Linguistics in text interpretation
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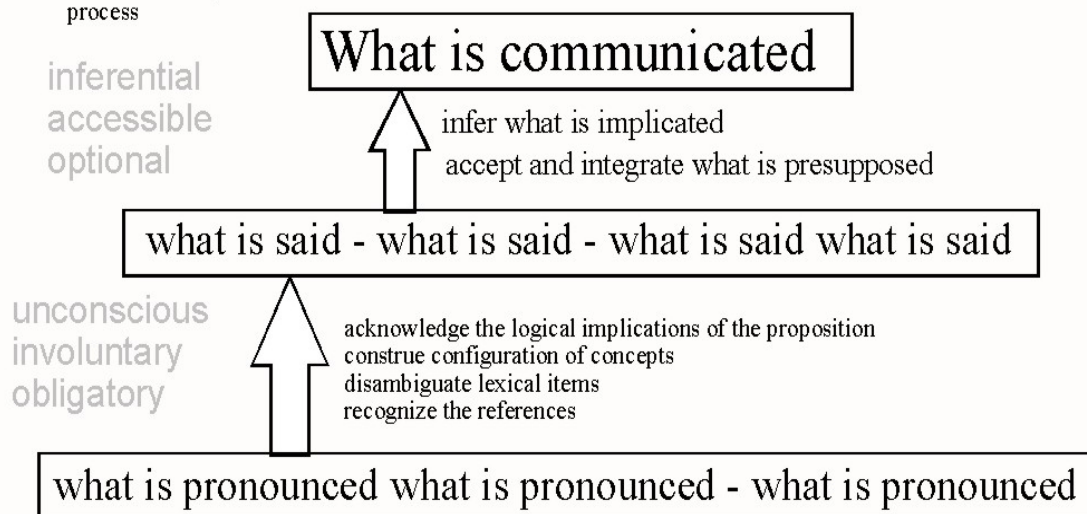

I. Theoretical framework:

It is reasonable to assume that any person at any time (when awake) has a mental model of the current situation - of what kind of situation it may be. Regular text interpretation is, then, a process of building another mental model, viz. a model of the situation talked about in the text, and then relating this new model to the already existing mental model of the current situation. The members of the audience build a mental model of the situation talked about by i) determining what is said from what is pronounced, and relate what is said to the model of the current situation by ii) determining what is communicated from what is said.

Determining what is said (so-called *literal meaning, the explicature* or *coded meaning*) from what is pronounced (known as *what is explicit*) is done by unconscious, involuntary and obligatory processes that are universal and necessary for the function of language as a means of communication (Recanati 2003).

The processes of determining what is communicated (both from presupposition and implicature (Grice 1975)) from what is said are inferential, accessible and optional, and as they are dependent on tradition and ability, they are not performed by all language users.

(1)

A model of the interpretation process

inferential
accessible
optional

What is communicated

infer what is implicated
accept and integrate what is presupposed

what is said - what is said - what is said what is said

unconscious
involuntary
obligatory

acknowledge the logical implications of the proposition
construe configuration of concepts
disambiguate lexical items
recognize the references

what is pronounced what is pronounced - what is pronounced

On another dimension a distinction is made between a) information that the speaker linguistically indicates as something that should be taking for granted and b) information that the speaker states as new in order to get the audience to take it in. The two crossing distinctions give six types of information: 1) names, 2) predicates, 3) what is named (the reference), 4) what is predicated, 5) what is presupposed and 6) the implicature (Togeby 2003, p. 131 ff).

(2)

Information	Taken for granted	Stated
What is pronounced	Names (definite noun phrases)	predicates (verb phrases, adjectives, adverbials)
What is said by the proposition	What is named (the recognizable reference in the mental model)	What is predicated as relevant to the audience
What is communicated by the utterance	What is presupposed by the utterance of the proposition	The implicature of the speaker's claim of relevance of the predicated information

Terminological note: The verb *imply* and the noun *implication* are used about entailments (logically necessary conclusive information). For example, *the fact 'that the child was born blind'* <u>implies</u> *'that he was and had always been lacking the power to see'*.

The verb *implicate* and the noun *implicature* are used about pragmatically generated, but logically cancellable, information. The answer *"There is a garage round the corner"* to the car driver's remark – *"I am out of petrol"* – implicates that *'you can probably get some petrol there'*. In Grice's original article *Logic and Conversation* (1967, 1975), the term *conventional implicature* is the name for 'what is presupposed'; and what I call *implicature,* Grice calls *conversational implicature*. Grice's terminology did not catch on, however, so I will use the following terminology: *Presuppositions* are conventional, semantic, and triggered by lexical items and syntactic constructions when they are uttered in a proposition. *Implicatures* are conversational, pragmatic, and triggered by the guarantee of relevance for the current purpose of the talk exchange given by the utterance of a speech act.

To show that the interpretation of a text depends heavily on both steps, I will take examples from the interpretation of the following text:

(3) *The Blue-eyed Boy*

'When I was in Vienna twenty years ago,' she began, 'a pretty boy with big blue eyes made a great stir there by dancing on a rope blindfolded. He danced with wonderful grace and skill, and the blindfolding was genuine, the cloth being tied around his eyes by a person out of the audience. His performance was the great sensation of the season, and he was sent for to dance before the Emperor and Empress, the archdukes and archduchesses, and the court.

The great oculist, Professor Heimholz, was present. He had been sent for by the Emperor, since everybody was discussing the problem of clairvoyance. But in the end of the show he rose up and called out: "Your Majesty," he said, in great agitation, "and your Imperial Highnesses, this is all humbug, and a cheat."

' "It cannot be humbug," said the court oculist, "I have myself tied the cloth around the boy's eyes most conscientiously."

' "It is all humbug and a cheat," the great professor indignantly insisted. "That child was born blind." '

         Isak Dinesen 1934: "The Deluge at Nordeney" in *Seven Gothic Tales*

II. What is said

What is said (the explicature) is defined as follows (Carston 2002 p. 116ff):

(4) 'What is said' is information about the stated relations between named things, information that the audience extracts from what is pronounced and its context, in order to grasp the meaning of the whole proposition that can be ascribed truth value. This extraction takes place on the basis of knowledge of the grammatical rules and lexicon of the language.

This extraction of what is said from what is pronounced consists of four operations: The audience must

1) recognize what the pronounced names refer to,
2) disambiguate the lexical items and the syntactic constructions,
3) construe the configuration of concepts (including the information omitted by ellipsis),
4) extract the logical entailments (the implications) of the proposition necessary for building a mental model of the situation.

1) Recognition of what the pronounced names (noun phrases and adverbials) refer to: In '*When I was in Vienna twenty years ago,' she began ...* , the audience must recognize that *I* and *she* refer to the same person, viz. 'Miss Malin Nat-og-Dag', who is the main character in the short story; and most people will, if they are interested, also recognize that *twenty years ago* refers to 'the year 1815'' (because it is uttered in 1835).

2) Disambiguation of lexical items and syntactical constructions: The readers have to decide that *sensation*, in this context, means 'a sensational event', and not a sort of 'feeling' or 'sense'; *sensation* as a lexical item can have both meanings. In the construction *a pretty boy with big blue eyes made a great stir there by dancing on a rope blindfolded,* it has to be recognized that it is 'the dancing boy' that is 'blindfolded' rather than 'the rope', although this alternative attachment pattern is possible too; compare: *a pretty boy with big blue eyes made a great stir there by dancing on a rope fastened to a tree.* In this case it is the rope that is fastened to the tree, not the boy.

3) Construal of the configuration of concepts (who did what to whom, including the information omitted by ellipsis). *He danced with wonderful grace and skill*: 'he' is the one who dances; 'with wonderful grace and skill' is not a companion, but the way he did it, and it has to be enriched with the information 'on the rope', information that has been left out by ellipsis.

4) Extraction of the logical entailments (implications) of the proposition that are necessary for the building of a mental model of the situation. From the fact 'that the child was born blind' the readers have to extract the implication 'that he lacked and had always lacked the power to see'.

III. What is communicated

The next step in the text interpretation process is to determine what is communicated by uttering the speech act in a specific situational setting. For members of the audience it involves

a) accepting and integrating what is presupposed in their already existing mental model, and
b) inferring what is implicated.

Presupposition (called a *conventional implicature* by Grice) has the following definition:

(5) 'What is presupposed' are the pieces of information that the speaker signals to the audience

that they must take as given (and incorporate in their mental model if they are not already there) in order to understand what is said as fitting into the existing mental model of the situation talked about. The speaker signals presuppositions, which fall outside the scope of the sentential negation, through lexical and syntactic choices.

Normally what is presupposed is signalled by lexical items. For example, all verbs of transition (perfective verbs) presuppose that the previous state is in force when the transition sets in: In *But at the end of the show he rose up and called out* it is presupposed 'that he was sitting' when 'he rose up', although this has not been said explicitly. This piece of information is trivial and uncontroversial and is not noticed as something necessary to incorporate in the existing mental model of the situation talked about.

Another well-known example of presupposition is the question *When did you stop beating your wife?* In this example, *your wife* presupposes that the addressee is married, *stop* presupposes that the process or activity was in force when it stopped, and *When* presupposes that the information in the rest of the sentence is true. If the addressee has not stopped beating his wife, has not ever beaten her, is not married, or is not male, what is presupposed by the proposition is not given to the audience. This is called *bullying*, which is a sort of presupposition failure (Harder & Kock 1976).

It is often said that the verb *know* presupposes the truth of what is known. When uttering the sentence *The professor knew that the boy was born blind,* the speaker takes for granted that it is a fact 'that the boy was born blind'. And with the sentence *The court oculist did not know that the boy was born blind* it is also taken for granted 'that the boy was born blind'. The fact that the presupposition falls outside the scope of the sentential negation is a simple test of what is presupposed.

Conjunctions and adverbials can presuppose information too. For instance, the word *but* presupposes that there is an opposition between the preceding and the subsequent grammatical constituent: *The waiter is negro but well-groomed* presupposes that there is an opposition between 'being negro' and 'being well-groomed', an example of bullying which reveals a controversial prejudice of the speaker and which is also forced on the audience; they cannot react against it unless they impolitely interrupt the flow of information by discussing something that is not relevant to the message of the utterance.

If information bullied on the audience is neither given nor controversial, the result is only confusion:

(6)

Den kvinde, der blev fundet i Fredericia centrum sent fredag aften, er nu identificeret. Hun er en 28-årig tysker, der kommer fra en institution i Hamborg. Den retarderede kvinde blev fundet i en rundkørsel ved Norgesgade ved 23-tiden fredag aften, men hun har intet sprog.	The woman found i Fredericia late Friday night has been identified. She is a 28-year-old German from Hamburg. The mentally retarded woman was found in a roundabout near Norgesgade about 11 o'clock Friday night, but she has no language.
Politiken 8.4.2003 I side 6.	

Here it is presupposed that there is an opposition between being 'found in a round about' and having 'no language', a statement that is neither given nor controversial and must be looked on as a communication failure. (It is likely that the editor of the paper cut the last sentence, which might have read something like this: *så man kan ikke finde ud af hvordan hun er kommet frem til rundkørslen i Fredericia* ("so it is impossible to find out how she got to the roundabout in Fredericia").

IV. What is implicated

What is implicated (the implicature; cp. Grice's *conversational implicature)*, which I propose calling *underforståelse* in Danish, is defined as follows:

(7) 'What is implicated' is the unspoken information that the members of the audience have licence to infer from what is said in order to see the relevance in light of the current situation. because by uttering the speech act the speaker issues a guarantee for the relevance of what is said according to the accepted purpose of the talk exchange.

Optimal relevance is achieved if what is said is the shortest formulation of the truth and the whole truth about the situation talked about, such as required for the accepted purpose of the talk exchange.

(8) A: - I am out of petrol.
    B: - There is a garage round the corner.
                    Example from Grice 1975

B's speech act provides a piece of information relevant to A in the current situation and it is the whole truth. A can now infer that she can presumably get some petrol there, but that B does not know for certain (otherwise he would have said so). The truth of the implicature is, contrary to what holds for presupposition, cancellable; B can cancel the implicature 'that you can have petrol at the garage' by adding:

(9) B: - but perhaps it is not open.

Another example:
(10)   I am passing through the customs (where I can import up to two litres of spirits) carrying a bag with six bottles of aqua vitae. When asked by the customs officer what I have in my bag I declare: - *I have two bottles of aqua vitae in my bag.*

That is not a blatant lie, because if I have six bottles it is a logical implication that I have two too. It is in fact the truth and nothing but the truth. But it is not the whole truth, and that (the whole truth relevant to the accepted purpose of the talk exchange) is exactly what I have issued a guarantee for when uttering my remark. So I am rightfully accused of cheating (but not of lying).

    Many remarkable examples will show both presupposition and implicature. In the example *The waiter is negro but well_groomed,* it is, as mentioned, presupposed that there is an opposition between a waiter being 'negro' and at the same time 'well-groomed', but it is also implicated that

'therefore we can have our lunch at this restaurant'. Normally, when the speaker introduces an opposition by means of the word *but*, the following conclusion is drawn from the second piece of information coordinated by *but*. The person who says, *The waiter is well-groomed but negro* implicates: 'and therefore we cannot have our lunch at this restaurant'.

Take the sentence *A pretty boy with big blue eyes made a great stir there by dancing on a rope blindfolded.* The sentence implicates, but does not presuppose, 'that the boy had the capacity to see (at the time when he was blindfolded)'. If he was born blind it would not be relevant to say that he was blindfolded because he could not see anyway. Implicatures always involve some kind of reasoning by the audience, the implicature being either the premise or the conclusion, sometimes both.

In the example with the waiter, the implicature is the conclusion. Here is an example where the non-trivial implicature is the premise: Two university teachers meet in the corridor:

(11)   A: - Where are you going?
         B: - To the departmental meeting.
         A: - But it's only for the research-active staff.
                Example from Carston 2002

         Curley brackets indicate pieces of information added by the audience:
             Departmental meetings are only for the research-active staff.
             {You are not research_active} .
             {You have no need to go there}

One premise is implicated here, and the conclusion is the implicature of the word *but*. In the case of A: - *But, it's only for the research-active staff,* the implicature is offensive and insulting. In other cases implicatures are naïve and symptomatic; in a book with children's scribblings one can read:

(12)   *Den første tand kommer I munden*
         The first tooth comes in the mouth.

The reasoning about the implicature is something like:

(13)   The first tooth comes in the mouth.
             {The other teeth come somewhere else, e.g. on the knee
             {The first tooth is the best (working) tooth}

A box of Italian lasagne reads:

(14)   *Denne lasagne er forkogt. Den skal ikke koges i 20 minutter i letsaltet vand.*
         This lasagne is pre-cooked. It should not be boiled for 20 minutes in lightly salted water.

Here it is implicated that 'it is to be boiled for 20 minutes in fully salted water'.
If the lasagne should not be boiled at all, the formulation should have been: *It need not be boiled.* The actual formulation is not the shortest and most economical possible for the current purpose of the talk exchange.

V. Communication Failures

Infelicitous naming, reference or predication lead to what is called obscurity. Independently of what is said, the information communicated in addition to what is said can be false or infelicitous; in this case, the speaker is not lying, but failing to communicate. This section offers some examples of communication failures such as indirect speech acts, obscurity, insincerity, naïveté and namedropping.

Some people say that a speech act can be indirect. At a dinner table a person says:

(15)   - *Can you pass the salt!*

This utterance has the form of a question but the illocutionary force of a request. It does not mean 'Are you able to hand me the salt castor?' The question of indirect speech acts was discussed some years ago at a conference in Copenhagen attended by Johnson_Laird, Jerry Fodor and John Searle. On that occasion I revealed to John the true meaning of "Can you pass the salt!", which he had used as an example of an indirect speech act: 'Are you able to travel through the salt desert?' So what is communicated by a speech act is always indirect because what is communicated is in any case inferred from what is said in light of the accepted purpose of the exchange.

Obscurity is defined as infelicitous naming, reference or predication. The example below illustrates this kind of communication failure:

(16)   Two young men, one of them carrying a pistol, were caught by a policeman. The man
            without the gun said to the man with the gun, "Let him have it!", after which he shot the
            police officer. Later, in court, the man without the gun said that his remark *Let him have
            it!* was supposed to mean "Give it to him", but the gunman had understood it as meaning:
            "Shoot him!"

Both the reference of *it* and the meaning of *let have* are infelicitous.

In their book *The Theory of Presupposition Failure* (1976), Peter Harder & Christian Kock introduced the following notational system for communication failures: S+ indicates that the presupposition of a utterance belongs to the background assumptions of the speaker, and H+ that it belongs to the background assumptions of the hearer; S- and H- that it does not belong to their respective background assumptions. HS+ indicates that H assumes that it belongs to the background assumptions of S, and SHS+ that S is aware of this. The same is true for SH- and HSH-, as well as for SHSH+ and HSHS-. PR indicates the relevant presupposition. So the standard situation has the following notation:

(17)   S+   H+
                    SH+   HS+
                  SHS+   HSH+
                SHSH+   HSHS+

'Failure' is the occurrence of a minus sign in the diagram. The first failure is when
the presupposition does not belong to the background assumption of the hearer: H_

(18)   Three fools had to pass a test to be discharged from a madhouse. The first one was
       asked, 'With what body part do you think?' He pointed at his fist and said, 'I use this
       one', and he was sent back to the madhouse. The second one was asked the same
       question; he pointed at his fist and was sent back to the madhouse. Then the third fool
       was asked; he said, 'With my head' and he was therefore discharged. Afterwards they
       asked him, 'How could you figure it out?' He pointed at his fist and said, 'I used this
       one'.

               S+   H-
             SH   HS
            SHS   HSH
          SHSH   HSHS
       He pointed at his fist and said, 'I used this one'.
       PR: 'The power to think is located in the fist'.

The second deviation is called 'insincerity': the presupposition does not belong to the background
assumptions of S:

(19)   A poor bricklayer brought a big lunch with him to work, but he was embarrassed only
       to be able to afford one type of filling for his sandwiches, viz. cheese. So when he had
       finished nine cheese sandwiches and set about eating the tenth and last one, he said,
       "Now we end up with the cheese sandwich".

               S-   H+
             SH   HS
            SHS   HSH
           SHSH   HSHS
       Now it is time for the cheese sandwich.
       PR: 'There was only one cheese sandwich'.

A 'mistake' is defined as a situation in which one party has a false assumption about the other
party's background assumptions: H & SH+, e.g.: Naïveté on the part of S:

(20)   S+   H-
               SH+   HS+
              SHS+   HSH+
            SHSH+   HSHS+
       He pointed at his fist and said, 'I use this one'.
       PR: 'The power to think is located in the fist'.

Name-dropping is an intentional, achieved mistake of H:

(21)   S+   H-
               SH-   HS+
              SHS+   HSH+
            SHSH+   HSHS+
       *On that occasion I revealed to John the true meaning of the sentence, 'Can you pass
       the salt!'*

PR: 'I, Ole Togeby, am on a first-name basis with John R. Searle'.

Name-dropping can be abortive if it is found out by H:

(22)   S+   H-
               SH-   HS+
               SHS+   HSH-
               SHSH+   HSHS+
               SHSHS+   HSHSH+

On that occasion I revealed to John the true meaning of the sentence, 'Can you pass the salt!'
PR: 'I, Ole Togeby, am on a first-name basis with John R. Searle'.

The utterance of the bricklayer below is an example of insincerity as well as of non-solidarity and feigning.

(23)   *Now we end up with the cheese sandwich.*
               PR: "There were various sandwiches and only one identifiable with cheese".

               S   H+ insincerity
               SH+   HS+ non-solidarity
               SHS+   HSH+ feigning
               SHSH+   HSHS+

The various types of communication failure can be defined in the following manner:

(24)   Sincerity: S+ Insincerity: S-.
       Mistakes: false beliefs about the other party: S- & HS+ or H- & SH+
       One-up-ness: a situation where one party is mistaken and the other party is one-up.
       Communicative balance: no party is mistaken.
       Non-solidarity (ordinary): S presupposes something but nevertheless assumes that H does not recognize it, marked with yellow: S+ & SH- or S- & SH+
       Rhetorical behaviour: S is not sincere and expects H to be aware of this: S- & SHS-
       Feigning: whenever S believes that H is mistaken: S- & SHS+ and SH- & SHSH+
       Suspicion of mistakes: H- & HSH+; of deception: HS- & HSHS+

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