: Blackwell.
- Bublitz, W. Jucker, A. Schneider K. (2011) *Foundations of Pragmatics: Handbooks of Pragmatics*. Volume 1. De Gruyter Mouton.
- Carston, R. (2002a). *Thoughts and Utterances: The Pragmatics of Explicit Communication*. Oxford: Blackwell.
- Carston, R. (2004). *Explicatures and semantics*. *Semantics: A Reader*. 817- 845.
- Clark, B. (2013). *Relevance theory*. Cambridge University Press
- Huang, Yan (2017) *The Oxford Handbooks of pragmatics*. Oxford. Oxford university press.
- Kroeger, P. R. (2019). *Analyzing meaning*. Language Science Press.
- Nagai, Noriko (2009) *Processes for the retrieval of explicature*. *Rose Journal*. V.7. pp.107-120.
- Scott-Phillips, T. (2014). *Speaking our minds: Why human communication is different, and how language evolved to make it special*. Macmillan International Higher Education.

- Sperber, D. & W. (1986). *Communication and Cognition*, Cambridge: M. A.: Harvard University Press.
- Sperber, D. & Wilson D. (1995). *Relevance: Communication and Cognition*, Second Edition, Oxford: Blackwell.
- Sperber, D., & Wilson, D. (2006). A deflationary account of metaphor. *UCL Work. Pap. Linguist*, 18, 171-203
- Stanley, J. (2000). Context and logical form. *Linguistics and philosophy*, 23(4), 391-434.
- Trusted, J. (1979). *The logic of scientific inference: An introduction*. Macmillan International Higher Education.
- Wilson, D. and Carston, R. 2007. "A Unitary Approach to Lexical Pragmatics: Relevance, Inference and Ad Hoc Concepts." In N. Burton- Roberts ed. *Pragmatics*. 230-260. Basingstoke: Palgrave Macmillan.