Institute of English Studies
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RELEVANCE ROUND TABLE I

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WUP

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Preface

Dan Sperber and Deirdre Wilson's Relevance Theory has been gaining significance as the leading theory of inferential communication, incorporating linguistic pragmatics and semantics since 1986/95, when *Relevance: communication and cognition* was published.

Since 2002, the Institute of English Studies (University of Warsaw) has organized biennial international Interpreting for Relevance conferences (2002, 2004, 2006, 2008). It has turned out that there is a need for meetings between the conferences during which Relevance Theory based work could be presented and views on its new developments exchanged. The first Relevance Round Table Meeting was held in the Institute in June 2007.

We owe our deepest thanks to Professor Deirdre Wilson. Neither the conferences nor the meetings would have been possible without Her encouragement, help and invaluable presence.

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Relevant translation of grammatical categories absent in the target language – a case study from Hungarian and Polish

The paper deals with the problems in understanding and matching the meaning of Hungarian sentences in their relevant translation into Polish which are qualified in the translation studies as limited translatability, or structural non-translatability resulting from the typological differences between the two languages. Wojtasiewicz (1992: 30–40). It is an outcome of the incompatibility of the nominal and verbal grammatical categories typical of each of those languages and in their specific correlations.

The term 'grammatical category' may be understood in two ways:

(1)   As a language category whose components have a formal indicator of affiliation with the given category (e.g. the category of number, person, case, gender – in Polish; the category of number, person, definiteness in Hungarian),

(2)   As a group of grammatical functions applicable to all the components of the part of speech in question, expressed using specific morphological and non-morphological indicators. The further part of the paper discusses both those interpretations.

Table 1 shows nominal and verbal morphological categories of Hungarian and Polish.

Table 1.

	Morphological categories of Hungarian	Morphological categories of Polish
NÉVSZÓ (Nominal)		
- **Főnév** (Noun)	Szám (number) sg./pl.	Number sg./pl.
	Eset („Case")	Case
	Személy (Person) – Affiliation	-
	Határozottság/határozatlanság (Definiteness/Indefiniteness)	-
	-	Gender
- **Melléknév** (Adjective)	Fok (degree) – 4	Degree – 3
	Szám (number)	Number
	-	
- **Számnév** (Numeral)	-	Case
	-	Gender
- **Névmás** (Pronoun)	Szám (Numeral)	Number
	Személy (Person)	Person
	Eset („Case")	Case
	-	Gender
IGE (Verb)	Person	Person
	Number	Number
	Tense (present – past)	Tense (past – present – future)
	Mode	Mode
	???	Aspect
	Causativeness	-

The problems that the Polish translator has to solve are presented here with a focus on the potential loss of relevant information in the source language and the introduction of information that is redundant from the source language perspective. I will present them by starting from the categories which are **obligatory** in the target language (Polish) and move on to those **optional** in Polish which are obligatory in the source language:

1. **Obligatory categories of the target language (Polish)**
(a) The first such category is the **grammatical gender** in Polish, which is not rendered by the Hungarian grammar. That makes the translator introduce redundant information to the text.
(b) The second such category is the **aspect**, which can be chosen based on an interpretation of correlation of indicators of tense, type of activity and other categories in the Hungarian text.

2. Categories which are optional in Polish and obligatory in Hungarian as the source language:

Here I will refer to **definiteness** and will subsequently discuss its correlation with conjugation forms of the verb and with the verbal category of **causativeness**. Reflecting them in translation frequently involves an unavoidable loss of relevant information originally present in the source text.

Nominal categories obligatory in the language

There is no category of gender in the Hungarian grammar. The biological gender is communicated lexically, and even that has certain limitations (cf. the nouns for animal females: *kanca* 'mare', *nöstény* 'female' *nösténoroszlán* 'lioness', *szuka/nösténykutya* 'bitch', *nösténymacska* 'she-cat', *tehén* 'cow', *emse/koca* – sow, *-nő* 'woman' – *tanárnő*). The Polish translator of a Hungarian text must identify: (a) the sex of the narrator, (b) the sex of the persons referred to.

Let us consider the sentence[1] mentioned in **Example (1)**:

Hamarabb <u>akartam</u> jönni, de meg kellett <u>várnom</u> Gyuricát, és tudod, hogy <u>ő</u> mindig mindenhonnann elkésik. Azt <u>mondta</u>, eljön kilencre, aztán tizenegy is elmúlt, mire <u>láttam</u> belépni a kapun. (Szabó, 1983: 7).

<u>Chciałam</u> przyjść prędzej, ale <u>musiałam</u> zaczekać na Gyuricę, a wiesz, że <u>on</u> zawsze i wszędzie się spóźnia. <u>Powiedział</u>, że przyjdzie o dziewiątej, tymczasem minęła jedenasta, gdy <u>ujrzałam</u> <u>go</u> <u>wchodzącego</u> do bramy. (Szabó, 1961: 5).

The person whose name is *Gyurica* has a diminutive suffix *-ica* in that name, which is usually used with feminine names but here it is used with the masculine name *Gyuri* (Pol. *'Jurek, Jerzy'* Eng. 'George'), as well as *Gizi-ke* (Pol. 'Gizelka'). The translator is obliged to specify the grammatical gender in the forms of the Polish verbs, pronouns and adjectives. The

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[1] The examples quoted after a novel by Magda Szabó. 1983. *Az Őz.* Bp: Magvető és Szépirodalmi Könyvkiadó and its Polish translation by Andrzej Sieroszewski, *Sarenka*. 1961. Warszawa: Czytelnik.

principle of relevance requires that we introduce grammatical information, which is redundant with respect to the Hungarian source text, but relevant for the Polish reader.

The gender of the narrator is gradually identified in the further part of the paragraph quoted here, based on the situational context and the knowledge of the audience about the reality (e.g. a purse and gloves thrown to the bed, the person/narrator wearing a flowery bathrobe, shaving accessories left on the washbasin by a man with whom the narrator had most likely spent the night).

The obligatory introduction of the gender category in Polish, which is not expressed grammatically in the Hungarian source text, is by no means a challenge that is reserved for the Polish translator only (cf. English or Finnish).

Translation from Polish into Hungarian inherently involves information losses from the Polish perspective. Lack of grammar-level gender indicators in Hungarian causes nearly any reference to grammatical feminine (or non-masculine) gender in Polish disappear from the surface of the target text (it is irrelevant from the Hungarian point of view). The Hungarian lexical feminine gender indicators differentiate between a girl/small girl (*leány/kisleány*), a grown-up women (*nő*) – with a reference to her age (*kisasszony, asszony*) and social status (*hölgy* – polite, used when referring to a third person; addressing forms – *úrnő, úrasszony*), marital/family status *asszony, -né* (the suffix which denotes a wife), *özvegy*, virgin – regardless of the sex (*szűz*) or a female animal (*nőstény*).

At the lexical level, the role of the translator is to select relevant equivalents which are usually used in polite forms of addressing[2]: Pol. *panna, waćpanna* – Hung. *kisasszony, leányasszony,* Pol. *Miłościwa pani i dobrodziejko* – Hung. *Nemzetes kisasszony, a mi jótevőnk és szerelmes úrnőnk;* Pol. *księżna* – Hung. *hercegasszony/hercegnő/hercegné,* Pol. *kniagini* – Hung. *knyazasszony, knyazkisasszony* (that form was formed artificially)*,* Pol. *niewiasta, białogłowa* – Hung. *fehérnép,* Hung. *leányzó* – Pol. *dziewka*. Lack of equivalents of historical names and the differences between the social structures lead to the use of strange and artificial nouns in the translated text, such as Pol.

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[2] Examples from *Ogniem i mieczem, Potop* and *Pan Wołodyjowski* by Henryk Sienkiewicza.

łowczanka Hung. *kisasszonyom,* Pol. *podkomorzanka* Hung. *kisasszonyom* (*Potop/Özönvíz*: 40). In some cases the translator translates the titles and surnames of married women literally, which is contrary to the pragmatic rules of the Hungarian language. Traditionally, a married woman would not use her surname, but a form equivalent to Pol. *Janowa Kowalski* instead:

> **(Example 2)** *Była to pani Helena Skrzetuska z domu kniaziów, Bułyhów-Kurcewiczów. – E hölgy Helena Skrzetuska asszonyom, családi nevén Bułyh-Kurcewiczówna.*

There are some serious semantic consequences of the inability to convey the morphological gender in Hungarian, as it does not only comprise the denotation but also the culturally conditioned connotations, too. A frequent form in the works of Henryk Sienkiewicz is the elliptical use of adjective *najjaśniejsza (Rzeczpospolita),* which connotes a revered and adorable *lady/ aristocratic woman*. The following literal translation:

> **(Example 3)** *Ja jestem Roch Kowalski, a to jest pani Kowalska, innej nie chcę! – Én Kowalski vagyok, ez meg itt <u>Kowalska asszony</u>, más nem kell!*

is pragmatically non-relevant and misses the word play based on the shared feminine gender of *wife* and *sword* in Polish; instead of <u>*Kowalska asszony*</u>, the translator should rather use more relevant *Kowalskané* but that, in turn, would actually mean wife.

A proper interpretation of the biological gender in the Hungarian equivalent of the sentence:

> **(Example 4)** *Idź i powiedz jej ode mnie. Nic to! – Menj! Mondd meg neki! Sebaj!*

is only possible on the basis of the preceding sentence: *Idź zaraz do mojej <u>żony</u>. – Menj el mindjárt a feleségemhez.* The impossibility to translate the Polish feminine personal pronoun *ona* into Hungarian is sometimes worked around by using the actual name of the woman referred to. Consequently, *Ona siedziała zaś zmieszana i milcząca.* is not translated ambiguously as *Ő (he or she) pedig zavartan ült, de olyan szép volt, akár tavászi nap* but rather as *Oleńka, pedig zavartan ült, de olyan szép volt, akár tavászi nap.*

In Hungarian, the morphological indicator of the category of **person** is combined with a Hungarian noun in a similar fashion as with a verb. Such a combination expresses the affiliation *birtoklás* (which is traditionally – and imprecisely – referred to as *possessiveness*), which includes various kinds of relationship which exceed the literal 'possession': *ház-om, ház-od, ház-a* (e.g. mereological relationships *a ház ajtája* 'the door of the house', *a fa ága* 'a tree branch', or cause-effect type of relationships *a nap fénye* 'sunlight', all kinds of circumstances and features of actions *az ebéd főzése* 'cooking the dinner') and are communicated in the so-called possessive attributes (Pol. *przydawka dzierżawcza*).

In Hungarian, the personal possessive suffix has an obligatory function of conveying the affiliation with a family, social or professional group or kinship *az apám* 'my father', *az anyám* 'my mother', *a bátyám* 'my elder brother, a húgom/a nővérem* 'my younger/elder sister', *a szobatársam* 'my room mate', *a munkatársunk* 'our colleague from the office', *a beosztottam* 'my employee'. The scope of use of that kind of noun forms is therefore much wider than in the case of Polish attributive clauses with a possessive pronoun, so the translator frequently abandons using an attribute with a possessive pronoun in the Polish text, considering it redundant information in agreement with the mechanisms of relevance. This happens particularly when the kinship level of the person referred to is related to the narrator, as shown in example (5):

(Example 5) *Apá-m 'Ojciec-ja' korán elarvult, nagyapá-m 'dziadek-ja' földje, amelyet gyám-ja kezelt, nem sokat jövedelmezett a bérlő kezén,...* (Szabó, 1983: 23)
'Ojciec wcześnie stracił rodziców, majątek ziemski dziadka, którym zarządzał opiekun ojca, w rękach dzierżawcy nie przynosił wielkiego dochodu',... (Szabó, 1961: 23)

Nagyanyá-m 'Babka-ja' gyűlölte apá-m-at... (Szabó, 1983: 21)
'Babka nienawidziła ojca...',... (Szabó, 1961: 23)

Az életrajz mellé adtak egy lepedőt is, ördög tudja, hány kérdéssel. Az egyik tudakolja, van-e rokono-m 'krewny-ja', hozzátartozó-m 'bliski-ja' külföldön, internáló táborban vagy börtönben ,... (Szabó, 1983: 19)
'Do życiorysu dodali jakąś płachtę, diabli wiedzą, z iloma pytaniami. Jedno z nich docieka, czy mam krewnych lub bliskich za granicą, w obozie dla internowanych lub w więzieniu',... (Szabó, 1961: 15).

In turn, the Hungarian translation of the Polish text includes information that is redundant with respect to the source text:

(Example 5) *Szlachetna panienko! Szlachetni panowie! – Nemzetes <u>kisas-szonyom</u>!* (my) *Nemes <u>uraim</u>!* (my) *Panie Michale! – Michał Uram! Mów mi wuju! – Nevezz <u>bátyáduram</u>! At, wuj, co gadasz! – Ne szólj így bátyau-ram! Ociec, prać? – <u>Édesapam </u>üssük? O dla Boga, Jezu! – <u>Jezusom, Szent Istenem!</u>* (Sienkiewicz 1961)

Reflecting the **syntagmatic relations** specified in Hungarian in much detail using a broad choice of agglutinative suffixes called **cases** as well as postpositions in the Polish translation may be reduced to a technical problem with achieving the equivalence of meaning of syntactic structures. Sometimes it involves an inherent loss of information present in the source language (e.g. indicators of spatial relationships).

Verbal categories obligatory in Polish (Aspect – Tense)

According to Contemporary Polish Grammar (*Gramatyka współczesnego języka polskiego* (Grzegorczykowa R. *et al.*, 1999: 157), the aspect category in Polish is a non-deictic verb category which is closely related to the tense (a deictic category) and „is used to indicate the differences of the perspective the narrator uses to describe an event".

The modern Hungarian language has a relatively narrow system of grammatical tenses (as most Finno-Ugrian languages): the present-future tense (jelen idő) and the past tense (múlt idő), indicated by the *t(t)* suffix of the verb root. The future tense is communicated lexically:

- Frequently by means of the (colloquial) adverb *majd*, as in **(Example (6)**

  Ha majd elkészültél, szólj! 'Jak będziesz gotowy/a daj znać', *Majd adok én neked!* 'Ja ci dam/Ja ci pokażę!' (pogróżka), *Majd, elébb vagy később, elpihenek én is* 'Potem, wcześniej czy później, odpocznę i ja' (Arany János, *Mint egy átélt vándor*]

- By means of adverbial and nominal phrases which denote the future **Example (7)**

Holnap moziba megyek 'Jutro idę do kina', *Déltájban felhivlak* '(Za)dzwonię do ciebie koło południa' *Máris elmész?* 'Już wychodzisz/idziesz?', *Máris megyek!* 'Już (zaraz) idę w czyimś kierunku', *Máris hozom a teát!* 'Już podaję/niosę herbatę!'

- By means of an analytical infinitive structure using the auxiliary verb *fog*:

Example (8)
Mától fogva csak te fogsz takarítani 'Od dziś tylko ty będziesz sprzątać'
Itél a nép, itélni fog 'Lud osądza, lud sądzić będzie/osądzi' (Ady Endre, *A hadak útja*).

Identifying the features of the Hungarian verb in order to establish the value of the category of **aspect** in the Polish translation is a complex task. The traditional Hungarian descriptive grammar does not discuss aspect as a verbal category.

The studies and disputes over the interpretation of aspect in Hungarian gained momentum in the 1970s. They were inspired by the language teaching needs of the Hungarian philologists of Russian as Slavist and Anglosaxon papers in that field (B. Comrie, V. Bondarko). Some scholars, such as Balázs Wacha, or Ferenc Kiefer consider aspect (aspectuality) as a universal semantic category (in a fashion similar to temporality, modality or personality) which can be rendered in different languages using their natural means, not necessarily morphological ones. Here, again, the principle of relevance guides the choice of verbal form.

According to Wacha (1989), the aspect of Hungarian verb structures depends on the execution of the action in time, the dependency between the meaning of the verb and the period of time reflected in the sentence (which is not equal to the time of speaking). The primary division of the time structure reflected in the sentence is established by the following dichotomy: *folyamatos – nem-folyamatos*, i.e. 'continuous' – 'non-continuous'. Those features are frequently accompanied by other semantic features, e.g. intensity, pejorativeness.

(Example 9) *Apám talál-gat-t-a* (szuka-powtarzalność-cz.przeszły) *vacsora után, ugyan mihez is ott fog ott Pesten* (Szabó, 1983: 88).
'Po kolacji ojciec zastanawiał się nad tym, do czego pan Domi weźmie się w Peszcie' (Szabó, 1961 : 70).

That approach to aspectuality relies on 3 different components:

- aspectual value of the verb root *néz-* 'looks/watches' *áll-* 'stands'*, *szület-* 'bears-'*,
- the value of the verb root connected to the prefix which occupies various positions with respect to the root: *le-jött – jött le* Pol. 'zszedł – schodził' (Eng. 'has gone down' – 'was going down')*,
- correlation of the verb – particularly a prefixed one – with components of the sentence, as shown on examples with a definite/indefinite subject of the action (agent) with an intransitive verb
- **(Example 10)** <u>*Megjött a busz*</u> *'Przyjechał (konkretny) autobus'* Váratlanul <u>jött egy</u> busz 'Niespodziewanie nadjechał jakiś autobus'.
- Definite/indefinite object of the action with a transitive verb:

  (Example 11) *Szórt rá <u>sót</u>* 'Posypał (trochę, tak sobie) soli', *Szórta rá <u>a sót</u>* 'Posypywał (konkretną) solą', *Már hozott <u>egy másikat</u>* 'Już przyniósł jakiś inny/coś innego' – *Már hozta <u>a másikat</u>* 'Już niósł/donosił coś (konkretnego/ znanego) innego';
  Kezet mosott 'Mył ręce – neutralne', *Mosta a kezet* 'Był w trakcie mycia rąk/Właśnie mył ręce'.

- Adverb of time

  (Example 12) <u>*Mikor*</u> *lomtalanítottak az utcánkban, én sokat dolgoztam* '<u>Kiedy</u> usuwano rupiecie na naszej ulicy, dużo pracowałem', <u>*Miután*</u> *lomtalanítottak, sokáig üresek voltak a pincék* '<u>Po tym jak/kiedy</u> usunięto rupiecie, piwnice długo były puste'.

- Syntax of the verb prefix and a conjunctive phrase

  (Example 13) *Lejött a lépcsön* 'Zszedł po schodach (zbliżając się do mówiącego)' – *Jött le a lépcsön*, *amikor megszólalt a telefon* 'Schodził po schodach, kiedy zadzwonił telefon', *Jött le a lépcsön és fütyörészet* 'Schodził po schodach i gwizdał/pogwizdywał/pogwizdując'.

The perfective value of the aspect of the sentence is often determined by the correlation of a prefixed or a non-prefixed verb with a definite/indefinite subject (agent), adverbs of time, the order of the prefix and the conjunctive phrases. In the following two examples, the action is perfective (completed), even though it is only the prefixed verbs that can be considered perfective:

Example (14)

A kórházban <u>*perecet*</u> (indefinite) <u>*ettem.*</u> *Szerda volt, látogatási nap, délben benéztem Hellához,* <u>*megettem a leves-é-t*</u> (definite)*; ismétlő próba volt a Szentiváni-ból, a jövő héten már kinn játszik a színház a Szigeten.* (Szabó, 1983: 213).

"W szpitalu <u>zjadłam</u> <u>obwarzanek</u>. Była środa, dzień odwiedzin, w południe zajrzałam do Helli i <u>zjadłam</u> u niej <u>zupę</u>; w przyszłym tygodniu teatr wystawi sztukę na Wyspie". (Szabó, 1961: 171).
Mikor Gyurica elment, <u>*hivott*</u> <u>*egy taxit*</u> (indef.)*, őt elvittem térig, ahonnan már csak száz méternyire volt a Hattyu…* (Szabó, 1983: 9).
"Kiedy Gyurica wyszedł, <u>wezwała</u> <u>taksówkę</u>, odwiozłam ją do placu, skąd do *Łabędzia* było już tylko sto metrów..." (Szabó, 1961: 6).

In the first sentence of Example (14), the object of the action Pol. *jeść* in the past tense (Eng. 'ate') is the indefinite 'pretzel', which can be interpreted twofold: as 'a (single, indefinite) pretzel'[3] or as 'some pretzels of some kind'. In both cases the action is completed, or perfective – cf. Pol. *Co jadłaś dziś na obiad?* (Having) eaten the soup is a completed and perfective (resultative) action *meg-ettem* as the "entire" specific soup prepared by Hella is the object of the action (indicator of affiliation/affinity). In both cases, the translator attributed the perfective aspect *zjadłam obwarzanek, zjadłam zupę* ('{I} have eaten the pretzel', '{I} have eaten the soup') to the verb *eszik.*

The necessity to link the interpretation of the value of the aspect in the Hungarian sentence with the temporal structure of that sentence and the type of action *(kezdő/ingresszív – ingressive, mozzanatos – momentary, terminatív-rezultatív – terminative and resultative, gyakorító (iteratív) – iterative, kicsinítő, diminutív – diminutive, reducing the intensity)* is stressed by Kiefer (1992), who refers to Hans Reichenbach's theory of time, and most notably to the notion of the relative time. He makes a distinction between 'internal and external temporal structure of the sentence' (*a mondat belső/külső időszerkezete*) along with its basic parameters: the moment of speaking (BI beszédidő – M), the moment of reference for events (RI

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[3] The Hungarian language prefers the use of singular in generic sense, eg. the equivalents of the Polish names of fruits *jabłka, gruszki, truskawki*, *winogrona* are in plural while *alma, körte, eper. Almát/körtét/epret/szőlőt vettem* in singular.

– referenciaidő – O) and the moment of occurrence of the temporalized event (EI – eseményidő).

The relevant features of the description of the internal structure of time are as follows: the divisibility of time into segments (oszthatóság), momentality (pillanatnyiság), repetitiveness and resultativeness (végpont – reaching the planned point). On this basis Kiefer pointed to specific Hungarian correlations of time, the type of action, aspect and definiteness of the object which differ from the Polish ones. The Polish translator has to allow for the correlations which determine the aspectual value of the Hungarian sentence, as in:

(Example 15) *Hamarabb akartam* <u>*jönni*</u>, *de meg kellett várnom Gyuricát, és tudod, hogy ő mindig mindenhonnann* <u>*elkésik*</u>. *Azt mondta,* <u>*eljön*</u> *kilencre, aztán tizenegy is elmúlt, mire* <u>*láttam*</u> <u>*belépni*</u> *a kapun* (Szabó, 1983: 7).

'Chciałam <u>przyjść</u> prędzej, ale musiałam zaczekać na Gyuricę, a wiesz, że on <u>zawsze i wszędzie się spóźnia</u>. Powiedział, że <u>przyjdzie</u> o dziewiątej, tymczasem minęła jedenasta, gdy <u>ujrzałam go wchodzącego</u> do bramy'. (Szabó, 1961: 5).

In the example above, the verb *jön* is used twice – in its basic form and in the prefixed form. The root of the verb *jön* first used as infinitive means 'to be approaching towards the speaker', 'to be reaching the place in which the speaker is located', 'to be moving along together with the speaker to the same place'. The physical features of the movement (on foot, by vehicle) are irrelevant.

In the prefixed form *eljön,* the prefix *el* solely contributes the spatial notion of 'moving away/from a place', which is not related to aspect. While choosing the Polish equivalent, the translator must choose from at least a few options: *iść* (walk), *jechać* (drive/go by vehicle)*, przybywać/przybyć* (arive/have arrived)*, przyjść/przychodzić* (arrive/be arriving on foot)*, dotrzeć/ docierać dokądś* (be reaching/having reached a destination)*.* Both Hungarian forms are neutral in terms of their aspect. In both cases, the translator adopted a point of reference which was the location of the narrator who describes: (1) their coming to the place which was the observation point for the description of the events, (2) coming to the place to which another person (Gyurica) is coming.

Another aspectually unclear verb is *lát-tam* (past tense), here used in an 'accusativus cum infinitivo' type of structure *láttam belépni* (*lépve bemegy,*

bejön ''), which is frequently used in literary Hungarian. The translator faces a choice of one of the two possible forms: 'Widziałam jak wchodzi/wchodził – Widziałam jak wszedł' (Eng. 'I saw him entering – I saw him enter' {to some audience, in English the difference between the two may not be as clear as in Polish) on the basis of their own intuition, as they can expect no help from the Hungarian grammar.

Example (16) shows a correlation of the temporal structure that is momentary, non-resultative, repeated (iterated):

(Example 16) *Éjjel nemigen aludtunk, fájt a lábam. Gizike folyton felugrált, és a borogatást cserélte. Reggel lement a közértbe telefonálni, a többit tudod.* (Szabó, 1983: 9).

"W nocy niewiele spałyśmy, bolała mnie noga. Gizi ciągle zrywała się i zmieniała okłady. Rano zeszła do spółdzielni zatelefonować, resztę już wiesz". (Szabó, 1961: 6).

Categories optional in Polish, obligatory in the source language – definiteness and its syntactic correlations, causativeness

In the final part of my presentation I deal with the categories which are obligatory in Hungarian and additionally enter syntactic correlations. In Polish, they may be treated as optional and possibly omitted, which means unavoidable loss of information.

The category of **definiteness** (indefiniteness) is not specifically peculiar to the Hungarian language. The metainformation which indicates that the sender of the message has a piece of information about the object/item and has already submitted it earlier to the recipient of the message and is currently informing them that the expression used this time has the same reference is conveyed by means of articles in such languages as English, French or German.

While establishing the Polish equivalents of Hungarian expressions with article *egy* ('some, a/an') as an indicator of indefiniteness, the Polish translator can use an indefinite determiner ('*jakiś, pewien, jeden, cokolwiek*') or omit that indicator altogether; the definite article *a, az* may possibly be reflected with a Polish demonstrative pronoun or determiner.

In Hungarian, a nominal phrase is understood to be definite if:

1. It includes an indicator of definiteness, such as the article *a/az* and possibly an indicative pronoun *ez a ház* 'that specific house'

   (Example 17) *Talán egy évig laktunk a Sugárúton, aztán <u>átköltöztünk</u> a Deák Ferenc utcába. Nálunk vidéken nagy szégyen volt <u>a költözés</u>...* (Szabó, 1983: 24).
   'Na Promienistej mieszkaliśmy chyba rok, potem <u>przeprowadziliśmy</u> się na ulicę Ferenca Deáka. U nas na prowincji <u>przeprowadzka</u> oznaczała wielką hańbę…' (Szabó, 1961: 18).

2. Contains a possessive suffix in a personal form (*a könyv-em, a anyám, a barátom, a városunk*)
3. Is a proper name.

   (Example 18) *A <u>Deák Ferenc utcából</u> a <u>Muzsaly utcába</u> kerültünk, onnan <u>a Templom-kertbe</u>, onna jöttünk aztán a Kőgátra.* (Szabó, 1983: 24).
   'Z <u>Ferenca Deáka</u> zawędrowaliśmy na <u>ulicę Muzsaly</u>, stamtąd do <u>Parku Kościelnego</u>, by znowu wrócić na <u>Kamienną Groblę</u>'. (Szabó, 1961: 18).

From the translator's perspective, the category of definiteness is interesting due to its syntactic correlations. An expression with a 'definite' value used as an indicator of the object of the action of a transitive verb implies the use of specific conjugation forms of the verb which belong to the so-called object-related conjugation. The verbs which collocate with a phrase which denotes an indefinite object of the action as well as intransitive verbs adopt the forms of the so-called subject-related conjugation (Pol. *koniugacja podmiotowa*).

   (Example 19) *Mikor megnősült, eladt-a a földet,* bebútorozkodott <u>*csináltatott egy fél tucat ruhát*</u> (zrobił na zamówienie pół tuzina nowych ubrań)*; anyám nem hozott semmit a házhoz…* (Szabó, 1983: 22).
   'Kiedy się ożenił, sprzedał ziemię, <u>kupił</u> <u>meble i pół tuzina nowych ubrań</u>; matka nic nie wniosła do domu…' (Szabó, 1961: 17).

The Polish language offers neither grammatical indicators of definiteness nor indicators of its correlation with the conjugation form of the verb. Hungarian-specific grammatical information about (in)definiteness cannot be conveyed in translation by structural means, which results in an unavoidable

loss of information. As I have indicated earlier, definiteness is significant in the interpretation of the aspectual value of Hungarian sentences.

1. The last Hungarian verbal category which I consider optional in translation is **causativeness**. The traditional Hungarian descriptive grammar used to rely on the term *műveltetés,* which was primarily encountered in word formation section in the context of suffix productivity evaluation, e.g. *tat/tet csinál – csináltat, at/et ír – irat, ít szépül – szépít, -aszt/eszt függ – függeszt,* as opposed to the suffixes of verbs of actions or states. The category as such was considered intuitive and not infrequently unclear semantic criteria of 'means causing an action to be performed (by someone)'. It was only reformulated in the recent years by such scholars as Komlósy (2000), who indicated the necessity to make the definition of causativeness more precise by distinguishing its three following meanings: 'Causing something' (okozó/előidéző) *Mári tiszt-ít-ja a ruhát* 'Maria cleans the clothes' causes them to become clean', *Mári forg-atj-a a kereket* 'Maria makes the wheel turn' – proper **causativeness** (kauzatív);

2. Causing/enforcing that someone does something (tétető)' *Mári ugrál-tat-ja Pétert* 'Maria tells Peter to jump', *Mári levelet írat Péterrel* 'Maria makes Peter write a letter/orders Peter to write a letter' – factitive causativeness} (faktitív)

3. Permissive (megengedő/hagyó) 'allow an action designated by the basic verb to take place/state ' – permisszív.

   In different natural languages those functions can be performed by means of different indicators (lexical, syntactic, morphological ones). In Polish, causativeness in its first meaning is coded in the meaning of verbs such as *pić – poić, jeść – karmić* (cf. Hung. *iszik – itat, eszik – etet)*. In most cases it is necessary to look for lexical or syntactic equivalents:

   (Example 20) *Én mindenesetre azt gondoltam, nagyon <u>megdolgoz-tat-ott</u>* 'spowodował, że się napracowałam/dużo pracowałam' *a nyavalyás cérnáért.* (Szabó, 1983: 13).
   'Ja w każdym razie, myślałam, że strasznie <u>wykorzystał mnie</u> za tę marną dratwę. (Szabó, 1961: 10)'.

   It must be remembered that in spite of the fact that this phenomenon is more related to the pragmatics of the language, if a Hungarian speaker talks about using any kind of services, e.g. *I had manicure done, I had my hair*

cut, I had my flat painted, I gave dinner to a beggar they will necessarily use the factitive form *Manikűrt csináltattam, Hajat (le)vágtattam, Lakás fest-et-tem. Megebédeltettem egy koldust.* When such sentences are translated, information loss cannot be avoided.

> **(Example 21)** *Mikor megnősült, eladt-a* (objective conjugation) *a földet,* be-bútorozkodott (subj. conjug.)*, csináltatott* (subj. conjug.) *egy fél tucat ruhát; anyám nem hozott* (subj. conjug.) *semmit a házhoz…* (Szabó, 1983: 22)
> "Kiedy się ożenił, sprzedał ziemię, kupił meble i pół tuzina nowych ubrań; matka nic nie wniosła do domu…" (Szabó, 1961: 17).

In the context of causative clauses one should also mention the syntactic behaviour of factitive verbs, which causes the structure of the arguments in the sentence to change in case of sentences in which the grammatical subject X causes action Y to be performed by the agent (instr.). A Polish equivalent can be obtained, for example, by using a sentence with the verb *kazać* ('to order/tell sbdy to do sthg'):

> **(Example 22)** *A hülye tanárunk még le is rajzoltatta velünk a Fámát, mert olyan együgyű volt, hogy azt hitte, a gyerek is olyan, mint ő, semmit se tud elképzelni puszta olvasás után.*
> Durny nauczyciel kazał nam narysować Famę, był tak naiwny, że myślał, że dziecko, tak jak on, tylko po przeczytaniu nic nie może sobie wyobrazić.

To conclude, it seems that even though information redundancy or loss cannot be avoided in translation of Hungarian texts into Polish due to the differences in the inventory of grammatical categories and their syntactic correlations between the languages, I still believe that the Hungarian language is not more special than any other language.

References

Bondarko A. V., *Principy Funkcional'noj Grammatiki i Voprosy Aspektologii.* Nauka, Moskva 1983.
Comrie B., *Aspect*, Cambridge University Press, Cambridge 1976.
Grzegorczykowa R., R. Laskowski, H. Wróbel (eds.), *Gramatyka współczesnego*

języka polskiego, Vol. 1, Państwowe Wydawnictwo Naukowe, Warszawa 1999.

Kiefer F., "Az aspektus és a mondat szerkezete". In: F. Kiefer (ed.), *Strukturális magyar nyelvtan Mondattan*, Adadémiai Kiadó, Budapest 1992, 797–887.

Kiefer F., "Aspect and syntactic structure". In: F. Kiefer, K. É. Kiss (eds.), *The syntactic structure of Hungarian*, Academic Press, New York 1994, 415–464.

Komlósy A., "A műveltetés". In: F. Kiefer (ed.), *Strukturális magyar nyelvtan. Alaktan*, Adadémiai Kiadó, Budapest 2000, 215–292.

Salga A., *A magyar nyelv az orosz nyelv tükrében*, Tankönyvkiadó, Budapest 1984.

Sienkiewicz H., *Tűzzel-vassal*, I. Mészáros (transl.), Budapest 1969.

Sienkiewicz H., *Ogniem i mieczem*, Państwowy Instytut Wydawniczy, Warszawa 1969.

Sienkiewicz H., *Özönvíz*, I. Mészáros (transl.), Budapest 1974.

Sienkiewicz H., *Potop*, Państwowy Instytut Wydawniczy, Warszawa 1969.

Sienkiewicz H., *Kis lovag*, I. Mészáros (transl.), Budapest 1963.

Sienkiewicz H., *Pan Wołodyjowski*, Państwowy Instytut Wydawniczy, Warszawa 1963.

Szabó M., *Az Őz*, Magvető és Szépirodalmi Könyvkiadó, Budapest 1983.

Szabó M., *Sarenka*, A. Sieroszewski (trans.), Czytelnik, Warszawa 1961

Wacha B., "Az aspektualitás a magyarban, különös tekintettel a folyamatosságra. In: E. Rácz (ed.), *Fejezetek a magyar leíró nyelvtan köréből,* Tankönyvkiadó, Budapest 1989, 219–282.

Wacha B., "A folyamatos-nemfolyamatos szembenállásról", *Általános Nyelvészetyi Tanulmányok 17*, 1989, 279–328.

Wojtasiewicz O. A., *Wstęp do teorii tłumaczenia*, Tepis, Warszawa 1992.

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Relevance Theory and degrees of understanding

1. Introduction

Pragmalinguistic theories define as one of the major objectives of their inquiry and scholarly pursuit the accounting for the context-sensitive cognitive processes that are at play when the recipient of a verbal message is arriving at the speaker meaning directed at him. In oral discourse, a verbal stimulus produced by the speaker is assumed to provide input to interpretation processes, the output of which should be similar enough to the original meaning that the speaker, as it is informally expressed, has in mind. This suggests that the central notion in pragmalinguistic studies is that of meaning, the precious commodity traded in communicative exchanges. Unlike in real-life, direct, bona fide commodity trade though, in which what is sold is (roughly, and at least most of the time) the same as what is bought, in communicative exchanges, even when they are successful, speaker meaning and hearer meaning are hardly ever identical. This paper attempts to show that relevance theory, a pragmalinguistic model of human communication, predicts that it should be so and explains why it is like that.

The paper is structured in the following way. The speaker meaning is dealt with first, and the issue of how the recovery of fully-fledged speaker meaning is modelled in relevance-oriented interpretation processes is focused on in section 2. The problem of the less-than-complete comprehension that the interpreter may go through is addressed in section 3. The partial or shallow interpretation problem is juxtaposed with misunderstanding in section 4. The paper ends with brief concluding remarks.

2. Relevance theory: the recovery of the speaker's full intended meaning

Relevance theory (Sperber and Wilson 1986/95, 1987, Wilson and Sperber 2004) is a psycholinguistic model which provides analytic tools to explain the nature of the mechanisms underlying human overt and intentional, that is ostensive, communicative behaviour. These mechanisms are largely sub-conscious, operate in an automatic and instantaneous fashion, even though they rely on a virtually unlimited source of background assumptions that interpreters need to access in the process of recovering the meaning intended by the speaker. Some of these assumptions are formed on the basis of the data processed by the interlocutor's perceptual mechanisms, while others will be retrieved from the long-term memory store or generated in the course of processing ostensive (verbal or non-verbal as the case may be) stimuli. The complexity of the enterprise is phenomenal, as is the fact that most of the time the communicator and the addressee can make perfect sense of each other's words even though the linguistic production by means of which they communicate is sketchy, gappy (cf. Carston 2006: 41), occasionally incongruous and sometimes even illogical on the surface, as can be illustrated by the brief attested exchange in (1). The conversation originally produced in Polish, translates into English as:

(1) (a) Bogdan : *Is that you?*
      (b) Magda: *No, it's me.*

The exchange took place between the present author's husband and her best friend, who was staying at the author's place for a couple of days. Upon hearing somebody passing by the bathroom door the author's husband whispered, *Is that you*, to which the guest replied *No, it's me*. Making sense of this simple but, on the surface, confusing exchange proved unproblematic for the interlocutors involved as it surely is for anyone who knows what the context was.

As this example shows, the process of recovering the meaning as intended by the speaker tends to be heavily context-dependent and is inherently inferential in its nature, as relevance theorists strongly emphasise (cf., for instance, Sperber and Wilson 1986/95, Wilson and Sperber 2002, 2004, Carston 2002, 2004, Mioduszewska 2006, Wedgwood to appear).

In accordance with Sperber and Wilson's postulates, the process of recovering the intended meaning, as initiated by the speaker producing a given utterance, is guided, on the one hand, by the search for relevance and, on the other, by identifying communicative intentions that the interpreter can attribute to the communicator in a given discourse situation (cf., among others, Sperber 1994, Sperber and Wilson 1986/95, 2002, 2005, Wilson 1999, 2005, Wilson and Sperber 2002, 2004).

On the relevance-theoretic approach, the interpretation process is believed to be constrained by the presumption of optimal relevance, itself a corollary to the Principle of Relevance, which entitles the audience to treat the ostensive stimulus being processed as relevant enough to be worth their attention and as the most relevant one compatible with the communicator's abilities and preferences (Wilson and Sperber 2004: 612). Given that the presumption of relevance defined in this way underlies the interpretation process, the interpreter is supposed to treat the ostensive stimulus as designed to be worth his effort (i.e. at least in principle as leading to the recovering of positive cognitive effects) and approach it as the most relevant one that the communicator is willing and able to produce.

Spelled out in this way, the presumption of optimal relevance provides the backbone for the interpretational heuristics (Sperber and Wilson 1986/95: 266–75, Wilson and Sperber 2004: 612–14), which outlines the procedure followed by the interpreter in performing whatever subtasks the recovering of the speaker's meaning might involve. This heuristics instructs the receiver of the message: "(a) to follow a path of least effort in constructing an interpretation of the utterance (and in particular in resolving ambiguities and referential indeterminacies, in going beyond linguistic meaning, in supplying contextual assumptions, computing implicatures, etc.), and (b) to stop when [the interpreter's] expectations of relevance are satisfied" (or abandoned) (Sperber and Wilson 2005: 360). So when testing the interpretive hypotheses, the comprehender is entitled to treat the first accessible one that he finds relevant enough as the meaning intended by the speaker. This heuristics explains how and why an utterance will have a given contextual interpretation to the exclusion of other interpretations it might potentially give rise to (Žegarac 2006: 1703).

More often than not the recovery of fully-fledged speaker's meaning (cf. Wilson 2005: 1140) involves multiple pragmatic enrichments at the level of explicit meaning as well as getting the implicit import that the utterance

communicates. This suggests that a number of subtasks that have to do with recovering of what is communicated by a certain utterance need to be performed. The originators of relevance theory refer to three types of subtasks that comprehension, at least in principle, embraces. Interpretive hypotheses as to explicitly conveyed meaning, or in Sperber and Wilson's terminology explicatures (a term coined by analogy with Gricean implicatures), are formed. An explicature is defined as "an ostensively communicated assumption which is inferentially developed from one of the incomplete conceptual representations (logical forms) encoded by the utterance" (Carston 2002: 377), and strictly speaking, has to do with what is in fact said. Explicatures result from the development of linguistically encoded meaning to full propositionality (Ariel 2002: 1005), and are "an amalgam of decoded linguistic meaning and pragmatically inferred meaning" (Carston 2004: 636). At the level of implicitly communicated meanings, background contextual assumptions accessed during the comprehension process are identified as implicated premises, while hypotheses concerning the intended contextual implications form implicated conclusions. Thus the utterance comprehension process is postulated to involve hypotheses as to explicatures, the implicated premises and implicated conclusions that an utterance ostensively communicates.

This suggests that the process of assigning an interpretation to what the speaker has uttered requires an adequate pragmatic enrichment of the incomplete linguistic input. In other words, the receiver of the message needs to deal with various underdeterminacies, since, as has been hinted at above, sentences produced in discourse severely underdetermine what is intended to be conveyed (cf., among others, Bach 2004, Carston 2002, 2004, Sperber and Wilson 1997, 2002, 2005, 2006, Wilson 2006, Vicente and Martinez-Manrique 2005, Žegarac 2006).

It is postulated on the relevance-theoretic model that in resolving all kinds of underdeterminacies, the hearer performs a range of inferential relevance-oriented tasks, as example (2) illustrates:

(2) (a) Peter: *What shall we do tomorrow?*
     (b) Mary: *I have finished the paper.*

Mary's utterance (2b) provided in response to Peter's question (2a) is underdeterminate in many ways. Apart from doing the obvious, that is as-

signing reference to the pronoun *I*, and establishing that whatever action Mary is referring to must have been completed at some unspecified time$_t$ prior to the utterance, in order to understand fully what Mary communicates, Peter needs to resolve all kinds of vagueness and ambiguity that are there. In particular the hearer needs to decide what the speaker means by 'have finished' and what she means by 'the paper'. Some plausible interpretations of these linguistic realisations have been listed under (3), but of course others are surely also possible.

(3)   **Mary has finished**

reading /proof-reading /deciphering /…   **the paper** submitted by one of Mary's MAs

writing   **the paper** for the conference she is going to

recording   **the paper** that Peter wrote and asked her to record

producing   (this particular portion of)   **the** (toilet / rice/ wall…) **paper** (toys) she has been working on/ using/ baking/ ……………………
[at some time$_t$ prior to the moment of speaking]

As the list of options indicates, Mary's utterance (2b) is multiply ambiguous. A relevance-guided interpretation process that will lead Peter to the recovering of Mary's message conveyed by uttering (2b) is schematically represented in Table 1.

Table 1.

Wilson and Sperber's (2004: 616, cf. also 2002) schematic utterance interpretation model applied to (2b)[1]:

(a) Mary has said, 'I have finished the paper.'	The encoded (incomplete) logical form of Mary's utterance gets embedded into a description of Mary's overt intentional behaviour.

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[1] Inevitably, this kind of analysis suffers from some inadequacy. On the one hand, there is arbitrariness, which as the authors of relevance point out (Wilson and Sperber 2002: 609) is due to the fact that the reasoning process has been spelt out here in English sentences, whereas interpretive hypotheses will most probably be represented (if they reach a level of mental symbolisation) in the language of thought rather than any natural language (cf. also Sperber and Wilson 1997). On the other hand, all these enrichments and adjustments happen simultaneously and not linearly, unlike what table 1 presents.

(b) Mary's utterance is optimally relevant to Peter.	The presumption of relevance conveyed by any stimulus produced in overt intentional communication (here: Mary's verbal behaviour) results in creating this expectation.
(c) Mary's utterance will achieve relevance by answering Peter's question about their plans for the following day.	Expectation raised by (b) and the fact that such an answer would be most relevant to Peter, who has asked (2b).
(d) If Mary has finished writing the paper for the forthcoming conference, then Peter and Mary can go away to their mountain cottage the next day.	First assumption to be accessible to Peter which, together with other adequate premises, might satisfy expectation (c). Treated as an implicit premise of Mary's utterance.
(e) MARY$_i$ HAS FINISHED WRITING* MARY'S$_i$ PAPER$_{j\ for\ the\ forthcoming\ conference}$.	First pragmatic enrichment of the logical form of (2b) to have been made by Peter which together with premise (d) will lead to the satisfaction of (c). Treated as explicature of Mary's utterance.
(f) Mary and Peter can go to their mountain cottage the next day.	Inferred from (d) and (e), meeting expectation (c); accepted as an implicit conclusion of Mary's utterance (2b).
(g) Peter will be able to go fishing the next day.	Inference from (f) and background knowledge. One of several potential weak implicatures of Mary's utterance, which together with (f) satisfy expectation (b).

In the analysis presented here it has been assumed that in the communicative situation in which (2b) is uttered, the explicature of the utterance is formulated as (3a), spelled out under (e) in the table.

(3) (a) MARY$_i$ HAS FINISHED WRITING* MARY'S$_i$ PAPER$_{j\ for}$
$_{the\ forthcoming\ conference}$.
(b) Peter and Mary can go to their mountain cottage the next day.

Processing this explicature in the context of the implicated premise (d*)* *If Mary has finished writing the paper for the forthcoming conference, then Peter and Mary can go away to their mountain cottage the next day,* leads to the formulation of contextual conclusion (3b) *Peter and Mary can go to their mountain cottage the next day*, listed under (f) in the table, which is the most likely candidate for the contextual effect that Mary must have hoped to achieve by saying (2b).

What is more, since Mary answers Peter's question in an indirect way, she is encouraging him to explore further the range of possible assumptions that her utterance makes manifest, since, as relevance theory predicts,

the extra processing effort that the interpreter must expend in comprehension needs to be offset by additional contextual effects (Sperber and Wilson 1986/95: 194–200). Given that the assumptions which an utterance makes manifest come with different degrees of strength, they can be communicated in a strong or weak way (cf. Sperber and Wilson 1986/95: 59–60; Carston 2002: 378; Wilson and Sperber 2004: 620, Wilson and Wharton 2006: 1569). If in a certain communicative situation, an utterance will achieve relevance when the comprehender necessarily supplies a given contextual assumption, then this assumption is communicated strongly. On the other hand, if in his search for the relevant interpretation of an utterance in a given context, the interpreter will recover "an interpretation consistent with the principle of relevance on the basis of different – though of course related – sets of premises and conclusions" (Sperber and Wilson 1987: 706), they are postulated to be weakly communicated. In weak communication then a number of (related) assumptions are made manifest by what is said and it is up to the interpreter to pick those implicatures, or, as the case may be just one contextual implication that he finds relevant.

In the example under discussion, while (3b) is communicated strongly, assumptions like (3c) and (3d) below will be only weakly communicated, so the responsibility for these (as well as potentially other) implicated conclusions that Peter will actually draw will rest with him:

(3)   (c)   Peter will have a chance to go fishing.
        (d)   Peter can look forward to having some peace and quiet for a change.

To be sure, the interpretation presented above is a stipulation in that if Mary's utterance were to be processed in a context of different contextual assumptions, a totally different interpretation would be recovered as the intended speaker meaning. For example, observe that if the verb *finish* were interpreted as CAUSE TO GO OUT OF BUSINESS, and if the noun phrase *the paper* were identified as referring to, let's say, THE *SUN* NEWSPAPER, through mutual adjustment of explicit and implicit content (Sperber and Wilson 1997: 12, 2005: 376, Wilson 2004: 352–356) in the context most accessible to Peter in a given discoursal situation, the explicature of Mary's utterance would be completely different, as, for instance, the one presented

tentatively in (4). Inevitably, the implicatures that Peter would be encouraged and would be likely to draw in this context will diametrically change:

(4)   MARY$_i$ HAS SAID THAT MARY$_i$ HAS CAUSED THE *SUN* NEWSPAPER TO GO BANKRUPT.

This example seems to illustrate well how heavily context-dependent and inferential through and through the relevance-guided process of recovering the intended meaning is. It inherently depends on the contextual information available to interpreters and on the communicative intentions that they infer from the ostensive stimulus produced by the speaker and her intentional behaviour.

It is worth pointing out that despite the fact that the inferential tasks that interpreters perform are complex and manifold, all these "inferential elaborations are performed automatically and unconsciously" (Sperber and Wilson 2005: 366) by a specialised dedicated inferential module responsible for verbal comprehension in the human mind (cf., among others, Sperber and Wilson 2002, Wilson 2005, Wilson and Sperber 2004).

As the analysis offered above indicates, relevance theory provides analytic tools to describe and explain the mechanisms underlying verbal comprehension which involve the recovery of fully-fledged speaker meaning, or, in other words, the relevance-theoretic model allows one to predict a full range of explicitly and implicitly communicated assumptions that the speaker makes manifest by her communicative act.

At this juncture it must be stated that the notion of fully-fledged, or complete, speaker meaning, even though intuitively appealing, is difficult to define in an exhaustive, convincing, theoretically sound and psycholinguistically plausible way[2]. Having admitted this, I will briefly address the problem of what this notion can be seen as referring to, as without explicating what fully-fledged speaker meaning embraces, the argument developed here can be hardly complete.

Without exploring the issue in great theoretical depth, as it merits a lengthy discussion for which there is no space here, fully-fledged speaker meaning

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[2] I am grateful to Prof. Ewa Mioduszewska for challenging me on this issue and bringing its importance to my attention.

will be defined for the purposes of this paper as an interactionally legitimate and relevant contribution to the current discourse that the speaker can be taken to make (cf. Ariel 2002), which is the output of pragmatic processing as carried out by the relevance-driven comprehension mechanism. In other words, it is argued here that the fully-fledged speaker meaning will embrace the full propositional meaning of the utterance that has been produced together with the implicit import which the relevance-oriented processing generates. Thus the concept includes the explicitly and implicitly conveyed sense in principle recoverable by relevance-triggered mechanisms, or, in other words, "what speakers totally communicate" (Hamblin and Gibbs 2003: 61).

This definition is based on the assumption that fully-fledged speaker meaning should not be thought of in terms of the complete meaning that the *speaker intends* to convey in a given discourse situation (whatever that might be), since as empirical data show, speakers (and also hearers, cf. section 2 below) may not aim at full propositionality all the time (cf. Ariel 2002). So, at least in principle, speakers may not have the intention to communicate the complete propositional content of the utterance or its explicature. Besides, as the analysis of example (2b) above reveals, what is recovered as the message actually communicated may go beyond what remains purely the speaker's responsibility: weakly conveyed assumptions by definition are not fully endorsed by the speaker, yet the very fact that the message has been produced in an indirect fashion suggests that the communicator encourages the audience to go beyond the assumption(s) communicated in a strong manner. The fact of the matter is then that what is recovered as the intended meaning is partly under the comprehender's (and not only the speaker's) control.

Obviously this aspect of the definition can be seen as incongruous with the essence of what is pursued: it is the *speaker* meaning that we are trying to delineate. Should then implicated conclusions drawn on the interpreter's sole responsibility count as speaker meaning? As has been underlined earlier, communicators sometimes deliberately leave it to the interpreter's discretion, so to speak, to derive some further meaning from what they have produced, so it would be inappropriate to leave out this component of interpretation as not belonging to fully-fledged speaker meaning. So even though it seems that speakers may be aware to different degrees of the full explicit and implicit import of what they communicate, this should not affect the understanding of the concept of fully-fledged speaker meaning as such.

Admittedly, fully-fledged speaker meaning may not always be the goal of the interactants, but since it can be and on many occasions is the communicative aim, a pragmatic theory needs to be able to explain how it can be worked out (cf. Hamblin and Gibbs 2003), which is precisely what relevance does along the lines sketched above.

In the light of these remarks it seems only logical to approach the notion under consideration as a construct belonging to and properly specified by the pragmatic model rather than providing access to empirically accessible and objectively verifiable interlocutors' judgements, with fully-fledged speaker meaning treated as a limiting case, a normative notion rather than a matter of empirically available reality (cf. Allot's (2005) remarks on the scientific exploration of tacit mental activity).

In the same way in which communicators may not always very precisely attend to what they are actually saying, because for their current communicative purposes it may not be essential, interpreters will aim at "different levels of precision in understanding" (Ariel 2002: 1041), which is the issue to be discussed in the next section.

3. Relevance-theoretic model and partial/shallow comprehension

As Sperber and Wilson have emphasised a number of times (cf., for instance, 1986/95, 2005, 2006), the thoughts that give rise to communicative acts are often complex and fuzzy, and on certain occasions the communicative intention behind them may simply be to "merely … steer the thoughts of the audience in a certain direction" (1986/95: 60). I have argued elsewhere (Jodłowiec to appear) that this is precisely the case with aphorisms, the processing of which involves the reader in accessing a number of contextual assumptions and exploring, in the way he chooses to do so, conceptual fields activated during the interpretation process. Frequently the outcome of the interpretation of an aphorism is a rather vague and complex conceptual representation. This explains why spelling out how a given aphorism has been understood by a reader or hearer is notoriously difficult and reveals the highly subjective nature of such interpretations. Relevance theory predicts that weak communication in general and poetic discourse in particular will lead to this kind of effect (cf. Pilkington 2002).

In many communicative situations then the thought made public by an utterance may be quite vague for the speaker herself, which means that she will not be entirely certain about the fully-fledged meaning she is trying to convey, since the communicative intention may be precisely to transfer something imprecise or even indeterminate (cf. Nerlich and Clarke 2001, Jucker *et al.* 2003). The communicator may be, for example, trying to convey just an impression and may not be entirely certain about the fully-fledged meaning that is being communicated, not expecting, under the circumstances that the interlocutor will recover a fully-fledged interpretation. It seems useful to refer here to phatic uses of language, which, by definition, are directed at creating certain feelings of sociability in the audience and the very act of ostention rather than what is explicitly said will mainly contribute to the relevance of the phatic communicative act, thus enhancing the social and affective rather than the cognitive level of discourse (cf. Žegarac 1998, Žegarac and Clark 1999)[3].

The core of the argument advanced in this paper is that relevance theory predicts and explains an important fact about human communication, namely that what is comprehended on a particular occasion may depart from the *full* pragmatic meaning recoverable from a given linguistic realisation in a particular context. This suggests that the model allows for different depths of interpretation that the addressee might wish to explore depending on the level of relevance that is settled for in a given situation. In other words, how far the interpretation process will go is subject to adjustment relative to judgements of what the interpreter finds relevant enough for the communicative purposes he is pursuing (or is capable of pursuing, cf. Mioduszewska 2006).

This means that from the point of view of the addressee merely a partial interpretation of the ostensive stimulus directed at him may suffice and there will be no need to recover the whole meaning that the utterance makes manifest in certain circumstances. In the first place, there may be contexts in which there is some obvious indeterminacy present and, as it has been hinted at above, it is either not the interpreter's task to resolve it or the interpreter does not care to resolve the vagueness and the 'shallowly' recovered meaning is found relevant enough, with some effort and mental energy conserved as a result. Examples to be brought in in this context are of the type:

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[3] Cf. Mioduszewska 2006 for a discussion of some other non-cognitive effects that the interpretation of linguistic input can lead to.

(5) *Do you think they serve pizza in hell?*
(6) *Do they really plan to build 700 km of motorway in Poland by 2012?*

In both (5) and (6) the pronoun *they* is indeterminate.

The phenomena I am trying to explore here are related to what in some psycholinguistic literature is referred to as shallow semantic processing, which embraces cases in which a specific interpretation chosen in processing discourse can be seen as partial if compared with the full semantic representation of the sentence. The concept is used to cover interpretations such as those characterising the exchange in (7), quoted from Sanford and Graesser (2006:100):

(7) (a) Mother: *Did my kid manage to climb a tree?*
     (b) Children's supervisor: *Right now every kid is up a tree!*

Since (7b) can potentially mean that there is just one tree and all the kids have climbed up this tree, or that there are N trees and N children with each now up one tree, or the sentence may refer to the situation in which there are some trees with one or more kids up some of them and other trees that happen to be children-free, the claim is that the mother's obvious inference in this context underrepresents the full meaning and therefore counts as partial representation (Sandford and Graesser 2006).

That interpreters often do not attend to the full semantic content of what they are processing has been also attested in a series of *Moses illusion* experiments (cf., among others, Natsopoulos 1985, Bredart and Modolo 1988, Sandford and Graesser 2006). In such experiments, when faced with questions of the type: '*How many animals of each kind did Moses take on the ark?*' the majority of the respondents would answer '*Two*', even though they certainly know it was Noah who sailed the ark. As some experiments show even if subjects are asked to verify statements of the type '*Moses took two animals of each kind on the Ark*' significantly many fail to notice the problem.

Another case of shallow processing discussed in the literature has to do with anomalous interpreting of very complex linguistic forms, which are notoriously not processed at an adequate depth by interpreters. One of the most often quoted examples of this kind is the sentence in (8):

(8)   *No head injury is too trivial to be ignored.*

which is commonly interpreted as '*However trivial a head injury is it should not be ignored*', while in fact the meaning is '*However trivial the head injury is it **should** be ignored*'. The explanation is that the expected, pragmatically normal and plausible meaning surfaces and is identified as the sense of the sentence whereas the other, correct interpretation, which inevitably leads to cognitive effects that are false in the light of language users' knowledge about the world, is blocked.

Such misinterpretations are mainly due to some problems with processing, however, it may also happen that the manifest communicative intention allows the recipient to focus on a narrower meaning than what the linguistic expression potentially carries. Ariel (2002: 1017) discusses a number of examples which indicate that, as the author argues, "there are cases where the speaker simply does not count on the addressee to inferentially complete the linguistic meanings." So, as the researcher concludes in her paper "it is **not** invariably so that interlocutors enrich the linguistic meaning precisely up to full propositionality" (Ariel 2002: 1040, my emphasis). This accords with the relevance-theoretic stance, which is aptly expressed in Carston's (2005: 277) words: "for any given utterance the addressee searches for an interpretation that satisfies specific expectations of relevance projected from the general presumption [of relevance] as applied to the specific case" (cf. also Mioduszewska's (2006) remarks on the impact of the guru effect on the interpretation process). As it has already been emphasised, in accordance with the relevance-driven comprehension heuristics, the interpreter is entitled to stop the interpretation process when his expectations of relevance are satisfied, which in some communicative situations may amount to being satisfied with the recovery of less-than-fully-fledged speaker's meaning.

In fact, language itself embraces a repertoire of resources which can be used in discourse to signal that the speaker herself has a vague idea about the meaning she is trying to convey or that she is uncertain about the meaning of at least a part of what she is saying. Some obvious examples to be quoted in this context are[4]:

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[4] Both examples come from the Internet: (9) is a piece of advice which I have found on an amateur fiction writers' website and (10) has been copied from somebody's personal blog.

(9)   *When I'm stuck I go for a walk **or something** and let the characters talk to me.*

(10) *I feel proud to be an Aussie, **whatever that means**.*

It is often the case that the meaning of an utterance will be to some degree indeterminate in that, as Carston (2002: 16) puts it, there is "a kind of open-endedness of what is meant", and no single fully determinate meaning can be or – for that matter – is expected to be worked out by the audience.

It may also be that the interpreter will find a less-than-full meaning relevant enough and will have no desire to process the meaning further beyond a more or less shallow and not fully pragmatically saturated sense, even if the manifest speaker communicative intent does not fully license this kind of behaviour. This can be illustrated with an example which comes from a mini, informal, quasi-experiment I have conducted. When in the staff room together with just one other person, a colleague, I uttered sentence (11)[5]:

(11) *Oh, exams are so boring.*

The range of responses (11) generated from five colleagues, each of which was addressed with this utterance separately is listed below:

(11) (a) *I know…*(used by two respondents)
      (b) *Yes, but then there are holidays after they are over, and that keeps me going.*
      (c) *Right you are!*
      (d) *I am dead tired at this time of year too...*

When I was trying to inquire about how exactly they understood my utterance, and in particular what they took the lexical item "exams" to mean in this context, it turned out that 3 interpreters settled for the meaning roughly corresponding to "*preparing the exam tests for the students*", one of the informants took it to mean "*examining the students orally*" while one associated it with, as she put it, "*the whole examination business and all that*".

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[5] Originally the exchanges took place in Polish and have been translated into English for the purposes of this argument.

Especially the last answer is indicative of the situation in which the hearer is ready to accept a less than complete interpretation without bothering to think about what the speaker might have been targeting.

The way in which relevance theory approaches the interpreter's tasks and goals predicts that less-than-full interpretation may be preferable under certain conditions. Even though relevance theory identifies the major concern of the interpreter in ostensive communicative situations with recovering the manifest speaker meaning, the very formulation of the second step of the relevance-theoretic comprehension procedure predicts that the hearer will stop the interpretation process as soon as his expectations of relevance have been met. This means that the hearer may sometimes settle for a less than complete interpretation, as soon as he does not consider it relevant to proceed any further.

This should not be deemed to reveal the weakness of human communication but rather its strength. As Sperber and Wilson emphasise, imprecision as to what implicatures the hearer should construct is not a sign of imperfection of communication, but may indicate "the degree of communication that suits both the speaker and the hearer" (Wilson and Sperber 2002:610). After all, as Widdowson (2004, in Mason 2006) contends, "what is relevant in the text is what the users choose to make relevant in relation to what they are processing language for." Mason (2006: 362–3) argues along very similar lines underlining that, "our actual processing of utterances as receivers is informed first and foremost … by our own purposes and motivations." Relevance-guided interpretation heuristics not only fully endorses this kind of view but offers a viable and psycholinguistically plausible explanation of the underlying mechanism involved.

All kinds of less-than-literal interpretations, loose uses of language, metaphor processing and the weak communication phenomena that relevance theorists have scrutinized and, I believe, successfully explained along relevance-theoretic lines provide evidence for the fact that relevance theory offers a homogenous framework that can be successfully applied to studying a wide range of diverse communicative phenomena and, as I have tried to show here, elucidates different depths of interpretation that comprehenders may be ready to plunge into.

4. Partial/shallow interpretation vis-à-vis misunderstanding

The verbal illusion examples that have been briefly discussed above bring us to the distinction between partial or shallow interpretation and misunderstanding, which seems to be ignored by a number of authors dealing with underspecification in reference to comprehension. I would like to point out that the *Moses illusion* and the *head injury illusion* are quite different, in that the former can be viewed as a case of shallow/partial understanding, while the latter is an example of misunderstanding.

This is related to the important postulates of the relevance-theoretic framework. As the originators of relevance theory argue, while communication can be successful without the exact duplication of the thoughts of the communicator by the audience (Sperber and Wislon 1986/95:193), the cognitive effects achieved as a result of comprehension in the hearer's mind need to be related and similar enough to those intended by the speaker (cf. also Wedgwood's (to appear) comments on how relevance theory views successful communication). This means that the set of assumptions made manifest to the addressee in the interpretation process needs to be similar to those that the communicator intends to convey. If the assumptions recovered as part and parcel of comprehension are different from those intentionally made manifest in a given ostensive act, then communication has not been successful. In other words successful communication ends in the similar mental representations entertained by both the communicator and the comprehender, so whatever conclusions can be drawn from the assumptions that have originated in the speaker's mind will also, at least in principle, follow from the assumptions that are manifest to the hearer as a result of the utterance interpretation process (at any rate within the limits of the background assumptions that the world knowledge of both of the interlocutors allows for).

Observe that in the context of the *Moses illusion* examples, misunderstanding does not occur: anyone who processes the sentence without noticing the mistake in the name used will not in any sense form assumptions that would be at odds with those that follow from *Noah put two animals of each kind in the ark*. By contrast, understanding the sentence *No head injury is too trivial to be treated* as *"However trivial a head injury is it should not be ignored"* leads to forming assumptions that are contradictory to those of the true meaning of the original sentence. Notice also that the 'true' meaning of the target sentence,

namely *"However trivial the head injury is it **should** be ignored"*, is blatantly false, that is totally irrelevant to the individual whose cognitive strategies, as relevance theory postulates, will be invariably geared towards the search for relevance. Thus relevance provides a rational and theoretically motivated reason for the preferred wrong interpretation that interpreters, regardless of their first language background go for (Natsopoulos 1985): their relevance-oriented cognitive functioning seems to block what would be the correct parsing resulting in patently false interpretation. To be sure, the mechanisms involved are much more complex than what I have had time for; it is simply the tip of the iceberg. There are compelling reasons to do with the intricacies of parsing at play here which contribute to the fact that the interpreter is not ready to expend mental energy in proceeding along the 'correct' parsing path, as it must be judged as leading to futile cognitive effects.

5. Conclusion

The truism verging on a cliché that I would like to conclude with is that it is a true miracle that we can understand each other's utterances at least most of the time, considering the vast gap or even chasm between what is said and what is communicated. As Andler (2003: 365), commenting on the efficiency of linguistic communication, aptly puts it, "nothing which *techne*, art, has invented, from the Greeks to our age of multimedia and virtual reality, comes close to everyday language in expressive versatility and power". But another miracle seems to be that relevance theory provides analytic tools that can elegantly, neatly and in a psychologically plausible manner (cf. van der Henst *et al.* 2002, 2004) explain a whole range of mechanisms underlying human communication. Hopefully, the remarks contributed in this article have brought to light the importance of investigating the communicator-comprehender interface (cf. Taillard 2002), since there are a number of interesting processes going on as interpreters, on the one hand strive to understand the meaning intentionally conveyed by the communicator, but on the other, pursue their own plans, designs and agenda.

References

Allot N., "Paul Grice, reasoning and pragmatics", *UCL Working Papers in Linguistics*, 17, 2005, 217–243.

Andler D., "Context: the case for a principled epistemic particularism", *Journal of Pragmatics* 35, 2003, 349–371.

Ariel M., "Privileged interactional interpretations". *Journal of Pragmatics* 34, 2002, 1003–1044.

Bach K., "Minding the gap". In: C. Bianchi (ed.), *The semantics/pragmatics distinction,* Center for the Study of Language and Information Publications, Stanford 2004, 27–43.

Bredart S. & K. Modolo, "Moses strikes again: Focalization effect on a semantic illusion", *Acta Psychologica,* 67, 1988, 135–144.

Carston R., *Thoughts and utterances. The pragmatics of explicit communication*, Blackwell, Oxford 2002.

Carston R., "Relevance theory and saying/implicating distinction". In: L. Horn & G. Ward (eds.) *The handbook of pragmatics*, Blackwell, Oxford 2004, 633–656.

Carston R., "A note on pragmatic principles of least effort", *UCL Working Papers in Linguistics* 17, 2005, 271–278.

Carston R., "Linguistic communication and the semantics/pragmatics distinction", *UCL Working Papers in Linguistics* 18, 2006, 37–69.

Hamblin J. & R. Gibbs, Processing the meanings of what speakers say and implicate", *Discourse Processes* 35(1), 2003, 59–80.

Jodłowiec M., (to appear), "Komunikacja nie wprost w ujęciu teorii relewancji". In: J. Nijakowska (ed.), *Język-poznanie-zachowanie: Studia nad psycholingwistycznymi aspektami przyswajania języka*, Wydawnictwa Uniwersytetu Łódzkiego, Łódź.

Jucker A., S. Smith & T. Ludge, "Interactive aspects of vagueness in conversation", *Journal of Pragmatics* 35, 2003, 1737–1769.

Mason I., "On mutual accessibility of contextual assumptions", *Journal of Pragmatics*, 38, 2006, 359–373.

Mioduszewska E., "The guru effect and sophisticated understanding", *Kwartalnik Pedagogiczny*, 4, 2006, 181–191.

Natsopoulos D., "A verbal illusion in two languages", *Journal of Psycholinguistic Research*, 14(4), 1986, 385–398.

Nerlich B. & D. Clarke, "Ambiguities we live by: Towards a pragmatics of polysemy", *Journal of Pragmatics,* 2001, 33: 1–20.

Pilkington A., *Poetic effects. A relevance theory perspective*, John Benjamins, Amsterdam, Philadelphia 2002.

Sanford A. & A. Graesser, "Shallow processing and underspecification", *Discourse Processes*, 42 (2), 2006, 99–108.

Sperber D., "Understanding verbal understanding". In: J. Khalfa (ed.), *What is intelligence?* Cambridge University Press, Cambridge 1994, 179–198.

Sperber D. & D. Wilson, *Relevance: Communication and cognition*, Blackwell, Oxford 1986/95.

Sperber D. & D. Wilson, "Précis of *Relevance: communication and cognition*", *Behavioral and Brain Sciences* 10, 1986, 697–754.

Sperber D. & D. Wilson, "The mapping between the mental and the public lexicon", *UCL Working Papers in Linguistics*, 9, 1987, 1–20.

Sperber D. & D. Wilson, "Pragmatics, modularity and mind–reading". *Mind and Language* 17, 2002, 3–23.

Sperber D. & D. Wilson, "Pragmatics", *UCL Working Papers in Linguistics*, 17, 2005, 353–388.

Sperber D. & D. Wilson, "A deflationary account of metaphor", *UCL Working Papers in Linguistics* 18, 2005, 171–203.

Taillard M.-O., "Beyond communicative intention", *UCL Working Papers in Linguistics* 14, 2002, 189–206.

van der Henst J.-B., Dan Sperber & Guy Politzer, "When is a conclusion worth deriving? A relevance–based analysis of indeterminate relational problems", *Thinking and Reasoning* 8, 2002, 1–20.

van der Henst J.-B. & D. Sperber, "Testing the cognitive and communicative principles of relevance". In: I. Noveck and D. Sperber (eds.), *Experimental Pragmatics*, Palgrave Macmillan, Basingstoke, New York 2004, 141–171.

Vicente A. & F. Martinez-Manrique, "Semantic underdetermination and the cognitive uses of language", *Mind and Language* 20, 2005, 537–558.

Wedgwood D., (to appear), "Shared assumptions: semantic minimalism and Relevance Theory", *Journal of Linguistics.*

Wilson D., "Metarepresentation in linguistic communication", *UCL Working Papers in Linguistics* 11, 1999, 127–161.

Wilson D., "Relevance and lexical pragmatics", *UCL Working Papers in Linguistics* 16, 2004, 343–360.

Wilson D., "New directions for research on pragmatics and modularity", *Lingua* 115, 2005, 1129–1146.

Wilson D., "The pragmatics of verbal irony: Echo or pretence?", *Lingua* 116, 2006, 1722–1743.

Wilson D. & Dan Sperber, "Truthfulness and relevance", *Mind* 111, 2002, 583–632.

Wilson D. & D. Sperber, "Relevance theory". In: L. Horn & G. Ward (eds.), *The handbook of pragmatics*, Blackwell, Oxford 2004, 607–632.

Wilson D. & T. Wharton, "Relevance and prosody", *Journal of Pragmatics* 38, 2006, 559–1579.

Žegarac V., "What is phatic communication?" In: V. Rouchota and A. Jucker (eds.), *Current issues in relevance theory*, John Benjamins, Amsterdam 1998, 327–361.

Žegarac V., "*Believing in:* A pragmatic account". *Lingua* 116, 2006, 1703–1721.

Žegarac V. & B. Clark, "Phatic interpretations and phatic communication", *Journal of Linguistics*, 32, 1999, 321–346.

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The epistemic/non-epistemic distinction as exemplified by *must*: a relevance-theoretic perspective

1. Introduction

The aim of this paper is to re-examine Palmer's (1990) distinction into epistemic and non-epistemic (deontic and dynamic) modality from the relevance-theoretic perspective (Sperber-Wilson 1986 [1995], Wilson-Sperber 2006) on the example of the English modal verb *must* and to provide an explanatory account of the relation between encoded and communicated modal meanings. "The fact that different scholars have dealt with modals and modality in so many different ways is a clear indication of the complexity of the issues involved and of the difficulty of arriving at any completely simple and completely convincing analysis" (Palmer 1990: 24). In my attempt to carry out such an analysis, I focus on the meanings of *must* such as deontic necessity (performative /cf. 1/ or non-performative /cf. 2/), dynamic necessity (subject-oriented /cf. 3/ or neutral /cf. 2/) and epistemic necessity /cf. 4/.

(1)   You *must* be back by ten o'clock. (Quirk *et al.* 1985: 225)
(2)   All students *must* obtain the consent of the Dean. (Coates 1983: 11)
(3)   Protoplasm, the living substance of all plants, contains nitrogen and the rose tree *must* absorb this nitrogen in the form of nitrates. (Palmer 1990: 129)
(4)   The Smiths *must* have a lot of money. (Quirk *et al.* 1985: 224)

In this paper, I point to the gap between encoded and communicated modal meanings, and before suggesting how the gap is bridged within Relevance Theory, I briefly summarise other relevance-theoretic approaches to modal-

ity. I claim that the modal meanings communicated by *must* are the result of pragmatic relevance-driven enrichment of a logical form encoded by the verb and argue that, as interpreting modality necessarily involves metarepresentational abilities, the type of enrichment involved in the interpretation of modals and thus the type of communicated modality are partly determined by the type of metarepresentation involved in producing and interpreting a modal utterance.

2. Encoded meaning vs. communicated meanings of *must*

Must, which encodes necessity on all occasions of use, is semantically underdetermined and communicates different types and shades of necessity depending on the context and co-text in which it is uttered. The typology of modality adopted for the purpose of the paper follows Palmer's (1990) classification. There are basically five different ways in which *must* may be interpreted.

First, as exemplified by (1) repeated in Table 1 with other examples for the sake of convenience, *must* may communicate deontic performative necessity, which is the necessity of acts performed by morally responsible agents, when the speaker (Mother) in the required position of authority over the addressee herself demands that the addressee (her daughter) does some action (be back at 10 o'clock). In such cases the meaning of *must* is equated with an obligation from the speaker, the deontic source.

Table 1.

Types of modality communicated by *must*

(a) **encoded meaning** = necessity
(b) **communicated meanings**
• deontic performative necessity
(1) You *must* be back by ten o'clock. (Quirk *et al.* 1985: 225)
• deontic non-performative necessity
• dynamic neutral necessity
(2) All students *must* obtain the consent of the Dean. (Coates 1983: 11)
• dynamic subject-oriented necessity
(3) Protoplasm, the living substance of all plants, contains nitrogen and the rose tree *must* absorb this nitrogen in the form of nitrates. (Palmer 1990: 129)
• epistemic necessity
(4) The Smiths *must* have a lot of money. (Quirk *et al.* 1985: 224)

Second, as can be seen in (2) above, *must* may communicate deontic non-performative necessity and dynamic neutral necessity. Whereas deontic non-performative necessity is defined as the necessity of acts performed by morally responsible agents, when some other party than the speaker (the Dean) demands that the addressees (students) do some action (obtain the consent of the Dean to take a Dean's leave of absence) and the speaker (a secretary) merely reports their will, dynamic neutral necessity is claimed to be the necessity in view of general circumstances/conditions holding in the world (e.g. a regulation) merely stated by the speaker (a secretary). The sentence under (2) is a case of indeterminacy between the two types of modality as *must* is used here for a regulation being part of the Dean's Leave Policy, which may be viewed in at least two different ways. On the one hand, regulations are perceived as the objective circumstances which make necessary the actualisation of a certain state of affairs and are associated with a dynamic neutral interpretation. On the other hand, since they are established by some authority, regulations may be perceived as reports of performative acts by people in authority, here a reported obligation from a non-speaker (the Dean), with the consequence of a deontic non-performative interpretation.

The fourth type of meaning communicated by *must* is dynamic subject-oriented necessity exemplified by *must* in (3), which is the necessity (to absorb nitrogen in the form of nitrates) in view of the characteristics of the subject (the rose tree) merely stated by the speaker (a teacher). In both types of dynamic modality, neutral and subject-oriented, the source of modality is not a volitive agent as in the case of deontic modality, but an objective fact which lies at the basis of necessity.

Finally, *must* can be used to communicate epistemic necessity as exemplified in (4), with epistemic necessity defined as the necessity relativised with respect to the speaker's set of beliefs or the degree of speaker commitment to the truth of the proposition embedded under the modal (the Smiths have a lot of money), based on a deduction from the facts known to the speaker (the Smiths live in a large house, travel in an expensive car, etc.).

3. Modality in Relevance Theory

Before explaining how the gap between the encoded and the communicated modal meanings mentioned above is bridged within Relevance Theory, I examine the notion of modality with special emphasis on the existing relevance-theoretic accounts of modality (Klinge 1993, 1995, Groefsema 1992, 1995, Papafragou 1998abc, 2000, 2006). What motivates me to provide an overview of selected accounts of the notion of modality is my belief that any interpretation of linguistic data or concepts, including modality, should be given against the background of other approaches. The criteria adopted to select the views for the presentation are both references in relevance-theoretic textbooks or papers and my own interests and preferences. Basically, the relevance-based approaches to modality discussed below are compatible with my assumption that the gap between the encoded and the communicated meanings of modals is bridged by the relevance-guided process of pragmatic enrichment. Yet, although all the approaches account for modality in terms of pragmatic enrichment, each treats enrichment in its own way. Below I briefly present and compare the three accounts (for the criticism of the approaches see Papafragou (2000) and Traugott (2003)).

3.1. Klinge's account of modality

I begin with Klinge's (1993, 1995) account of modal verbs in the framework borrowed from Sperber and Wilson (1986/95). As regards the semantics of the verbs, Klinge's basic claim is that the modals are not ambiguous and the various meanings that have been assigned to them, i.e. ability, possibility, permission, obligation or logical conclusion, are in fact the meanings that should be assigned to **utterances** of sentences containing a modal as one of their constituents rather than treated as semantic meanings.

According to Klinge (1993: 320), a central key to an explanation of the meaning of the modals is inferential enrichment of linguistic semantic input. To illustrate how we arrive at an explicit interpretation of an utterance of a sentence containing a modal, he employs the notions of propositional content, situation representation and world situation, each of them having its counterpart in Sperber and Wilson's (1986/95) theory of communication. In

short, in Klinge's approach a propositional content, which is comparable to a logical form, is developed into a situation representation, the equivalent of a propositional form, in the process of disambiguation, reference assignment and specification of vague terms, with the help of our assumptions about a world situation that the situation representation is taken to represent. Since the assumptions about world situations are used inferentially to interpret utterances of sentences (Klinge 1993: 325), they may be compared to Sperber and Wilson's implicated premises, assumptions acquired from perception or other contextually available assumptions which are part of a context used for the interpretation process. The resultant situation representations are mental representations of past, present or future WORLD SITUATIONS[1] with an in-built temporal index and they can be entertained with various strength, strength being defined (Klinge 1993: 326) as the extent to which we believe in the representational adequacy of a situation representation (compare Sperber-Wilson 1986/95: 199). While in Relevance Theory the propositional form that the hearer arrives at is the one most relevant in a context, in Klinge's approach (1993) the SITUATION REPRESENTATION that an addressee arrives at is the one most salient in the obtaining context of utterance, where saliency is defined as ''a conceived relationship between linguistic semantic input and the accessibility of our assumptions about a world situation'' (Klinge 1993: 325).[2]

As for the semantic structure of sentences with modals, they have an operator structure and the modals make the semantic contribution in the operator position. They encode procedural information (cf. Blakemore 1992) specifying how the conceptual information carried by the propositional content is to be processed (Klinge 1993: 321) and their lexical semantics is captured in the model of their shared semantic field called POTENTIALITY, which may be defined as the potential correspondence between the SITUATION REPRESENTATION in the scope of a modal and the WORLD SITUATION

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[1] I would like to point out that in the present section we follow Klinge's (1993) convention of using capital letters to write such expressions as ''world situation(s)'', ''situation representation(s)'', ''propositional content'' and ''potential/potentiality''.

[2] In other words, the most salient situation representation is the one derived from the most accessible assumptions activated by linguistic semantic input, which makes saliency similar to relevance and thus spurious as a separate notion.

that the situation representation represents. Each of the modals gives different procedural information about the POTENTIAL correspondence between a SITUATION REPRESENTATION and a WORLD SITUATION, the correspondence relying on a change of cognitive environment paraphrased as ''turn out'' (Klinge 1993: 325). To give an example, *must* rules out non-correspondence between a situation representation and a world situation.

As for the distinction between epistemic and deontic modality in Klinge's (1993: 328) approach, it is based on the type of a situation representation arrived at. In interpretations of utterances in terms of epistemic modality a SITUATION REPRESENTATION is an assumption about the world at past or present time or about future world-event with no agent control inferred. As regards utterances interpreted in terms of deontic or dynamic modality, a SITUATION REPRESENTATION is an assumption about agent-events, with a special focus on the intentional activity element of the agent-event. When an agent-event is motivated by the agent himself, we deal with dynamic modality, and when it is not motivated by the agent himself, we are faced with deontic modality.

3.2. Groefsema's account of modality

Another person who takes up the problem of modality and adopts Relevance Theory to explain how we arrive at the different interpretations of modals in use is Groefsema (1992, 1995). Groefsema's account of modal verbs resembles the one proposed by Klinge in that it assumes the unitary meaning approach to the semantics of modals: ''the modals [have – MK] a unitary meaning, where it is our interpretation of utterances containing modals that gives rise to overtones of root or epistemic modality, rather than a distinction in the meaning of the modals themselves'' (Groefsema 1995: 60).

The full interpretation of utterances containing modals depends on the interaction between the unitary meanings and assumptions in the context of the utterance (Groefsema 1995: 61). The process of getting from the basic unitary meanings to various interpretations associated with modals can be explained in terms of the relevance-guided process of developing a logical form, the output of the linguistic decoding process, into a semantically

complete propositional form according to the Principle of Relevance. As Groefsema (1995: 68) points out, "it is not the case that the basic meanings of the modals are always enriched in ostensive communication. It may be the case that the proposition expressed including the basic meaning of the modal is relevant enough in its own right".

Groefsema's (1992, 1995) account of the meaning of modal verbs is similar to Klinge's (1993, 1995) in that both employ the relevance-driven process of pragmatic enrichment to explain the meaning of the modals. Another point of similarity between Klinge and Groefsema is that in both approaches modal verbs are claimed to encode the instructions to process the embedded proposition in a specific way. According to Groefsema (1992, 1995), the basic meanings of modals express relations between the proposition expressed by the rest of an utterance containing them and a set of "background" assumptions[3], putting constraints on what sets of assumptions are recovered during the interpretation process.

As for the lexical semantics of modals in Groefsema's account (1992, 1995), it definitely differs from that envisaged by Klinge (1993). It is defined in terms of entailment or compatibility and the notion of bearing, which draws the addressee's attention to all the evidence for the proposition expressed by the rest of the utterance[4]. The definition of the meaning of *must* is given below:

(5)   *Must:* p is entailed by the set of all propositions which have a bearing on p. (where p is the proposition expressed by the rest of the utterance) (Groefsema 1995: 62)

As regards the distinction between root and epistemic modality, Groefsema (1995: 69) confines herself to saying that "whether we interpret an utterance (...) as expressing epistemic or root modality depends on the nature of the

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[3] Groefsema's (1995) "background" assumptions are equivalent to Klinge's (1993) assumptions about a world situation.

[4] In technical terms, P positively has a positive bearing on Q iff Q follows from P and P positively has a negative bearing on Q iff ~Q follows from P. P negatively has a positive bearing on Q iff Q follows from ~P and P negatively has a negative bearing on Q iff ~Q follows from ~P (cf. Groefsema 1995: 62).

propositions taken as evidence''. Unfortunately, she does not elaborate on the nature of propositions or the correspondence between the propositions and types of modality. The only piece of information deducible from the paper (1995) is that epistemic modality is concerned with how the evidence may influence the truth or falsity of the embedded proposition.

3.3. Papafragou's account of modality

Still another person who has been investigating the problem of modality in Relevance Theory is Papafragou (1998abc, 2000, 2002, 2006). Her aim is to account for the different types of modal meanings within the relevance framework, by adopting a unitary semantic approach to the English modals as Klinge and Groefsema did. In Papafragou's (1998a: 11, 15; 1998b: 249, 2002: 55) relevance-theoretic account of modality, modal verbs are assumed to be context-dependent expressions, whose linguistic content radically under-determines the overall meaning communicated by their uses and is enriched via the processes of pragmatic saturation and free pragmatic enrichment. Thus, like in the other presented approaches, modals depend on the inferential processes of pragmatic enrichment to complement the information they semantically encode, with the processes being specified and named for the first time in the discussion of modality.

According to Papafragou (1998a, 1998b: 249, 1998c: 372), modal verbs are ''incomplete propositional operators''[5], which encode logical relations between a proposition and a set of other, contextually specified, propositions which the speaker has in mind. In other words, they resemble quantificational devices with a structure schematically represented in (6) and are used to convey information that a certain proposition p bears a certain logical relation R (basically entailment or compatibility) to the set of propositions in a propositional domain D.

(6)   R (D, p)

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[5] The assumption that modals are operators makes Papafragou's (1998a, 1998b, 1998c) approach similar to Klinge's and Groefsema's treatment of modality.

The schematic semantics of modals depicted in (6) can be described in more general terms, with reference to the notions of operator, restrictor and matrix characterising every tripartite structure, cf. (7):

(7)   operator (Restrictor, Matrix) (Papafragou 1998a: 11, 1998b: 249)

In the case of modals, *the operator* is the logical relation of entailment or compatibility encoded by a modal which takes scope over *the matrix*, the proposition embedded under the modal, and relates it to *the restrictor*, the domain of propositions, which may be either linguistically present or pragmatically inferred. Papafragou (1998abc, 2002) resembles Groefsema (1992, 1995) in that she employs the notions of entailment and compatibility to define the meaning of modals. Yet, while Groefsema uses the notion of bearing to account for the semantics of modals, Papafragou points to the importance of domains of propositions in the definition of the meaning of modal verbs and stresses the fact that logical relations such as entailment and compatibility apply only among propositions in a single domain. Potential domains will include assumptions easily accessible from the encyclopaedic entries of the concepts in the embedded propositions and other, contextually available, assumptions. The specification of the intended domain takes the form of a general description, which is inserted in the proposition expressed in order for the logical form of a modal utterance to become truth-evaluable (cf. Papafragou 1998a: 28), from which we can infer that a logical form of every modal sentence contains an indexical standing for the domain which needs saturation. The type of domain recovered in the enrichment process is to determine the type of modality: ''it is the restrictor that is responsible for the different types of modal concepts which a modal expression is capable of expressing in different contexts'' (Papafragou 1998a: 11, 1998cb: 249).

As for the types of domains of propositions, Papafragou (1998ab) adopts Sperber and Wilson's (1986 [1995]) and Sperber's (1997) typology of propositions and elaborates on it. Among the types she enumerates we have the factual domain consisting of factual assumptions, ''regulatory'' domains including legal rulings, chess rules, laws of biology or chemistry, etc., ideal-centered domains involving descriptions of states of affairs in ideal, or stereotypical worlds, domains consisting of propositions being descriptions of states of affairs in worlds desirable from someone or other's point of view

(cf. Wilson-Sperber 1988) and, finally, the domain of propositions being metarepresentations.

The proposed semantic representation of *must* in (8) lacks the specification of a value for the modal restrictor and is enriched via pragmatic saturation: the empty slot is filled in by on-line processes of pragmatic comprehension (cf. Papafragou 1998a: 14).

(8)   *Must:* p is entailed by the set of all propositions in domain D
      (D-value → *unspecified*) (Papafragou 1998a: 14)

Compared with Klinge (1993, 1995) and Groefsema (1992, 1995), Papafragou (1998abc, 2000, 2002) devotes much attention to the very important distinction between root and epistemic uses of modals. She argues that the various interpretations assigned to modals depend on the sort of proposition which forms their complement. Epistemic modality differs from other types of modality in that both the proposition embedded under the epistemically understood modal and the evidence for it are metarepresentational assumptions capturing the individual's internal representation of reality. While root operators take scope over propositions entertained as truth-conditional descriptions of states of affairs and relate them to other propositions of the same kind, epistemic operators take scope over interpretively used propositions and relate them to the speaker's belief-set (Papafragou 1998b: 257). On their epistemic interpretations the English modal verbs typically mark the proposition embedded under them as a conclusion motivated in terms of ''inference from known premises'' (Papafragou 2001: 173).

Pulling all the facts together, Papafragou observes that in order to master epistemic interpretations, we need to have a grasp of (a) the inferential component of the modal (the notions of compatibility and entailment which underlie those of possibility and necessity), and (b) the premises (beliefs) required for the inferencing. Moreover, since the successful use and comprehension of epistemic modal operators involves thoughts about beliefs, their acquisition presupposes advanced 'Theory of Mind' (ToM) abilities, especially the ability to attribute to oneself and to others mental representations, to reason inferentially about these representations, to assess their accuracy in representing the real world, and to understand that they may be revised with time (cf. Papafragou 1998c: 373, 2002: 55-56).

4. A relevance-theoretic account of bridging the gap between the encoded and communicated modal meanings

The first relevance-theoretic distinction that I address in the empirical analysis of the meaning of *must* in section 5 of this paper is a distinction between logical form and explicature, which is a natural consequence of the claim that the encoded meaning of modals is underdetermined and the different shades of modality that they communicate are determined in the process of contextual enrichment of their common semantic base, which can be identified with the relevance-theoretic logical form, the output of linguistic decoding. As far as the encoded meaning of *must* is concerned, it translates into a logical form in (9), which is the output of applying the deductive rules associated with *must* in its logical entry:

(9)   It is necessary that p (the state of affairs described in the proposition in the scope of a modal)

Having arrived at the logical form, the hearer has to enrich it by processing the content of the assumption in the context which is at least partly determined by the encyclopaedic entries for the concepts which this assumption contains. The communicated meanings of *must* correspond to explicatures, higher-level explicatures and implications of modal sentences. Explicature is a development of a logical form encoded by an utterance U, which involves disambiguation, reference assignment, fixing of the scope of quantifiers, specification of the meaning of vague terms, interpretation of semantically incomplete expressions (e.g. *too big*) and ad-hoc concept construction (Sperber-Wilson 1986 [1995: 182], Wilson-Sperber 2006, Carston 2002). In the process of constructing an explicature of an utterance, the speaker will access conventional implications and implicated premises in the encyclopaedic entries of the concepts and saturate the variables in the logical form in the first place. Depending on the contextual assumptions, the enrichment of the logical form will result in different explicatures and thus in different types of modality. The part of the enrichment process which is common for all interpretations involves accessing this part of the encyclopaedic entry of *must* which is invariant among speakers and conventionally implicates the attitude of desirability on the part of X or in view of X, depending on whether X is

agentive. Since modality is closely related to the speaker's evaluative and volitive attitude towards the state of affairs described in the proposition connoted by modals, the explication of the modal meaning requires addressing a distinction between a basic-level explicature and higher-level explicatures, which are those developments of a logical form which involve embedding the proposition expressed under a speech-act description or propositional-attitude description (Wilson-Sperber 1993: 14). As regards propositional attitudes, they may be conventionally implicated, as is the case with the attitude of desirability in the encyclopaedic entry of modals such as *must*, or contextually established in the course of interpretation. The same applies to speech-act information, which may be conventionally implicated by the grammatical mood of a sentence or contextually determined on the basis of implicated premises concerning issues of authority, duty and the social and power relations between the source and addressee of modality, and the speaker and the hearer.

As illustrated in the following section, the different types of modality communicated by *must* are the result of different developments of a logical form encoded by the verb. Different developments of a logical form and thus different interpretations of necessity are, in turn, a consequence of the fact that modality can be interpreted in terms of metarepresentation, which, as defined by Wilson (2000: 130) and exemplified in (10), "involves a higher-order representation with a lower-order representation embedded in it".

(10)   Metarepresentation:
       [higher-order representation [lower-order representation] $_{p1}$] $_{p2}$

Whereas the higher-order representation is generally an utterance or thought, there are three main types of lower-order representation: mental representations (e.g. thoughts), public representations (e.g. utterances) and abstract representations (e.g. sentences, propositions). In other words, Wilson (2000) distinguishes three types of metarepresentational ability used in verbal comprehension: the ability to metarepresent attributed thoughts, the ability to metarepresent attributed utterances, and the ability to metarepresent abstract, non-attributed representations (e.g. sentence types, utterance types or propositions). This is the third crucial distinction that is addressed in our account of the epistemic and non-epistemic necessity.

The assumption that the interpretation of modals necessarily involves metarepresentational abilities coincides with Jodłowski's (1953: 88) observation that modal sentences involve propositions about propositions. In the case of modalised utterances, a lower-order proposition (the embedded one) is part of a higher-level proposition (the one with a modal verb), which can be schematically represented as in (11) and (1a-4a). Both propositions (p1 and p2) can be used as higher-order representations and lower-order representations.

(11)   Modal utterance
       [higher-order proposition [lower-order proposition] $_{p1}$] $_{p2}$
(1a)   [You *must* [PRO be back by ten o'clock] $_{p1}$] $_{p2}$
(2a)   [All students *must* [PRO obtain the consent of the Dean] $_{p1}$] $_{p2}$
(3a)   [... the rose tree *must* [PRO absorb this nitrogen in the form of nitrates] $_{p1}$] $_{p2}$
(4a)   [The Smiths *must* [PRO have a lot of money] $_{p1}$] $_{p2}$

I want to point out that it is the assumption that modals are indicators of interpretive use and add a higher-order representation to the basic layer of communicated content by carrying speech-act or propositional-attitude information that motivates postulating a higher-level explicature in the process of modal enrichment.

The final distinction to be exploited in the interpretation of modality communicated by *must* is a cognitively defined distinction between descriptive and interpretive use of representations. Propositions may be used either **descriptively,** to represent some true or conceivable state of affairs in virtue of their propositional form being true of that state of affairs (Sperber-Wilson 1986 [1995: 228]), or **interpretively,** to represent some other representation which also has a propositional form – an attributed utterance or thought or non-attributed representation – in virtue of resemblance between the two propositional forms (Sperber-Wilson 1986 [1995: 229], Wilson-Sperber 2006). Following Papafragou (2000), the type of use of a lower-order proposition (a modalised proposition p1) determines the epistemic/non-epistemic distinction. If a lower-order proposition is used **interpretively** as in (4), we deal with an **epistemic** interpretation of modality. If, on the other hand, the embedded proposition is used **descriptively** as in (1a-3a), we deal with

a **non-epistemic/root** interpretation of modality. The claims are supported with an empirical study of the meaning of *must* in section 5 of the paper.

Although identifying the lower-order proposition as descriptively used excludes an epistemic interpretation, it is of no help when it comes to distinguishing between deontic performative, deontic non-performative and dynamic neutral and subject-oriented uses of modals. In order to distinguish between these three uses, it is necessary to specify the type of representation (mental/public/abstract) which the higher-order proposition including *must* (a modal proposition p2) interprets and the number of levels of metarepresentation involved in the interpretation process. This interdependence is illustrated in the tables in the following section.

When *must* is used to communicate **deontic performative modality** as exemplified in (1a), a lower-order proposition (*You be back by 10 o'clock*) is used descriptively and a higher-order proposition (*You must be back by 10 o'clock*) metarepresents an attributed <u>mental representation</u>, a <u>thought</u> about a desirable state of affairs attributed to the Speaker, the deontic source imposing an obligation on the addressee. The logical form of (1a) will be enriched as demonstrated in (12).

(12)   Mother tells her daughter Mary that she regards [Mary be back from the party by ten o'clock on the day of the party] as a desirable state of affairs and therefore she makes it necessary for Mary to be back from the party by ten o'clock on the day of the party, i.e. Mother obliges Mary to be back from the party by ten o'clock on the day of the party.

The explicature above is a higher-level explicature which contains a description of a conventional speech act of informing, a description of an indirect speech act of obliging, a description of the speaker's and source's propositional attitude (desire) and also the values for the source and addressee of the communicated modality, which are the mother (the speaker) and the daughter (the hearer), respectively. What is crucial for the obligation reading to arise is an implicated premise about the authority of the speaker or the source of modality over the addressee of modality and an implicated premise about the desirability of the state of affairs described from the speaker's point of view.

When *must* is used to communicate **deontic non-performative modality** as demonstrated in (2a), a lower-order proposition (*All students obtain the consent of the Dean*) is also used descriptively**,** but a higher-order proposition (*All students must obtain the consent of the Dean*) metarepresents an attributed <u>public representation</u> or <u>abstract representation</u>, an <u>utterance</u> or <u>sentence</u> which is a metarepresentation of a thought about a desirable state of affairs attributed to somebody other than the Speaker (capable of having desires), here the Dean. An utterance communicating deontic non-performative modality is a free indirect report of what somebody said. As visible in the explicature of (2a) exemplified in (13) below, in such cases the speaker is different from the source of modality and takes responsibility for the judgement without involving herself in a performative action.

(13)   A secretary informs the students that the Dean regards [all students in the Department of Modern Languages obtain the consent of the Dean of the Department to take a Dean's leave of absence] as a desirable state of affairs and therefore she makes it necessary for the students to obtain the consent of the Dean to take a Dean's leave of absence (she asserts an obligation imposed by some authority)

(13) resembles (12) in that it is a higher-level explicature describing a propositional attitude of desirability, a speech act of informing and a speech act of obliging, but in (13), as opposed to (12), two different people perform the speech acts. It is the speaker who informs and it is somebody other than the speaker who desires and obliges. Accordingly, the obligation is non-performative.

Finally, when *must* is used to communicate **dynamic neutral modality** as exemplified in (2a) and **dynamic subject-oriented modality** as exemplified in (3a), lower-order propositions (*All students obtain the consent of the Dean* or *The rose tree absorb this nitrogen in the form of nitrates*) are used descriptively as in the previous cases, but higher-order propositions (*All students must obtain the consent of the Dean* or *The rose tree must absorb this nitrogen in the form of nitrates*) metarepresent a non-attributed <u>abstract representation</u> (a <u>proposition)</u> without attributing the representation to anyone and thus without obliging anyone to make it true. The corresponding explicatures of (2a) on the non-deontic reading and of (3a) are presented in (14) and (15), respectively.

(14) A secretary says that [all students in the Department of Modern Languages obtain the consent of the Dean of the Department to take a Dean's leave of absence] is desirable in view of the Dean's Leave Policy and informs the students that the regulations being part of the Dean's Leave Policy make it necessary for them to obtain the Dean's consent.

(15) The teacher says that [the rose tree absorb the nitrogen contained in protoplasm, the living substance of all plants, in the form of nitrates] is an inevitable state of affairs in view of the characteristics of a rose tree, which make it necessary for the rose tree to absorb nitrogen / The teacher informs the students that there exists an objective necessity for the rose tree to absorb nitrogen.

For the corresponding account of the meaning of Polish non-inflected verbs see Kisielewska-Krysiuk (2005, 2007).

5. Modal enrichment

In the present section of the paper I explain how modal enrichment is completed on the example of different meanings communicated by *must* and trace the relation between different types of modality, type of metarepresentational abilities and type of enrichment involved in interpreting *must*.

5.1. Deontic performative necessity

(1a) [You *must* [PRO be back by ten o'clock] $_{p1}$] $_{p2}$

Table 2.

From necessity to deontic performative necessity

(a) Mother has said to her daughter Mary: *You must be back by ten o'clock.*	Her utterance is recognised as an ostensive stimulus and a communicative act which raises expectations of optimal relevance and triggers the process of decoding
(b) Logical form: It is necessary for Y (the referent of *you)* to be back by ten o'clock tx.	Decoding of the utterance involves identifying the words uttered, recovering the associated concepts, accessing the lexical and logical entries of the concepts named by the words and applying the deductive rules from the logical entries of the concepts. The logical form is underdetermined and the hearer has to enrich it.

	Enriching the decoded logical form involves:
(c) Explicature: It is necessary for Mary to be back from the party by ten o'clock on the day of the party	• Reference resolution (pronoun *you*), saturation of a covert time indexical (tx) and interpretation of semantically incomplete expressions (*be back*) in agreement with the Principle of Relevance by making use of the information provided by the encyclopaedic entries of the decoded concepts and by the immediate context of the utterance.
(d) Higher-level explicatures: (i) Mother says that it is necessary for Mary to be back from the party by ten o'clock on the day of the party	Modals as indicators of interpretive use motivate the presence of higher-level explicatures
(ii) Mother says that she regards [Mary be back from the party by ten o'clock on the day of the party] as a desirable state of affairs and therefore she makes it necessary for Mary to be back from the party by ten o'clock on the day of the party	• embedding of the communicated propositions under a propositional-attitude and speech-act description. Since a modal utterance can be decomposed into two propositions, both propositions can be embedded under a propositional attitude or speech act description
(iii) Mother obliges Mary to be back from the party by ten o'clock on the day of the party	• Identifying the proposition embedded under *must* as descriptively used to represent a desirable state of affairs (→non-epistemic modality interpretation) • Identifying the modal higher-order proposition (explicature) as interpretively used to represent a mental representation, the speaker's thought, and thus attributing the necessity to the speaker (the deontic source) (→ deontic performative modality interpretation) • supplying an implicated premise "[Mary's coming back from the party by ten o'clock on the day of the party] is desirable from Mother's point of view" and an implicated premise about the speaker's authority over the addressee (→ strong obligation interpretation)

5.2. Deontic non-performative necessity or dynamic neutral neccesity?

(2a) [All students *must* [PRO obtain the consent of the Dean] $_{p1}$] $_{p2}$

Table 3.

From necessity to deontic non-performative necessity and dynamic neutral necessity

(d) Higher-level explicatures:	• embedding of the communicated propositions under a propositional-attitude and speech-act description
(i) A secretary says that it is necessary for all students in the Department of Modern Languages to obtain the consent of the Dean of the Department to take a Dean's leave of absence	• Identifying the proposition embedded under *must* as descriptively used to represent a desirable state of affairs (→non-epistemic modality interpretation)
(ii) A secretary says that the Dean regards [all students in the Department of Modern Languages obtain the consent of the Dean of the Department to take a Dean's leave of absence] as a desirable state of affairs and that [all students in the Department of Modern Languages obtain the consent of the Dean of the Department to take a Dean's leave of absence] is desirable in view of the Dean's Leave Policy, which makes it necessary for the students to obtain this consent	• Identifying the modal higher-order proposition (explicature) as interpretively used to represent an abstract representation, a requirement/regulation written down in the Dean's Leave Policy, whose propositional form is a metarepresentation of a thought or utterance about a desirable state of affairs attributed to somebody other than the Speaker (the deontic source – the Dean or the Department Board) (→ deontic non-performative/dynamic modality interpretation)
(iii) A secretary informs the students that they are obliged by the Dean/the Department Board to obtain the consent of the Dean to take a Dean's leave of absence/She asserts an obligation imposed by some authority	• supplying an implicated premise about lack of the authority on the part of the speaker to impose such an obligation and an implicated premise about the authority of the Dean over students (→weak obligation interpretation)
(iv) A secretary informs the students that the regulations being part of the Dean's Leave Policy make it necessary for them to obtain the Dean's consent	

5.3. Dynamic subject-oriented necessity

(3a) [... the rose tree *must* [PRO absorb this nitrogen in the form of nitrates] $_{p1}$] $_{p2}$

Table 4.

From necessity to dynamic subject-oriented necessity

(d) Higher-level explicatures:	• embedding of the communicated propositions under a propositional-attitude and speech-act description
(i) The teacher says that it is necessary for the rose tree to absorb the nitrogen contained in protoplasm, the living substance of all plants, in the form of nitrates	• Identifying the proposition embedded under *must* as descriptively used to represent an inevitable state of affairs (→non-epistemic modality interpretation)
(ii) The teacher says that [the rose tree absorb the nitrogen contained in protoplasm, the living substance of all plants, in the form of nitrates] is an inevitable state of affairs in view of the characteristics of a rose tree, which make it necessary for the rose tree to absorb nitrogen	• Identifying the modal higher-order proposition (explicature) as interpretively used to represent an abstract representation, a law of biology, without attributing the necessity to anybody (→ dynamic modality interpretation) • supplying an implicated premise about lack of the authority on the part of the speaker to impose an obligation on the rose tree
(iii) The teacher informs the students that there exists an objective necessity for the rose tree to absorb nitrogen	

5.4. Epistemic necessity

(4a)   [The Smiths *must* [PRO have a lot of money] $_{p1}$] $_{p2}$

Table 5.

From necessity to epistemic necessity

(d) Higher-level explicatures:	• embedding of the communicated propositions under a propositional-attitude and speech-act description
(i) A husband says to his wife that it is necessary that the Smiths have a lot of money	• Identifying the proposition embedded under *must* as interpretively used to represent another proposition, a conclusion from the premises known to the speaker, e.g. the S has observed the Smiths living in a large house, travelling in an expensive car, etc. (→ epistemic modality interpretation)
(ii) A husband says to his wife that the proposition [the Smiths have a lot of money] is necessarily true in view of what is known to him	
(iii) A husband tells his wife that a set of assumptions available to him make it necessary (allow him to conclude) that the proposition [the Smiths have a lot of money] is true of the Smiths and that he strongly believes the proposition to be true	• Identifying the modal higher-order proposition (explicature) as interpretively used to represent a mental representation, a belief of the Speaker based on deduction from premises available to him

6. Conclusions

   The empirical analysis presented in the paper exploits the basic distinctions of the relevance-theoretic framework, such as the cognitively defined distinction between descriptive and interpretive use of utterances, the distinction into three main types of lower-order representations (abstract, mental and public) and the relevance-theoretic distinction into logical form, explicature and higher-level explicature with a place for a propositional attitude/speech act description. The reliance on the concepts mentioned above has been motivated by the following assumptions. First, modals are linguistic indicators of interpretive use and their interpretation necessarily involves metarepresentational abilities (cf. Papafragou 2000, Kisielewska-Krysiuk 2007). Second, the encoded meaning of modals is underdetermined and the different shades of modality that they communicate are determined in the process of contextual enrichment of their common semantic base, which can be identified with a logical form (cf. Kisielewska-Krysiuk 2004, 2005). Third, in order for the speaker and for the hearer to interpret modality, they have to identify the source of modality, and evaluate and take some attitude towards the state of affairs described in the proposition connoted by a modal, which requires postulating the level of higher-order description, at which propositional-attitude and speech-act information is provided (cf. Kisielewska-Krysiuk 2005, 2007). All in all, the type of modality communicated on a particular occasion of utterance largely depends on the source of modality and on the type of metarepresentational ability involved in interpreting a modal utterance. Although the presence of metarepresentation is linguistically indicated by a modal verb and sometimes by a higher-level description, the source and type of metarepresentation is left to the hearer to infer. It is argued throughout the paper that the distinction between epistemic and non-epistemic modality is determined by the type of the use of a lower-order proposition (interpretive/descriptive) (cf. Papafragou 2000), whereas different kinds of non-epistemic modality are differentiated according to the type of representation that a higher-order proposition exemplifies (mental/public/abstract). The process of modal enrichment has been summarised in Table 6:

Table 6.

From encoded to communicated modal meanings

(a) encoded meaning → **logical form** (*must* encodes necessity → It is *necessary that* p)
(b) communicated meaning → **explicature** + **higher-level explicatures**
(c) different developments of a logical form and thus different interpretations of necessity a consequence of the fact that modality can be interpreted in terms of metarepresentation • **Metarepresentation:** [higher-order representation [lower-order representation] $_{p1}$]$_{p2}$
(d) Modals as indicators of interpretive use add a higher-order representation to the basic layer of communicated content by carrying speech-act or propositional-attitude information → <u>implications for the process of modal enrichment</u>: postulating a higher-level explicature
(e) the type of use of a lower-order proposition (a modalised proposition p1) determines the epistemic/non-epistemic distinction • **non-epistemic (root) modality** (1a-3a): a lower-order proposition used **descriptively** • **epistemic modality** (4a): a lower-order proposition used **interpretively**
(f) the type of representation (mental/public/abstract) that a higher-order proposition (a modal proposition p2) interprets and a number of levels of metarepresentation involved in the interpretation process differentiate between different kinds of non-epistemic modality • **deontic performative modality** (1a): a higher-order proposition metarepresents an attributed <u>mental representation</u>, a <u>thought</u> about a desirable state of affairs attributed to the Speaker • **deontic non-performative modality** (2a): a higher-order proposition metarepresents an attributed <u>public representation</u> or <u>abstract representation</u>, an <u>utterance</u> or <u>sentence</u> which is a metarepresentation of a thought about a desirable state of affairs attributed to somebody other than the Speaker (capable of having desires) • **dynamic neutral modality** (2a) and **dynamic subject-oriented modality** (3a): a higher-order proposition metarepresents a non-attributed <u>abstract representation</u> (a <u>proposition</u>) without attributing the representation to anyone and thus without obliging anyone to make it true

References

Blakemore D., *Understanding Utterances: An Introduction to Pragmatics*, Blackwell, Oxford 1992.

Carston R., *Thoughts and Utterances: The Pragmatics of Explicit Communication*, Blackwell, Oxford 2002.

Coates J., *The Semantics of the Modal Auxiliaries*, Croom Helm London, Canberra 1983.

Groefsema M., "*Can, may, must* and *should*: unitary semantics, diverse pragmatics*", Cognitive Science Memo 37, University of Essex, Colchester 1992.

Groefsema M., "*Can*, *must*, *may* and *should*: A Relevance theoretic account", *Journal of Linguistics* 31, 1995, 53–79.

Jodłowski S., "Istota, granice i formy językowe modalności", *Biuletyn PTJ* 12, 1953, 85–113.

Kasher A. (ed.), *Pragmatics: Critical Concepts*, Vol. 4. *Presupposition, Implicature and Indirect Speech Acts*, Routledge, London 1998.

Kisielewska-Krysiuk M., "From logical form to explicature: the case of Polish non-inflected modal verbs". In: E. Mioduszewska (ed.), *Relevance Studies in Poland*, Vol. 1, Institute of English Studies, Warsaw University Press, Warszawa 2004, 29–46.

Kisielewska-Krysiuk M., "Modality and enrichment: a relevance-theoretic account of the meaning of Polish non-inflected modal verbs". In: A. Korzeniowska & M. Grzegorzewska (eds.), *Relevance Studies in Poland*, Vol. 2, Institute of English Studies, Warsaw University Press, Warszawa 2005, 99–123.

Kisielewska-Krysiuk M., "Modality and metarepresentation: a relevance-theoretic account". In: P. Stalmaszczyk & I. Witczak-Plisiecka (eds.), *PASE Studies in Linguistics*, Łódź University Press, Łódź 2007, 121–132.

Klinge A., "The English modal auxiliaries: From lexical semantics to utterance interpretation", *Journal of Linguistics* 29, 1993, 315–357.

Klinge A., "On the linguistic interpretation of contractual modalities", *Journal of Pragmatics* 23, 1995, 649–675.

Palmer F., *Modality and the English modals*, 2nd ed., Longman, London, New York 1990.

Papafragou A., "Inference and word meaning: The case of modal auxiliaries", *Lingua* 105, 1998a, 1–47.

Papafragou A., "Modality and semantic underdeterminacy". In: V. Rouchota & A. Jucker (eds.), *Current Issues in Relevance Theory*, John Benjamins, Amsterdam 1998b, 239–274.

Papafragou A., "The acquisition of modality: Implications for theories of semantic representation", *Mind and Language* 13, 1998c, 370–99.

Papafragou A. *Modality: Issues in the Semantics-Pragmatics Interface*, Elsevier, Amsterdam 2000.

Papafragou A., "Linking early linguistic and conceptual capacities: the role of theory of mind". In: A. Cienki, B. Luka & M. Smith (eds.), *Conceptual and Discourse Factors in Linguistic Structure*, CSLI Publications, Stanford 2001, 169–184.

Papafragou A., "Mindreading and verbal communication." *Mind and Language* 17, 2002, 55–67.

Papafragou A., "Epistemic modality and truth conditions", *Lingua* 116, 2006, 1688–1702.

Quirk R., S. Greenbaum, G. Leech & J. Svartvik, *A Comprehensive Grammar of the English Language*, Longman, London-New York 1985.

Sperber D., " Intuitive and reflective beliefs", *Mind and Language* 12, 1997, 67–83.

Sperber D. & D. Wilson, *Relevance: Communication and Cognition*, Blackwell, Oxford 1986/95.

Traugott E., "Approaching modality from the perspective of Relevance Theory", *Language Sciences* 25, 2003, 657–669.

Wilson D., "Metarepresentation in linguistic communication". In: D. Sperber (ed.), *Metarepresentations: A Multidisciplinary Perspective*, Oxford University Press, Oxford 2000, 411–448.

Wilson D. & D. Sperber, "Mood and the analysis of non-declarative sentences". In: J. Dancy, J. Moravcsik & C. Taylor (eds.), *Human Agency: Language, Duty and Value,* Stanford University Press, Stanford 1988, 229–324.

Wilson D. & D. Sperber, "Linguistic form and relevance", *Lingua* 90, 1993, 1–25.

Wilson D. & D. Sperber, "Relevance Theory". In: L.R. Horn & G. Ward (eds.), *The Handbook of Pragmatics*, 2nd ed., Blackwell, Oxford 2006, 607–632.

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On relevance of non-communicative stimuli: the case of unintentional obscurity

1. Introduction

The Theory of Relevance is a theory of communication and cognition. Obscurity of expression, for the needs of this paper understood in terms of P. Grice's Cooperative Principle and its maxims, may be intentional, that is communicative or unintentional, that is non-communicative. In both cases it is relevant to the hearer/reader. The question is whether relevance-theoretic interpretation of unintentional obscurity distinguishes the two cases.

2. Obscurity

For the needs of this paper, obscurity[1] is understood as (by definition intentional) flouting or unintentional breach of the super-maxim "Be perspicuous" or the first sub-maxim "Avoid obscurity of expression" (Grice 1989: 27) of Grice's category of manner. Examples below illustrate the relevant cases.

A. Maxim exploitation
The cases of flouting or exploiting the maxim of manner result in intentional communicatively significant obscurity of expression, as in the following examples.

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[1] Obscurity is understood in terms of Grice's CP and the maxims. Its relevance-theoretic 'definition' is not attempted here. Neither is an analysis of the relation between obscurity and underdeterminacy.

(**Example I**) Context: Mother (A) and father (B) discuss the choice of dessert in the presence of their children.
A: Let's get the kids something.
B: OK. But I veto i-c-e-c-r-e-a-m-s. (Levinson, 1983: 104)
B implicature: The children shouldn't learn what I veto.

(**Example II**) Context: Two friends A and B are talking about their mutual acquaintance.
A: What do you think of Mary?
B: I like her dog.
B implicature: I don't like Mary too much.

(**Example III**) Context: Spoken discourse. Announcing the result of a military attack.
A: I have Sind/sinned. (Grice 1989: 55[2])
A implicature: I have conquered Sind, which was a sin.

(**Example IV**)
(a) Poet: 'I sought to tell my love, love that never told can be.'(Grice 1989: 54)
(b) Poet: 'For sweetest things turn sourest by their deeds; Lilies that fester smell far worse than weeds.' (Shakespeare 1609, sonnet 94)

B. Unintentional maxim breach
(**Example V**) (adopted from Sochacka, 2007: 14)
Context: Preparing food for a party, A said to her husband B
A: Pour the pot on the floor.
B: On what floor?
A: The one next to the statue.
B: Pour where?
A: Take the glasses.
A meant the pot on the table near the fridge. The soup in it was to be poured into the vase. The husband did exactly what she wanted.

(**Example VI**)
(a) posterunek ruchomy psa służbowego na bloku
(a mobile post of the service dog at the block) (Dąbrowska, 2006: 13)
(b) zamiatacz i kij do niego (a sweeper and its stick) (Dąbrowska, 2006: 13)

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[2] Context and interpretation of the example has been changed in comparison with the original.

C. Unintentional or intentional maxim breach

    (**Example VII**) 'Consciousness is a being, the nature of which is to be conscious of the nothingness of its being,' (Jean Paul Sartre)

The cases of flouting or exploiting the maxim of manner (part A, examples I-IV) result in intentional communicatively significant obscurity of expression. The obscurity is meant to be recognized and interpreted in a way confirming the relevance of the utterances. The examples differ in the way they gain relevance: via strong, univocal implicatures (example I), through weaker implicatures (example II), different sets of implicatures (example III), to a vast array of weak implicatures (example IV).

When breach of the maxim of manner is unintentional (part B, examples V-VI), it is nevertheless recognized. It may hinder communication (example VI) but it does not have to (example V).

The most complex cases are those (part C, example VII) in which obscurity may be interpreted as (1) unintentional and not recognized by the sender but recognized by the receiver; (2) unintentional but recognized by both the sender and the receiver; (3) intentional but meant by the sender not to be recognized as such by the receiver if it is recognized at all.

3. Problem

All the cases of obscurity gain some kind of relevance, that is they are somehow relevant to the hearer/reader. The question is whether relevance-theoretic tools offer a possibility to describe and explain the differences among the three types of obscurity.

 Especially interesting are the predictions of relevance theory concerning examples from groups B and C. In examples V-VI obscurity is unintentional and thus non-communicative in the sense of ostensive-inferential communication. Yet, such utterances are clearly relevant to the hearer by the definition of relevance. The relevance, at least partly, results from the obscurity inherent in the language used. Example VII is even more complicated; the problem is how its three different interpretations, none of which is strictly speaking communicative, can be distinguished using relevance-theoretic tools, which aim at analyzing intentional ostensive-inferential communication.

Before analyzing the examples from relevance-theoretic perspective, the tools themselves are first recalled.

4. Relevance-theoretic tools

Four relevance-theoretic constructs seem to be of importance in analyzing obscurity: (1) ostensive-inferential communication; (2) relevance; (3) relevance-theoretic comprehension procedure; (4) three strategies of utterance comprehension.

4.1. Ostensive-inferential communication

Ostensive-inferential communication consists in the communicator's producing a (verbal and/or non-verbal) stimulus which is perceptible and clearly directed at the audience (ostensive behavior). The hearer recognizes the stimulus as communicative (he recognizes the speaker's communicative intention) and infers the content of the message from available evidence: "the communicator produces a stimulus which makes it mutually manifest to communicator and audience that the communicator intends, by means of this stimulus, to make manifest or more manifest to the audience a set of assumptions {I}".(Sperber & Wilson 1986/95: 63). A phenomenon (fact, stimulus, behavior) is manifest to an individual if he can mentally represent it and accept this representation as true. Communication requires two intentions on the part of the speaker – the informative intention (to inform the hearer about something) and the communicative intention (to inform the hearer that the speaker wants to inform him about something). Communication can be fully or partially successful or it may fail entirely. What we have managed to communicate is only partially predictable.

4.2 Relevance

Relevance of a stimulus, for example of an utterance, is a balance between the cognitive gain it brings to the hearer/reader and the effort he must put in

processing the stimulus to extract the gain. Every ostensive stimulus brings with itself a guarantee of its relevance to the hearer/reader and that is why he undertakes the effort to process it. The effort is expended till the relevance of the stimulus is confirmed. Here are the original definitions.

Relevance of an input to an individual

(a)   Other things being equal, the greater the positive cognitive effects [contextual implications, strengthening/weakening of an assumption EM] activated by processing the input, the greater the relevance of the input to the individual at that time.

(b)   Other things being equal, the greater the processing effort expended the lower the relevance of the input to the individual at that time (Wilson & Sperber 2004: 45).

Optimal relevance

An ostensive stimulus is optimally relevant to an audience iff (a) It is relevant enough to be worth the audience's processing effort; (b) It is the most relevant one compatible with communicator's abilities and preferences (Wilson & Sperber 2004: 10).

Cognitive Principle of Relevance

Human cognition tends to be geared to the maximization of relevance (Wilson & Sperber 2004: 7).

Communicative Principle of Relevance

Every ostensive stimulus conveys a presumption of its own optimal relevance (Wilson & Sperber 2004: 9)

4.3. Relevance-theoretic Comprehension Procedure

In searching for relevance of an ostensive stimulus, the hearer/reader uses the relevance-theoretic comprehension procedure, which reads

(a)   Follow a path of least effort in computing cognitive effects. Test interpretive hypotheses […] in order of accessibility; (b) Stop when your expectations of relevance are satisfied (Wilson & Sperber 2004: 13).

Sub-tasks in the overall comprehension procedure

(a)   Constructing an appropriate hypothesis about explicit content (in relevance-theoretic terms, EXPLICATURES) via decoding, dis-

ambiguation, reference resolution, and other pragmatic enrichment processes.

(b)   Constructing an appropriate hypothesis about the intended contextual assumptions (in relevance-theoretic terms, IMPLICATED PREMISES).

(c)   Constructing an appropriate hypothesis about the intended contextual implications (in relevance-theoretic terms, IMPLICATED CONCLUSIONS) (Wilson & Sperber 2004: 16).

Relevance of a stimulus may be found in three different ways, depending on which comprehension procedure is used.

4.4. Three strategies of utterance comprehension

Sperber (1994) distinguished three comprehension strategies: naíve optimism, cautious optimism and sophisticated understanding.

In naíve optimism, the hearer assumes that the speaker is benevolent and competent and that his utterance is presented in the easiest and best way to get the meaning across. The first interpretation of an utterance the hearer finds relevant is accessed by him as intended by the speaker.

In cautious optimism based strategy, the hearer assumes that the speaker is benevolent but not necessarily competent enough to realize what is relevant for the hearer. Cautious optimism based interpretations consist in attributing to the speaker an interpretation that the speaker might have thought would be relevant enough and most easily accessible to the hearer.

In sophisticated understanding, the hearer assumes the speaker to be neither benevolent nor competent. The hearer stops his search for relevance not at the first relevant interpretation that comes to mind and not at the first interpretation that the speaker might have thought would be relevant to the hearer. The hearer stops at the interpretation that the speaker might have thought would SEEM relevant to the hearer.

The four relevance-theoretic tools which have just been recalled are, hopefully, sufficient to provide a distinction of relevance-theoretic unintentional obscurity interpretation and an explanation of the differences among its (obscurity's) three types as illustrated in the (A)-(C) groups of examples.

5. Analysis

On hearing an utterance (reading a text), the hearer (reader) assumes that it is relevant to him (cf. Communicative Principle of Relevance). In other words, he assumes that the utterance will bring enough cognitive effects to outweigh the cognitive effort necessary to understand and interpret it (cf. Relevance of an Input to an Individual).

In Grice's (1975, 1978) terms, intentional obscurity results in particularized conversational implicatures, which secure the relevance of the stimulus. The implicatures are meant by the speaker to be recovered by the hearer. On their recovery, the hearer discovers the speaker's intended meaning. This is the case in examples I-IV (group A). Grice's particularized implicatures translate into relevance-theoretic implicatures, that is implicated conclusions of deductions in which an utterance and (an) assumption(s) from memory are premises. However, there is a difference – according to Grice's interpretation, the implicatures in examples I-III have the same status. In relevance-theoretic terms they differ in strength, as it has already been mentioned. The array of weak implicatures in example IV is a constitutive feature of poetic effects, according to the theory. Such distinctions could not be drawn by Grice's tools alone.

Interpreting unintentional obscurity (examples V-VI, group B) requires a different approach. Since the obscurity is unintentional it is not communicative, either (cf. ostensive-inferential communication). If it is not communicative, no specific implicatures are meant by the speaker. Here obscurity is probably not used as a device to achieve any specific communicative effect. It rather is an inherent feature of the text. If we consider the speaker important to us (example V), we take the trouble to interpret his verbal stimulus in spite of the obscurity. We are ready to expend a lot of cognitive effort because we assume that the cognitive gain will compensate for it. In example V the husband, who knows the context very well, takes the cautious optimism based strategy, assuming that his wife, though benevolent, is not necessarily competent. Consequently, what she says cannot constitute the relevant interpretation.[3] He looks for an interpretation that the speaker might have

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[3] Another interpretation, supported by a special context, could be that the obscurity is intentional (and thus communicative) and the wife's utterance is an example of , for instance, playful use of language.

thought would be relevant to the hearer but could not avoid obscurity for lack of adequate linguistic means, caused, for example, by nervousness.

When people whom we do not consider important express their thoughts in an opaque way (example VI), we often do not take the trouble to interpret their utterances because the necessary effort would be too great for too small a cognitive effect. On the other hand, in such cases the obscurity may gain relevance by the very fact of being present. On reading examples VI (a)-(b), the reader may find them relevant, that is bringing significant, though not intended, cognitive effects such as learning about the type of language used or some comical effects. In this case the relevance-theoretic comprehension procedure applies in exactly the same way in which it applies in intentional meaning interpretation.

Example VII (group C) poses yet another problem for interpretation. Here it may be difficult for the reader to decide whether the obscurity was intended or not. Yet, even if he does not grasp the content behind the obscurity, he may still be ready to put a lot of cognitive effort into the interpretation of the text, on the condition that its author is an authority figure for the interpreter.

The trusting hearer/reader may believe that it is the limits of his own understanding that make him feel the text to be obscure. Such favorable interpretation is based on the prior authority of the text author. If in your cognitive environment[4] there is an important authority figure and you support it, this is a proof of your own intelligence and of your as if becoming part of this authority. As predicted by the guru effect (Sperber 2005), when authorities are obscure we often trust that what we are presented with is relevant. So we are ready to put much more effort into processing their texts. Even if we fail to understand the content of the text, we take its profundity on faith, assuming benevolence and competence of the author, thus not recognizing lies or bad faith on his part.

In the first interpretation of example VII, obscurity is assumed to be unintentional and not recognized by the sender but recognized by the reader. The interpretation is guided by the naíve optimism strategy. According to it the writer is assumed to be benevolent and competent. The first accessed relevant enough interpretation is accepted as the one intended by the writer.

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[4] „A cognitive environment of an individual is a set of facts that are manifest to him" (Sperber & Wilson 1986/95: 39).

If, because of the obscurity of the passage, the reader cannot find a relevant interpretation he will probably give up his search for relevance when the effort becomes too great but the blame for not finding it is on him. Not finding a relevant interpretation must result from the reader's incompetence.

The second interpretation assumes that the obscurity is unintentional but recognized by both the writer and the reader. Adopting the cautious optimism based strategy of utterance/text interpretation may lead the reader to the conclusion that the writer is incompetent. Hence, not finding a relevant interpretation may result from this fact and the reader feels free to reject the obscurity of the passage.

Finally, there may be a situation in which intentional obscurity is meant by the sender not to be recognized as such by the receiver, if it is recognized at all. Adopting sophisticated understanding based strategy, the reader assumes that the writer is neither benevolent nor competent. The reader assumes the writer to intend to SEEM benevolent and competent. The reader should stop looking for the text's relevance at the first interpretation that the writer might have thought would SEEM relevant to the reader. The reader may disregard the content of the text if he does not accept it as true, recognizing however the communicative intention, namely that the writer wants to convey something possibly profound if he is an authority. The assumption that the speaker is not benevolent would not allow the hearer to ascribe profundity to the text, unless the guru effect takes over (Mioduszewska 2006).

6. Conclusions

The theory of relevance provides tools to describe both – intentional and unintentional obscurity and to explain the differences among their various sub-types. What is interesting is that the principles of relevance and the relevance-theoretic comprehension procedure work in exactly the same way in communicative and non-communicative cases. It is the definition of ostensive-inferential communication that differentiates between the two.

References

Dąbrowska A., "Ruchomy psi posterunek", *Polska Zbrojna* 23, 2006, 12–13.

Grice P., "Logic and conversation". In: P. Grice, *Studies in the Way of Words*, Harvard University Press, Cambridge MA 1989, 22–41.

Grice P., "Further Notes on Logic and Conversation". In: P. Grice *Studies in the Way of Words*, Harvard University Press, Cambridge MA 1989, 41–58.

Levinson S., *Pragmatics*, Canmbridge University Press, Cambridge 1983.

Mioduszewska E., "The Guru Effect and Sophisticated Understanding". *Kwartalnik Pedagogiczny* 4, 2006, 181–191.

Shakespeare W., *Sonnets*. In: M.J. Cohen, *The Penguin Dictionary of Quotations*, Penguin 1973, 356.

Sochacka H., "Precyzja słowa", *Reader's Digest* 5, 2007 (Polish edition), 14.

Sperber D., "Understanding verbal understanding". In: J. Khalfad (ed.), *What is Intelligence*?, Cambridge University Press, Cambridge 1994.

Sperber D., "The Guru effect", Manuscript, 2005.

Sperber D., D. Wilson, *Relevance: Communication and Cognition*, Blackwell, Oxford 1986/95.

Wilson D., D. Sperber, "Relevance theory." In: G. Ward & L. Horn (eds.), *Handbook of Pragmatics*, Blackwell, Oxford 2004.

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Misunderstanding and communication failure in Relevance Theory – a problem revisited

The problem of misunderstanding viewed from relevance theoretic perspective has been of interest to me, as I have shown in some of my previous papers (Mirecki 2002, 2004). In this paper, I want to have another look at the problem of inner relationship between misunderstanding, communication failure and the so called successful communication. I start with presenting the definitions of both communication failure and misunderstanding, and then I briefly show the definitions of successful communication in RT and other theories, presenting the above mentioned relationship. I conclude my paper with hinting some possible applications of the above mentioned distinctions to some of the problems of communication analysis within the Relevance Theory.

Let me start with briefly coming back to the notions of communication failure and misunderstanding. Both of those definitions are grounded in the RT, which was chosen as a theoretical framework for my research. The definition of communication failure is as follows:

Definition of communication failure
A communication failure appears in all kinds of situations when:
a) Hearer goes back in the processing of information in search for additional data, or for a correction of already made assumptions, and Hearer shows in an ostensive way that he undergoes such a process;
b) or when the communication is disrupted (internally or externally) in such a way that its continuation is prevented. (Mirecki 2004: 68)

As it may be seen, the definition consists of two parts – point a) refers more directly to utterance processing, whereas b) makes some assumptions

concerning external conditions accompanying communication. Such a division is important for analysing the communication process and for the classification of communication failures that has been created on the basis of this definition.

The second definition that I use is a working version of the definition of misunderstanding

Misunderstanding occurs when:

a) in the course of the conversation the addressee does not realise, hence does not show in any ostensive way that his understanding of the speaker's words is not the one intended by the speaker;

b) neither of the interlocutors realizes and shows in an ostensive way that there is a problem in conversation;

c) after the conversation, interlocutors (or at least one of them) show(s) in an ostensive way that their understanding of the message conveyed is different than the intended interpretation. (cf. Mirecki 2005: 50)

The reason for creating the definitions of misunderstanding were as follows: we cannot always guarantee that there is an ostensive stimulus, or that the communication will break, in that way showing interlocutors that there are some problems in their mutual understanding. Yet, when the interlocutors are talking at "cross-purposes", and at the same time are not aware of it, then misunderstanding may occur. For the interlocutors, provided that both participants continue to take part in the conversation, the conversation remains relevant, i.e. worth the time and processing effort to produce implications. Taking post-Gricean account of communication – that is the claim that 100% replication of thoughts, ideas and intentions is impossible, then, and only then, we have to accept cases as the one mentioned above, and need not consider them as failures of communication but as misunderstandings. Even in the garden-path examples we have the initial recognition of Speaker's certain thoughts by Hearer (it does not matter that this recognition is a false one), and only later does Hearer arrive at the intended interpretation. If Hearer does not show in an ostensive way that he changes his interpretations, then the communication is successful, even though two contrary interpretations have appeared in Hearer's mind, only one of which turned out to be the intended one. Moreover, if we want to accept as communication failure the cases when the interlocutors are talking at cross–purposes, we expose ourselves to unnecessary risk. There are many absurd and/or abstract

situations in real life, and how we should judge whether the communication has failed if we have to rely only on our knowledge of interlocutors and their background – they may be joking, talking in code and for them the communication may be successful. Such judgments are possible only in artificial situations – like in the case of theatre plays used by Tzanne (2000) – where the reader has complete knowledge/control over the situations and the condition that influence it.

I want to claim that it is misunderstanding, and not communication failure, when throughout the course of a conversation participants think that successful communication is going on – and, in reality, they are talking at cross purposes. To have a better look at misunderstanding, let me first see how Relevance Theory defines successful communication.

Sperber and Wilson see successful communication as an exception, and not a rule "failures in communication are to be expected: what is mysterious and requires explanation is not failure but success" (1995: 45). In their 1990 paper, successful communication is defined as a process of communication in which the hearer aims at finding an interpretation that is consistent with the principle of relevance. "When (…) [this] criterion yields a single interpretation (or closely similar interpretations with no important differences between them) communication succeeds." (Sperber and Wilson (1990: 147)). Carston offers the following definition:

> "Verbal communication, (...), is not a means of thought duplication; the thought(s) that the speaker seeks to communicate are seldom, if ever, perfectly replicated in the mind of the audience; communication is deemed successful (that is, good enough) when the interpretation derived by the addressee sufficiently resembles the thoughts the speaker intended to communicate." (Carston 2002: 47)

Let me compare these definitions of successful communication with the definition of miscommunication given by Tzanne (2000: 60). She recognizes, after Thomas (1983, 1995) two levels of Speaker's meaning,[1] and schematically represents miscommunication as follows:

[1] For a detailed discussion of the levels of meaning, see Grice (1989 [1957]), Austin (1962), Leech (1983) and Thomas (1983, 1995).

1. S directs utterance U to H with communicative intent X
2. U conveys S's communicative intent X by carrying a specific
   i. utterance meaning (level 1 of Speaker meaning)
      – sense
      – reference
   ii. force[2] (level 2 of Speaker meaning)
      – illocutionary force (Speaker's intent to perform an act)
      – interpersonal force (face considerations and interpersonal relation-ships among interlocutors in the course of an interaction)
      – discoursal force (Speaker's intent as management and organization of a discourse is concerned, as well as to language as a means of constructing a text, and the function of individual utterances in the process of communication)
3. By assigning different meanings to (i) and/or (ii) from those intended by S, H understands U to convey a communicative intent X'.

When we compare the definitions of successful communication within Relevance Theory (especially the one given by Carston 2002: 47) with the definition of misunderstanding/communication failure in non-relevance theories (e.g. Tzanne 2000), then we may realise that what we see as successful communication within Relevance Theory, is considered to be a misunderstanding in other theories. In Relevance Theory, we do not have 100% replication of the initial thought of the speaker. Since there is no 100% replication of an initial thought, if all we have is a mere approximation of what the speaker has in mind, then according to non-relevance theorists, there is no such thing as successful communication in Relevance Theory. From this point of view, it is now quite clear why there is a need for both a definition of misunderstanding and of communication failure within the Relevance Theory.

So we may safely claim that there are three levels of communication – successful communication, communication failure, and misunderstanding. The question that should be posed here is, what the inner relationship between those two latter terms is. It seems possible (Mirecki 2005) that successful

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[2] An utterance usually has one prevalent (main) force and the other two types as accompanying forces (their role is limited by the prevalent force) (cf. Tzanne 2000: 62). For a detailed discussion, see Tzanne (2000), Austin (1962), Schegloff (1987) and Fraser (1983).

communication, basic misunderstanding and communication failure form three levels of equal significance. Now, I would like to propose a slightly different classification. It may be assumed that our communication starts with miscommunication (as understood outside relevance theory – we do not have 100% replication of human thoughts/ideas/intentions in the mind of the interlocutor). Yet, this supposed miscommunication may turn into:

1. Successful communication – when we have conveyed our thoughts sufficiently well, that is our interlocutors have now thoughts similar to ours and behave/perform/think in the way in which we want them to behave/perform/think
2. Communication failure (defined above)
3. Misunderstanding (defined above)

The second principle of relevance (cf. Sperber and Wilson 1995: 260) tells us not to disregard all aspects of communication – and this is precisely what we are doing here – initial miscommunication may turn into successful communication – in the most ideal case. It can also result in communication failure – when the interlocutor initiates some repair procedures, or it can become a semi successful misunderstanding. I deem misunderstanding semi successful, since when we encounter a misunderstanding, we cannot immediately recognize it as something different than successful communication. In both cases we think that the interpretation derived by us sufficiently resembles the thoughts our interlocutor intended to communicate (cf. Carston 2002: 47). Let us have a look at the following example from Tzanne (2000).

> **Context**: George (A) and Crouch (B) have a conversation on two different topics without either of them being aware of this disparity. George is talking about his dead rabbit and Crouch about the murder of a person during the Lib-Dem's party the previous evening.

1	B	*I just came up to see if there was anything I could do, I knew you'd be upset...* [A looks at him] *I got to know him quite well, you know... made quite a friend of him.*
2	A	*You knew about it?*
3	B	I was there, sir. Doing the drinks. It shocked me, I can tell you.
4	A	*Who killed him?*
5	B	Well, I wouldn't like to say for certain... I mean, I heard a bang, and when I looked, there he was crawling on the ground... [A winces] ...and there was Miss Moore... well –

6	A	*Do you realise she's in there now, eating him?*
7	B	### You mean – raw?
8	A	[Crossly] No, of course not! – cooked – with gravy and mashed potatoes.
9	B	### I thought she was on the mend, sir.
10	A	*Do you think I'm being too sentimental about the whole thing?*
11	B	[Firmly] *I do not, sir. I think it's a police matter.*
12	A	Yes! No – They'd laugh at me... There was a policeman here, but he's gone.
13	B	Yes, sir. I saw him leave. I thought that would be him. You were wondering, sir, who brought them round.
14	A	No, I telephoned them myself.
		(*Jumpers*, pp.67-68 after Tzanne 2000: 77.)

The example here is categorized by Tzanne as a topic management[3] type of misunderstanding. With her understanding of the term 'misunderstanding' different from mine, Tzanne (2000: 75) discusses the misunderstandings that are caused by the organization of the discourse. The example discussed here belongs to the topic related subtype, and it is named "maintaining topical coherence at the expense of making sense". It appears when neither Speaker nor Hearer is aware that two topics remain simultaneously active.

The misunderstanding results here (cf. Tzanne (2000: 77–78)) from two intertwined topics – a dead man and a dead rabbit. As the source of the problem Tzanne sees the pronoun "it" which refers both to the death of a rabbit and the man (lines two and three), as well as "him" which refers to the man and the rabbit (lines one, four and six). The participants are unable to see that they are talking about two different subjects and the misunderstanding is not clarified.

Here the relevance theoretic analysis is quite close to Tzanne's one. The definition of communication failure clearly does not apply here – neither of the interlocutors is aware that they are talking at cross-purposes and that there is some kind of problem. The outcome of the conversation (lines eleven to fourteen) clearly shows two different understandings – A is still talking about

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[3] Tzanne's understanding of the term "topic" is that of Brown and Yule (1983).

the dead rabbit, B about the dead human being. Consequently, it is a case of misunderstanding: neither of the interlocutors shows in an ostensive way any problems with the communication.

Relevance Theory allows us to differentiate between communication failure and misunderstanding. Yet there seems to be a problem with the differentiation between successful communication and misunderstanding. The speakers are not aware that they are talking at cross purposes, they both think that their interpretation sufficiently resembles the thoughts our interlocutor intended to communicate (cf. Carston 2002: 47) – only later they learn that what they have encountered is a misunderstanding. My third condition of misunderstanding above "after the conversation, interlocutors (or at least one of them) show(s) in an ostensive way that their understanding of the message conveyed is different than the intended interpretation." allows us to come back to the level of miscommunication – the starting level for any communication. If one of the interlocutors shows in an ostensive way that there was a misunderstanding, then there is a chance for the second interlocutor to initiate the correction and achieve the required resemblance of the initial thoughts.

As a result, it may be concluded that misunderstanding precedes successful communication. This view is quite tempting for me for a few reasons. Firstly, Sperber and Wilson (1995) see successful communication as an exception to the rule – if what we see as communication starts with misunderstanding, then this view would be fully justifiable. Secondly, seeing successful communication as a "result" of misunderstanding, would allow us to create a uniform classification not only of misunderstandings and communication failures, but also of "successful communication". Let me rephrase it – I would like to claim that all our communication starts with a misunderstanding, which in the majority of cases leads to successful communication. As a result, I would like to propose the following view on the communication process. What we have are three levels of communication process:

I.   Level 1 – successful communication.
II. Level 2 – basic misunderstanding.
III. Level 3 – communication failure.

In the communication process what we start with is Level 2 misunderstanding. Then, we have three possibilities – misunderstanding can turn into successful communication (Level 1), when both interlocutors have the right

feeling that they have conveyed and received messages in an appropriate way and act according to the information conveyed; it can turn into communication failure Level 3, or it can remain at Level 2. If it changes into Level 1, we have successful communication. If it does not, we have then two possibilities – interlocutors may realize that there is a misunderstanding and show this ostensively – then we have Level 3 of communication process, that is communication failure. On the other hand, interlocutors may not have such realization, and then we stay on Level 2 of the communication process. In the case of Level 3 of communication process, attempts at failure clarification and repair bring us to the initial stage of communication.

Another difference between Level 2 and Level 3 of communication process is that for a misunderstanding to become Level 3, the revelation that there is a communication failure must occur within the same talk-exchange or within some period of time. I am not going to limit this period of time here. Since I assume full transformability of Level 2 into Level 3, any such limit seems to be unnecessary. In other words, all the cases of Level 2 are prone to be changed into Level 3 – and this process is not time-limited. On the other hand, Level 2 does not require any realization, that the speakers are experiencing a misunderstanding. Consequently, the most typical kind of miscommunication is Level 2, namely misunderstanding, which under certain conditions may become Level 3 or/and consequently, Level 1 and lead to successful communication.

Moreover, for the interlocutors it is impossible to distinguish between Level 2 and Level 1. In both cases they think that they have successfully communicated. What differentiates these two cases is that in the case of Level 2, they may later ostensively show that their understanding of messages conveyed differs considerably.

As I have said before, it is very probable that a misunderstanding changes into communication failure, yet it is impossible for the change to go the other way round – from communication failure we may only move to the initial stage of communication. Communication failure appears when the interlocutors realize that it has occurred. On the contrary, misunderstanding appears when neither of the interlocutors realizes that communication is not successful. As such, misunderstanding turns out to be very similar to successful communication. What differs them is that in the case of successful communication both participants in the process behave/think/perform in a way

that is expected by any of them, whereas in the case of misunderstanding, the outcome is contrary to the expectations.

In the paper I tried to achieve the following. Firstly, I tried to show how my definition of misunderstanding and communication failure work and interact with one another. Secondly, I tried to show that misunderstanding should be placed on the scale ranging from successful communication to communication failure. As a result, my definition of misunderstanding fits and complements a more general schema of the communication process. Yet, t misunderstanding and communication failure, as well as their relation to successful communication, still remains open to further investigations.

References

Carston R., *Thoughts and Utterances*, Blackwell, Oxford 2002.

Mirecki P., "Communication "failure" – a definition and a classification within the Theory of Relevance". In: E. Mioduszewska (ed.), *Relevance Studies in Poland*, Vol. 1, Institute of English Studies, Warszawa 2004, 67–87.

Mirecki P., "Misunderstanding: a Starting Point for Successful Communication – a view from relevance-theoretic perspective". In: A. Korzeniowska and M. Grzegorzewska (eds.), *Relevance Studies in Poland*, Vol. 2, Institute of English Studies, Warszawa 2005, 45–51.

Sperber D. & D. Wilson, "Rhetoric and relevance". In: J. Bender & D. Wellbery (eds.), *The Ends of Rhetoric: History, Theory, Practice,* Stanford University Press, Stanford 1990, 140–156.

Sperber D. & D. Wilson, *Relevance: Communication and Cognition*, Blackwell, Oxford 1986/95.

Tzanne A., *Talking at Cross Purposes*, John Benjamins, Amsterdam, Philadelphia, 2000.

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Application of relevance theory and psychological theory of attention to L2 classroom communication

1. Voluntary and involuntary attention in relevance theory and cognitive psychological theory

According to Relevance Theory (Sperber and Wilson 1995), human beings automatically pay attention to the most efficient information, that is, the information that will enable them to arrive at contextual assumptions with the smallest expenditure of energy[1]. The process of paying attention is understood primarily as an involuntary automatic process. If attention is paid to particular input, it is relevant for the hearer. According ro Sperber and Wilson, input is relevant when it produces enough contextual effect for the least processing effort. In other words, in order to comprehend the speaker's intention expressed in an utterance, the hearer has to arrive at contextual assumptions on the basis of his/her present knowledge, without putting too much effort into the process. Contextual assumptions and contextual effects refer to the hearer's use of his/her knowledge in the context of particular communication, that is taking into consideration the speaker's identity and the circumstances in which the utterance is produced.

The hearers interpret the utterances they have heard according to the rationality principle, which postulates that the first acceptable interpretation of an utterance is the only acceptable interpretation. That is what Sperber and Wilson call the Cognitive Principle of Relevance (Wilson and Sperber 2004). However, the hearers have to choose the context for utterance interpretation (see

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[1] This paper includes ideas elaborated by the author in her book *Input for Instructed L2 Learners: The Relevance of Relevance* (Niżegorodcew 2007).

Jodłowiec 1991: 76). According to this view, and in accordance with Relevance Theory, we can claim that the interpretation process is partly voluntary.

Also in cognitive psychological theory of attention the process of paying attention has two sides: involuntary and voluntary. Posner distinguishes between involuntary attention, associated with the automatic orienting mechanism and voluntary attention, associated with the control mechanism (Nęcka *et al.* 2007). In accordance with developmental psychological theory, adult and adolescent L2 learners are able to control voluntarily their attentional processes, whereas in the case of children, attention is mostly involuntary.

In psychological theory, selectivity is a fundamental feature of attention. It refers to the ability to choose one stimulus instead of another at a given time (Nęcka *et al.* 2007). It is connected with the shifting of attention between stimuli as well as dividing attention between them. Paying attention is viewed as a process of narrowing down the input since the cognitive system is able to process only a fraction of the stimuli which reach it at any given time. The role of attention is to filter out some of the information which reaches the cognitive system. The filter blocks the unimportant information and it lets the important one in.

Different psychological models treat the level of information selection and the fate of the rejected information in different ways. For instance, from the relevance-theoretic perspective, an interesting cognitive theory of selective attention has been proposed by Anne Treisman – the "attenuator model". According to Treisman, less important information is weakened at an early stage of information processing, but it is not fully rejected. Selection occurs in three stages: the first stage is pre-attentive: the information which fulfils some preliminary criteria is selected and the remaining information is preserved in a weakened form. The next stage consists in matching the selected information with the existing mental representations, while the remaining information is further weakened. The final third stage of the process of selection involves conscious focus of voluntary attention on the most important information. Treisman's theory underlines the semantic principle of information selection.

Another attention theory – the model of attentional resources, equates attention with distribution of mental energy resources. The conception links attention with a cognitive effort required to perform a given task. Automatic involuntary tasks require less energy than tasks controlled by voluntary attention.

The above psychological models of attention have clear affinities with ideas expressed by the authors of Relevance Theory. According to Relevance Theory, it can be said that some information is not relevant enough at one moment, but provided the hearers are ready to put more effort and/or find more contextual assumptions, it can become relevant enough at the next moment. Let us reflect on attention in L2 teaching to adolescents and adults as a system selecting formal accuracy and/or fluency as changing focuses in L2 classroom communication.

2. Focus on fluency and/or accuracy in L2 classroom communication

The Communicative Approach with its recent modifications, such as Task-Based Language Learning , has been an approved L2 teaching methodology for the last thirty years. It is credible that the crucial paradigm shift in the 1970's was the shift of focus from teaching a language code, that is, developing learners' knowledge of and skills in L2, to teaching how to communicate with other L2 speakers. One of the main theorists of the Communicative Approach, Henry Widdowson (1978), claimed that instead of teaching the language code, teachers should develop communicative skills.

In contemporary L2 classrooms, the Commuicative Approach is taken for granted[2] and classroom oral communication is the crucial concern of the teachers. However, it is the area of L2 practice, where there is perhaps the greatest tension between what was considered traditionally the focus of L2 teaching, that is concern with language forms and practising accuracy, and what the Communicative Approach has considered its main responsibility, that is communication of meanings and practising fluency. Additionally, a seepage of ideas from Second Language Acquisition (SLA) theory and research on the role of input and interaction for L2 learning has underlined the double nature of L2 classroom communication, as focusing the learners' attention on L2 forms and/or on L2 meanings (see Doughty and Williams 1998).

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[2] The approved status of the Communicative Approach does not preclude, of course, that in some L2 classrooms teachers focus entirely on the L2 code, following the Grammar-Translation Method, or that in some language courses they teach according to modern versions of the Audio-Lingual Method, e.g. the Callan Method.

In L2 classrooms, attempts to completely give up focusing on L2 forms in favour of communicative practice have not been successful. In other words, it has been discovered that it is impossible to completely abandon accuracy practice in favour of fluency practice. Consequently, the L2 classroom makes allowances for focusing on formal accuracy in otherwise fluency focused practice. However, the question arises how to focus the learners' attention on forms in order not to interfere with classroom communication.

The Integrated Theory of L2 Learning (see Ellis 1990) underlines the learners' active role in attending to meaning-focused and /or form-focused input. According to Ellis, "teachers shift the focus as the lesson unravels – at one moment engaging the learners in meaningful communication and at another directing their attention to the linguistic code" (Ellis 1990: 188).

Similarly, the Cognitive Focus-on-Form Approach (CFonF) (see Long 1991) puts stress on L2 forms as they are learned and/or acquired in L2 classroom communication. An advocate of the approach, Catherine Doughty (2001: 249), makes an interesting case for the existence of "small cognitive windows of opportunity", through which L2 teachers could intervene by focusing the learners' attention on form in otherwise meaning-focused activities. The questions that are asked by CFonF researchers concern the time when shifts of attention from meaning (fluency practice) to form (accuracy practice) should occur. In other words, when L2 teachers should intervene in L2 classroom communicative activities. Another equally important pedagogical question refers to the form of teachers' corrections. Are they to follow learners' erroneous utterances immediately or should they be postponed? Should teachers' corrections following learners' errors have the form of corrective repetitions (recasts) or should they be more explicit?

It follows that the teacher as a manager of L2 classroom communication focuses the learners' attention on fluency and/or on accuracy. He/she switches the focus from L2 communication to the L2 code and *vice versa.* I would like to suggest that L2 teachers should be more aware of the processes involved in L2 classroom communication management and in the functioning of L2 learners' attention. Relevance Theory and cognitive psychological theory can provide a conceptual framework to make teachers realize the underlying processes involved in paying attention to L2 classroom communication.

3. Drawing L2 learners' attention to forms and/or meanings

One of the L2 teacher's roles is directing learners' attention, depending on the aim of the teaching activities, either to formal accuracy of sounds, structures and vocabulary, or to fluency, that is to the meanings to be conveyed in L2 classroom communication.

During L2 classroom communication two inappropriate teachers' approaches have been observed (Niżegorodcew 2007). One of them involves focusing L2 learners' attention only on the general requirements of a task, without paying attention to accuracy of expression and real communication (e.g. "Please, fill in a questionnaire about what is your favourite food. It does not matter what you say as long as you use vocabulary items referring to the food.")

The other approach consists in focusing learners's attention exclusively on formal accuracy and disregarding communication and fluency (e.g. The teacher responds to a perfectly understandable question which has a minor grammatical error: "I won't answer your question unless you repeat it in the correct form.") The former approach impairs accuracy and the latter is harmful for fluency development. Both have detrimental effects for real L2 classroom communication.

A good L2 teacher should be able to keep balance between focusing learners' attention on accuracy of forms and on the messages these forms convey. If the teacher is focused first and foremost on general requirements of tasks, learners are likely to disregard accuracy. On the other hand, if the teacher is concerned only with correctness of forms, learners do not pay enough attention to fluent communication. However, if the teacher combines fluency and accuracy practice by asking clarification questions, or by explicitly correcting erroneous forms, the learners focus their attention on those forms and are likely to remember them, being at the same time focused on the meanings. The following L2 classroom communication excerpt illustrates the double purpose of L2 teachers' input: focusing the learners' attention on L2 forms in order to enable them to fluently express meanings.

(L2 learners are discussing national stereotypes.)
T: *Now let's think about Poles.*
S: *They are hostile.*
T: *Could you explain what you mean?*

S: *They like people when they come to them.*
T: *You mean they like having quests, they are not hostile, but . . .*
S: *Oh, yes, hospitable*, *zawsze to mylę* /I always mix them up/.
(Fryc 2000: 113)

The teacher elicits self-correction through a clarification request followed by an explicit feedback comment. She makes the student focus on the incorrect lexical item and facilitates the learner's search for an item beginning with the same sounds. Had the teacher provided the required word herself, she may not have shifted the learner's attention to the form for a sufficient time to be noticed. The learner's L1 comment shows her momentary focus on the two similar forms she has realized she is likely to confuse.

4. Relevance Theory and cognitive psychological theory applied to L2 classroom attention allocation

Both cognitive psychological theory and Relevance Theory can be applied to L2 classroom shifts of attention between formal accuracy and fluency. According to the "attenuator" model, the incorrect forms, which are first treated as "weaker" stimuli, can be attended to when they become more important for the learners after the teacher has paid attention to formal correctness.

As has been said before, formal features of L2 classroom communication are disregarded as long as learners' attention is focused only on fluency practice. However, if they interpret L2 classroom communication as instructional input, in which communicative and corrective functions are much more closely linked than in everyday communication, they are much more aware of L2 forms. Since adults and adolescents are able to voluntarily allocate attention, L2 learners can be directed to the required aspects of the L2 input.

The linguistic data L2 learners hear: teacher talk, peer talk, as well as spoken and written teaching materials, focus their attention not only on the meaning, but also on the unknown forms, first of all on unknown vocabulary items. The teacher either anticipates those moments of ignorance and provides additional information beforehand in pre-listening and pre-reading activities, or she provides corrective input more or less explicitly after the errors have been made. L2 corrective feedback, stemming from *ad hoc* situations,

learners' errors and language problems, focuses the learners' attention on the forms of the messages, which otherwise could be disregarded.

SLA theorists claim that L2 learners must notice the gap between their non-native-like forms and the target forms made salient by the teacher. According to Doughty (2001: 229) such noticing is possible due to the cognitive resources L2 learners possess, one of which being a cognitive preference for re-utilizing recent speech. This solution, however, does not seem to be optimal because L2 learners may misinterpret teachers' recasts, treating them not as corrections but as echoing of their own answers by the teachers. More effective corrections seem to be those which are more explicit and followed by the learners' self-correction (see Czekajewska 1999; Havranek and Cesnik 2001).

The tension between accuracy and fluency could be interpreted in the light of RT as choosing a context of existing assumptions to interpret teachers' utterances while searching for their optimal relevance. Optimal attention control in L2 classroom communication involves meaning focus, with the "weaker" formal information being present in the attention scope. Whenever formal correctness is required, as in clarification requests, comprehension checks or explicit corrections, the weaker information can be "strengthened" and can become an atttention focus.

Let us consider an example of an L2 exchange coming from a content lesson conducted in L2 (Mazur 2000).

A physics teacher uses an unknown word " *a spark plug*". A learner asks a clarification question with a rising intonation "*Spark*?" First, the teacher interprets the question as a request for repetition of the vocabulary item the learner has not heard. However, after a moment of reflection, the teacher realizes that the learner may not have known the word and he uses a comprehension check: "*You know what a spark is*?" Obviously, the ability to realize potential difficulties in communicating meanings due to an incomplete knowledge of the target language is an indispensable teaching skill of L2 teachers.

Let us take another example from L2 communication. If a learner asks a real communicative question in an erroneous form *You think was the film good?,* and the teacher tries to elicit her self-correction by saying *What do you mean*?, the learner may interpret the teacher's question as a clarification question and repeat the same question again with the title of the film *You think was Harry Potter good?* However, after a moment of reflection, she may realize that the teacher is interested first of all in grammatical accuracy,

and she is likely to self-correct *Do you think that the film was good?* The learner's attention is first of all focused on the meaning of her question. Later, however, the retained, weaker formal features of her utterance might produce enough contextual effect to appear relevant to the learner, who would focus her attention on grammatical accuracy and self-correct.

Conversely, the teacher could be primarily focused on the accuracy of learners' language, and, accordingly, interpret it as formally correct or incorrect, notwithstanding the meanings the learners tried to convey.

According to the CFonF Approach, L2 classroom input is most useful for acquisition when it is focused on meaning and on form. I would like to expand this view in the light of Relevance Theory, claiming that focus on form in L2 classroom communication, in other words, focus on fluency and accuracy, can be interpreted as moving to a higher level of expected optimal relevance.

It could be claimed that Relevance Theory involves different levels of expected optimal relevance, relative to the processing effort needed to reach contextual effects. Simultaneous focus on accuracy and fluency requires an increased expenditure of energy. We could claim that since the expected level of relevance should always be optimal, if the teacher focuses on accuracy, according to the Principle of Relevance, she communicates to the learners that she intends them to believe that she communicates something that is optimally relevant to them at a given moment. Consequently, although the teacher may not succeed in being relevant, the learners who believe that the teacher at least tries to be relevant are likely to focus on accuracy. Conversely, if the teacher does not take care of correctness of forms, she communicates to the learners that communication and fluency are optimally relevant at that time.

Additionally, if the teacher uses L1 in metacommunicative utterances (commenting on the communication or on the L2 code), especially repeating in L1 what has been communicated in L2, she indicates that L1 communication is optimally relevant at that moment, in other words, that the level of expected optimal relevance has been lowered, and, consequently, the learners stop paying attention to L2 metacommunication, which automatically becomes less relevant.

From what has been said above it follows that the teacher's role is crucial indeed. It is the teacher who focuses the learners' attention on fluency and/or

on accuracy. As a manager of L2 classroom discourse and, in particular, communicative activities, the teacher's input communicates its own optimal relevance in a given function of classroom discourse.

When the teacher combines fluency and accuracy practice, and she makes learners attend to L2 forms while simultaneously focusing on a role-play or discussion topic, she communicates to them moving to a higher level of expected optimal relevance. At such a higher level of expected optimal relevance, the learners are informed that the teacher is not satisfied with incomplete or faulty communication, consequently, that the learners are expected to pay attention to formal correctness as well.

5. Conclusion and pedagogical implications

Clear affinities could be found between Relevance Theory and psychological models of attention in their treatment of voluntary and involuntary attention. Both approaches view attention as automatic, involuntary process, which may be directed through voluntary attention allocation. Combining psychological theory and Relevance Theory, we could say that L2 teachers' control of learners' voluntary attention in the L2 classroom context is facilitated by the automatic orienting mechanism, that is involuntary attention allocation. In order to optimally allocate learners' mental energy resources, the L2 teachers should provide contextual assumptions referring to the learners' knowledge and experience. In L2 classroom communication such optimal attention allocation would mean personalization of tasks and reference to recent and familiar experiences and topics, that is, the information known from other school courses, including L2 learning, and from personal life.

I believe that the specific nature of L2 classroom communication, stemming, as has been said before, from a fundamental conflict between a focus on communication and a focus on the target language as a code, can be interpreted in the light of Relevance Theory as a partly automatic and partly voluntary process of learners' searching for optimal relevance of the teacher's utterances. Likewise, cognitive psychological theory, with its double focus on voluntary and involuntary attention processes, can elucidate the double nature of L2 classroom communication: focusing learners on fluency and/or on accuracy.

References

Czekajewska A., *The effectiveness of spoken error correction in secondary school L2 classes*, unpublished MA thesis, Jagiellonian University, Kraków 1999.

Doughty C., "Cognitive underpinnings of focus on form". In: P. Robinson (ed.), *Cognition and second language instruction*, Cambridge University Press, Cambridge 2001, 206–257.

Doughty C. & J. Williams (eds.), *Focus on form in classroom second language acquisition*, Cambridge University Press, Cambridge 1998.

Ellis R., *Instructed second language acquisition*, Blackwell, Oxford 1990.

Fryc A., *Using communicative activities in Polish secondary schools*, unpublished MA thesis, Jagiellonian University, Kraków 2000.

Havranek G. & H. Cesnik, "Factors affecting the success of corrective feedback". In: S. Foster-Cohen & A. Niżegorodcew (eds.), *EUROSLA Yearbook*, Vol. 1, John Benjamins, Amsterdam 2001, 99–122.

Jodłowiec M., *The role of relevance in the interpretation of verbal jokes – a pragmatic analysis*, unpublished PhD dissertation, Jagiellonian University, Kraków 1991.

Long M., "Focus on form: a design feature in language teaching methodology". In: K. de Bot, R. Ginsberg & C. Kramsch (eds.), *Foreign language research in cross-cultural perspective*, John Benjamins, Amsterdam 1991, 39–52.

Mazur J., *Bilingual education at the secondary school level in Kraków*, unpublished MA thesis, Jagiellonian University, Kraków 2000.

Nęcka E., J. Orzechowski & B. Szymura, *Psychologia poznawcza*, Wydawnictwo Naukowe PWN and Academica Wydawnictwo SWPS, Warszawa 2007.

Niżegorodcew A., *Input for instructed L2 learners: The relevance of relevance*, Multilingual Matters, Clevedon 2007.

Sperber D. & D. Wilson, *Relevance: Communication and cognition*, Blackwell, Oxford 1986/95.

Widdowson H., *Teaching language as communication*, Oxford University Press, Oxford 1978.

Wilson D. & D. Sperber, "Relevance theory". In: L. Horn & G. Ward (eds.), *Handbook of pragmatics*, Blackwell, Oxford 2004.

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Concepts reflecting aesthetic judgments in blind children

1. Introduction

The paper offers a description of an experimental study conducted on a group of blind children concerning their understanding of selected evaluative terms. The terms examined included *pretty*, *beautiful*, *handsome*, and *cute*, i.e. expressions whose meaning is intrinsically connected with visual stimuli. The theoretical framework for the analysis is provided by Relevance Theory.

For some years now I have been teaching English to visually impaired children at classes organized by the Polish Association for the Blind, and the classes have provided an opportunity for me to find out about the linguistic and cognitive development of children with visual impairments. It is known that partial vision, and especially lack of vision affects both cognitive processes and language acquisition (cf. Finello et al. 1992), and the concepts directly connected with visual stimuli are most likely to be incomplete or at least differently represented than in sighted individuals. This time a group of three children aged 11–12 were learning adjectives expressing aesthetic judgments. The setting of the experiment, i.e. the fact that it was an English class imposed the limitation on the number of individuals that could be examined, since the topic suited this particular group's learning schedule.

The aim of the activity was twofold: by learning about blind students' understanding of the world it is possible to recognize their needs and develop optimum methods and techniques of working with them, and possibly to get some insight, however limited, into what can generally be known about concepts. Hoping that this may be so I shall present a brief and necessarily fragmentary overview of the treatment of concepts in Relevance Theory in

Section 2, then the study will be discussed in Section 3 and its implications will be suggested in Section 4.

2. Concepts in Relevance Theory

According to the early formulation offered by Sperber and Wilson (1986/ 95), a concept is viewed as a mental entity consisting of three entries: lexical, logical and encyclopaedic. The lexical entry can be described as an address in memory giving access to logical and encyclopedic information stored under this address. The logical entry provides the indispensable core of a concept's meaning, by specifying logical relations into which this concept may enter. Logical entries, which could also be compared to dictionary definitions, have to be fully acquired by speakers of a language, or otherwise a concept cannot be considered to be properly understood. It follows that logical entries are constant across speakers. Encyclopedic entries, on the other hand, are open-ended and specific to an individual, they can also evolve in the course of life. Although it was not explicitly stated at that time that mental concepts are subject to contextual fine-tuning when used in utterances, the early view admitted such as possibility, as it was stated elsewhere (Sperber & Wilson 1986/95, Ch. 4) that pragmatic enrichment was one of the processes involved in developing the logical form of the utterance, so that vague or incomplete terms, such as *too young* have to be contextually enriched in order to contribute any specific meaning to the explicature.

It was also mentioned that not every concept must necessarily have all the three entries, since there are concepts which are relatively salient in the minds of speakers and which are not lexicalized. In another paper Sperber and Wilson (1998) suggest that the concept *uncle/aunt* could be such an example. It is indeed plausible that one could have a joint mental representation of uncle and aunt, as there are numerous common assumptions characterizing uncles and aunts. Another example is the concept siblings, which is not lexicalized in French, or the concept corresponding to the English words *nephew* and *niece*, which are not lexicalized in Polish, as in each case one's sister's children are named differently from one's brother's children.

The paper mentioned above, titled 'The mapping between the mental and the public lexicon' (Sperber and Wilson 1998) makes stronger claims

and brings new insights into the relationship between mental concepts and natural language items (lexical entries). The authors express the view that there are not just more, but significantly more stable concepts than words, so that the mapping of the mental lexicon into the public lexicon is necessarily partial. The argument goes that since the absorption and categorization of new information in the mind of an individual is faster than establishing new shared items in the natural language, then not every concept that is created in the minds of speakers will be reflected in the language of a community, or at least not immediately and not necessarily .

Another important claim is that a number of words do not encode fully specified concepts but rather pro-concepts or pointers to a range of concepts. The verb *open* is given here as an example, and it is argued that as the activity of opening a bottle is different from opening a washing machine (and still different from opening the window, etc.), so it is reasonable to talk about the pro-concept corresponding to the verb *open* whose interpretation is adjusted to the context on each occasion of use. As far as I understand the motivation behind introducing the term pro-concept, it is meant to develop the initial formulation of the term concept without really altering it, by reflecting the linguistic indeterminacy of most lexical items and emphasising the role of contextual processes in specifying their meaning. Looking at the verb *open* it is impossible to represent to oneself an act of opening per se, without at the same time representing the object and way of performing this act. Although it is not specifically explained how the term pro-concept relates to the distinction between logical and encyclopaedic entries, I assume it does not affect this basic distinction. I would consider it tempting to believe that the idea of words encoding pro-concepts pertains to encyclopaedic information and practically it means that one cannot expect to have a general mental representation, or a prototypical image, or in fact any default representation of opening as such. However, it is also possible to relate the idea of pro-concepts to the logical entry, which would be consistent with the view that some, or in fact most, logical entries do not provide exhaustive definitions of concepts.

The position that words encode pro-concepts is maintained by Carston (2002, 2002a), who argues that the actual range of occasion-specific meanings of a word, such as *happy* is so wide that the lexically encoded concept HAPPY

'is distinct from all of these; it is more general and abstract than any of them, but

provides the basis, in appropriate contexts, for processes of pragmatic enrichment so that addressees can come to grasp one of the more specific concepts and incorporate it into their representation of the speaker's thought. But what is not at all clear is whether we ever actually have (hence sometimes try to communicate) thoughts in which this very general lexicalised concept features as a constituent" (Carston 2002a: 98–9).

It is therefore reasonable to assume, according to Carston, that a lexical item 'does not encode a concept, but rather 'points' to a conceptual region, or maps to an address (or node, or gateway, or whatever) in memory.' She goes on to say that 'there is a sense in which all concepts are ad hoc'. It is important to note that the argument used by Carston for the pro-concept view (and against the full-fledged concept view) is that such vague mental constructs, as the general understanding of the adjective *happy*, do not figure as constituents of thoughts. This is connected with the view maintained in relevance theory that truth-theoretic semantics operates on fully propositional mental representations, such as explicatures, and not on linguistic representations, which are incomplete. Only constituents of fully propositional representations are capable of corresponding to bits of reality, or to other representations, so only they can be called concepts proper. It follows that Carston takes the definition of concept as 'constituent of mental representation' rather than 'address in memory', which she in turn treats as definition of pro-concept. In *this* sense, indeed, all full-fledged concepts must be ad-hoc concepts. It can be noted that introducing the pro-concept/concept distinction does not really involve a significant change in the relevance-theoretic treatment of concepts but it rather marks a shift in focus connected with the development of lexical pragmatics, which highlighted the role and ubiquity of on-line concept adjustment.

Therefore, it seems that the objection

'if 'word meaning' is not a concept but merely a pointer TO concepts, do we need–in fact, can we have–any notion of either 'narrowing' or 'loosening'? Surely, those notions only make sense if 'word meaning' is taken to consist in 'a concept' (which might then need to be narrowed or loosened)'

raised by Burton-Roberts (2005: 404) may not be, after all, such 'an intriguing conjecture whose implications merit further exploration' (Burton-Roberts 2005: 404), if we simply consider the term 'pointer to concepts', i.e. pro-concept as another label for 'what is encoded', which remains in opposition to 'ad hoc concepts', and which brings about the fact that 'what is encoded' is never specific enough to figure as a constituent of one's thoughts. What matters though, is that the division is still two-partite, into pro-concepts and (ad hoc) concepts, that is, no distinct third category, such as 'encoded full-fledged concept' is postulated. Should such entities exist (symbols of chemical elements?) they would be treated as providing the end of a specificity scale in the whole set of encoded pro-concepts.

Another issue discussed by Burton Roberts (2005) in her review of Carston's (2002) book is related to the actual type of encoding employed for (pro-)concepts. She considers two types of encoding: C-encoding, where C stands for 'constitutive' encoding, in which case concepts would have to encode bits of conceptual representations of which they are constitutive parts, and L-encoding, in which case concepts would encode words of natural language. Burton Roberts concludes, though not without hesitation, that the L-encoding view is more compatible with the whole set of Carston's theoretical claims. This conclusion is not only right, it is inevitable, in the light of what has been discussed in the paragraphs above and in the light of Carston's own statement:

> [I]t seems that the 'concepts' encoded by bits of lexical phonological material are a rather different kind of thing from the concepts that feature as ingredients in our thoughts (Carston 2002: 361), quoted also by Burton-Roberts (2005: 405).

Summing up the discussion on the development of the notion of concept in relevance theory it seems reasonable to state the relatively recent relevance-theoretic contributions concerning this notion did not in fact undermine Sperber and Wilson's initial (1986/95) formulation. These developments should be seen in terms of change of focus rather than genuine modifications.

It can be stated that the relevance-theoretic view on the nature of concepts combines the expectations and intuitions of an ordinary language user with more cognitively realistic and accurate claims. A language user will tend to say that there are bears in the world, that people have the concept BEAR,

and that the word *bear* corresponds to this concept. This intuition is grasped by postulating the encoded concept, or address in memory, having a logical entry and pointing to encyclopaedic information about bears[1]. On closer examination it will be observed that whenever the word *bear* is used, it is meant as some ad hoc concept. Let us also note that the relevance-theoretic position can be treated as a development of the idea endorsed by Wittgenstein (1953/1999), namely that at least some concepts are structured by family resemblance. The concept GAME was believed to be one, since when we look at various uses of the word *game* we will notice that they may not have any common denominator. Therefore, Wittgenstein concluded there are not necessary and sufficient conditions of the membership in the category GAME. Applying the relevance-theoretic apparatus we could say that the lexical pragmatic processes are responsible for the contextual enrichment of the lexically encoded pro-concept *game* so that it can correspond to different mental representations on various occasions, as was illustrated by the verb *open*, the adjective *happy,* etc.

3. The study

As stated before, due to its restricted range, all the study can aspire at is pointing to the direction of how experimental research could contribute to the understanding of concepts. It goes without saying that for congenitally blind individuals such words as *pretty* or *beautiful* do not correspond to the same mental entities as for sighted individuals, neither at the level of encoded concepts, nor at the level of their contextually specified ad hoc counterparts. It was assumed that the four words encode four different concepts, and, consequently, that they correspond to four distinct logical entries and four, though definitely overlapping, encyclopaedic entries. The reason why this assumption was made is that the intuition that these words are not synonymous is strong and supported by linguistic evidence. In some contexts *beautiful* can be used in opposition

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[1] In this respect, i.e. to common-sense intuitions relevance theory has an advantage over such views as cognitive grammar, which defines language as a conventional inventory of units, without making a distinction between encoded concepts and ad hoc concepts, or between logical entries and encyclopaedic information (Langacker 2000).

to *pretty*, as in *This girl is pretty but not beautiful*, where both terms mark regions at a scale, with *beautiful* being stronger. There are also oppositions not implying scalar interpretation, such as *Babies may be cute but not beautiful*. Although then I am not able and I would not venture to specify the content of each logical entry, it seems rather obvious that they are distinct.

Besides, it has to be stated that the utterances including the words were meant to be simple, they referred to generic rather than specific descriptions so that literal interpretations were invited and relatively little contextual fine-tuning had to take place. As the only plausible method of demonstrating the meaning of these words seemed to translate them into Polish, the children could easily transfer all the knowledge and associations from their native language to English, which was exactly what was expected of them, since the Polish items are exact lexical equivalents of the English ones.

Having made those initial remarks, let me move on to a more detailed analysis of the experiment.

First, the children were presented a set of statements, which they were to mark as 'true' or 'false'. Below are the statements together with the judgments:

1. *Flowers are beautiful,* True
2. *Eggs are beautiful*. False
3. *Easter eggs are beautiful* True
4. *Footballers are handsome*. True
5. *Mercedes is handsome*. False
6. *Puppies are cute/Babies are cute* True
7. *Snakes are cute/Lizards are cute*. False
8. *Houses can be pretty.* True
9. *Onions are pretty.* False
10. *Chocolate is pretty.* False

The three children agreed in their responses to the above statements. Additionally, one girl made the comment to the effect that snakes can be cute if they are not poisonous. The true/false judgments show that the children are capable of applying the aesthetic terms correctly, and that they can in fact grasp their meaning really well. It is clear that they are aware that the words *pretty*, *beautiful*, and *handsome* denote visual properties, and not just positive values, since the term *pretty* is not applicable to chocolate. The responses also show the children's awareness of the fact, there is nothing inherently

aesthetic in ordinary objects like eggs or onions, but when such objects are intentionally used for aesthetic purposes, they acquire those properties (cf. *Easter eggs are beautiful*, *Houses can be pretty*, i.e. when they are nicely decorated). The comment about snakes shows that *cute* is considered to be to some extent also a behavioural, and not only visual, property, as poisonous snakes are not cute.

In another task the children were invited to make up their own utterances using the evaluative words. They came up with the following:

> *A model is beautiful… A dog is beautiful … A footballer is handsome ….*
> *A kitten is cute*

The children produced few utterances, one of which was a repeated statement from the previous task, but the utterances seem to support the initial impressions.

In the next task the children were asked to choose the odd one out. Their responses, again consistent, were as follows:

- *Big fat ~~cute~~ small*
- Young ~~beautiful~~ old new
- Intelligent funny happy ~~pretty~~
- Handsome beautiful ~~tall~~ pretty

'Choose the odd one out' is a standard vocabulary exercise, which is generally enjoyed by young learners. The results clearly bear out the assumption that the children are capable of singling out the aesthetic element as the property which differentiates the words in question from other terms. Although *young* and *beautiful*, or even *new* and *beautiful*, often co-occur in utterances, *beautiful* is chosen the odd term as the only one carrying the aesthetic load, and not *old*, which could also be potentially seen as contrasting with the others. It seems that the understanding of these terms goes beyond memorizing standard set phrases and collocations.

In yet another task comparisons were made between objects. Below are the questions and responses elicited:

> *Which is prettier, a sunflower or a rose?*

'A rose'. (It simply turned out that the rose is more familiar to the children, it functions as their prototype of a beautiful flower.)

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Which is prettier the Mercedes or the Fiat?

Here the responses were 'I don't know' and 'The Fiat, we used to have one and it was very reliable'. For the first time the latter utterance shows that the word *pretty* was applied in a non-standard way, referring to the quality of the car rather than its shape. Actually, I expected a response based on the stereotypical assumptions on car makes, such as that the Mercedes is more expensive and prestigious, so by extension it should be prettier. Apparently the assumptions based on personal experience were more relevant here.

A flower is prettier than a fish

The children spotted the oddity of this comparison and tried to amend it by specifying that a fish must be a goldfish. Here the same comment applies as was made in connection with (*Easter) eggs are beautiful*.

Which is more beautiful – jive or waltz?

The question appeared here because I know that the children attend dance classes as a form of therapy. The girl who likes dancing very much and who gets really excited when she talks about her future career as a dancer said that the word *beautiful* is not applicable to dances. The reason why she believed that dancing was not a matter of beauty could be that in terms of her own personal experience dancing involved different emotions, those induced by music, i.e. auditory stimuli, and motion, i.e. kinesthetic stimuli, and the property of being beautiful was associated with visual stimuli. The girl treated dancing from the perspective of a dancer and not of a viewer. She assumed this perspective although on a different occasion she said that her favourite TV programme was 'Dancing with the Stars'.

Finally, I would also like to mention a few statements I heard from the children in an informal conversation we had in Polish. When I asked them why they liked spring and why spring was believed to be the most beautiful time of year they produced the following responses (translated here into English):

'Because birds start singing early and you know it's dawning'.
'Because it gets warmer'.
'I like the smell of spring'.

Apparently, when asked about their own opinion, and outside the confines of a language exercise, the children came up with the responses which showed their idiosyncratic understanding of the concept beautiful. No one mentioned flowers or leaves not because they do not know that most flowers bloom in spring but the blooming of flowers does not really contribute to the beauty of spring.

4. Conclusions

One has to be cautious when trying to interpret the results like the above, so anything that will be said here is of speculative character. Nevertheless, it seems that the following conclusions are legitimate:
– In the general statements including evaluative concepts, the responses produced by the children did not show any idiosyncratic features. They were what we could expect of their sighted peers. It can be explained by the fact that concepts used in statements of the type *Flowers are beautiful* require little contextual adjustment so that the ad hoc concept is close to the encoded concept.
– In the less controlled tasks were more personal opinions were invited, idiosyncrasy in applying the concepts appeared. Here, the concepts needed more contextual adjustment on the basis of encyclopaedic information accessible to the children. It is clear that the assumptions they associate with the evaluative concepts are related to the perceptual modalities available to them, i.e. the sense of hearing, smell, etc.
– The children's understanding of the evaluative concepts includes the assumption that these concepts involve visual judgments. Blind children are well aware of the fact that sighted people are capable of perceiving stimuli that are not accessible to blind individuals (cf. Krzeszowski et al. (2008) on the development of understanding of colour terms). Although the visual information does not figure directly in their representation of the world, the awareness of its existence constitutes a salient feature in their characterizations of evaluative concepts.
– It is disputable whether blind children have properly acquired the logical entries for evaluative concepts. They do indeed show the understanding of these terms, including the awareness of the visual element, yet can

they be said to have the grasp of the basic meaning of *beautiful* without knowing what this visual element is[2]? As far as encyclopaedic entries are concerned the fact that they are strongly affected by lack of vision could only be expected and was confirmed by the tasks in which the children produced their own opinions and examples. Assuming that the logical entries for the evaluative visual concepts are rendered defective by visual impairment it seems likely that they are deficient in the same way for all blind individuals, whereas the content of their encyclopaedic entries is perhaps even more individual-specific than in the case of sighted people.

The results seem to provide a further argument for L-encoding (should we need one), since what blind and sighted users of language share as a common code are bits of phonological structures and not content of mental representations standing behind those structures.

References

Burton R.N., "Robyn Carston on semantics, pragmatics and 'encoding'", *Journal of Linguistics* 41, 2005, 389–407.

Carston R., *Thoughts and Utterances: The Pragmatics of Explicit Communication*, Blackwell, Oxford 2002.

Carston R., "Metaphor, ad hoc concepts and word meaning – more questions than answers". *UCL Working Papers in Linguistics* 14, 2002a, 83–105

Finello K.M., N.H. Hanson & L.S. Kekelis, "Cognitive focus: Developing cognition, concepts, and language in young blind and visually impaired children". In: R.L. Pogrund, D.L. Fazzi, & J.S. Lampert (eds.), *Early focus: Working with young blind and visually impaired children and their families*, American Foundation for the Blind, New York 1992.

Krzeszowski T.P., B. Marek & A. Piskorska, *Uczeń z dysfunkcją wzroku na lekcji angielskiego*, *Wskazówki metodyczne dla nauczycieli*, Uniwersytet Warszawski, Warszawa 2008.

Langacker R., "A dynamic usage-based model". In: M. Barlow and S. Kemmer, *Usage-based Models of Language*, CSLI Publications, Stanford 2000.

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[2] By analogy, one could wonder whether it is possible to grasp the meaning of *salt* not only without ever tasting salt but without ever tasting anything.

Sperber D. & D. Wilson, *Relevance: Cognition and Communication*, Black-
    well, Oxford 1986/95.
Sperber D. & D. Wilson, "The mapping between the mental and the public
    lexicon". In: P. Carruthers`& J. Boucher (eds.), *Language and Thought:
    Interdisciplinary Themes*, Cambridge University Press, Cambridge 1998,
    184–200.
Wittgenstein L., *Philosophical investigations*, Prentice Hall 1953/99.

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Accessing multiple meanings: the case of zeugma

1. Introduction

Zeugma, sometimes referred to as sortal crossing, is a semantic anomaly which occurs when a word or phrase has to be interpreted in two distinct ways simultaneously, thus triggering a punning effect. For example, in sentence (1) the verb *fix* is applied to the object *the problem in* the sense of "solve," and to the second object *the blame* in a different sense, namely "assign." In sentence (2) the verb *expire* oscillates between two different senses, i.e. "die," which applies to the subject *he*, and "lose validity," which applies to the second subject, *his passport*.

(1)   *Fix* the problem, not the blame.
(2)   Ted could well *expire* before his passport does.

The possibility of creating a zeugmatic structure is one of a number of criteria for distinguishing ambiguity from vagueness. As pointed out by Zwicky and Sadock (1975), the zeugmatic effect is possible only in structures in which two or more words or phrases are modified or governed by a single lexically ambiguous word, i.e. one that has more than one distinct sense. The punning effect does not arise if the key word lacks sharply demarcated senses and permits an unspecifiable range of possible interpretations, as is the case with *cool* or *open* in sentences (3) and (4), respectively.

(3)   The day was *cool* and so was his shirt.
(4)   Jane *opened* the curtains and the windows.

Though the adjective *cool* generally represents the quality of being between warm and cold, its meaning varies: in sentence (3) it indicates that the day in question was neither hot nor cold and that the shirt permitted its wearer relief from heat. Similarly, in sentence (4), the unambiguous verb *open* is understood differently when referring to the activity of opening the curtains and differently when referring to the activity of opening the windows. Such cases will be treated here as instances of vagueness, though the term 'semantic underspecification' would probably be less polemical, considering the many different positions that exist in linguistic literature on what constitutes vagueness (Fine, 1975; Kempson, 1977; Channell, 1994; Franken, 1997; Pustejovsky, 1998; Zhang, 1998).

In this paper I would like to apply the ideas recently developed within the Relevance Theory, especially those connected with on-line concept construction and lexical adjustment processes, in order to examine several issues connected with processing and representing zeugmatic structures. Hoping to determine what makes it possible for the language user to simultaneously entertain two disparate meanings of one linguistic expression I will make an attempt to show how duality of sense in zeugmatic structures can be represented mentally and theoretically. I will also consider the linguistic and cognitive factors involved in triggering the zeugmatic effect in some cases and in blocking it in others.

2. Word meaning in the relevance theoretic framework

In the model of utterance interpretation offered by the Relevance Theory (Sperber and Wilson, 1986/1995, 2002), the principles that govern interpreting verbal inputs follow directly from the principles that govern human cognition. As spelled out in the Cognitive Principle of Relevance, given in (5), processing cognitive stimuli is geared to achieving the greatest possible cognitive gains at the lowest possible cost. In keeping with the Communicative Principle of Relevance, given in (6), ostensive verbal stimuli, such as utterances, raise in the addressee the expectation that in return for directing his attention and processing resources he will achieve adequate gains.

(5) **Cognitive Principle of Relevance:**
Human cognition tends to be geared to the maximisation of relevance. (Wilson and Sperber, 2002: 255)

(6) **Communicative Principle of Relevance:**
Every ostensive stimulus conveys a presumption of its own optimal relevance. (Wilson and Sperber, 2002: 256)

The two mental activities performed by the addressee during the process of interpreting utterances are linguistic decoding and pragmatic inference. On being presented with an utterance, whether spoken or written, the language user automatically decodes it into structured sets of encoded concepts, i.e. logical forms, which serve as input to the pragmatic processes of forming the hypotheses about the utterance's explicature and implicatures, i.e. the explicitly and implicitly communicated assumptions, constituting speaker meaning. The procedure employed by the addressee, given in (7), is a direct consequence of his presumption of the optimally relevant character of attended verbal inputs. When deriving meanings, whether at word or utterance level, the addressee takes the track of least processing effort in deriving cognitive effects; he considers possible interpretations as they become available and accepts the first interpretation which satisfies his expectations of optimal relevance as the one intended by the speaker.

(7) **Relevance-theoretic comprehension procedure**:
(a) Follow a path of least effort in computing cognitive effects: Test interpretive hypotheses (disambiguations, reference resolutions, enrichments, implicatures, etc.) in the order of accessibility.
(b) Stop when your expectation of relevance is satisfied.
(Wilson, 2004: 260)

For instance, in the exchange presented in (8), on hearing Ted's response to her question, Ann will develop it (via decoding, reference resolution, disambiguation, pragmatic enrichment) into the explicature given in (8a), which, together with the contextual information she can supply, will allow her to derive the strong implicature, given in (8b), which constitutes the answer to her question, and possibly to derive other weakly communicated implicatures such as (8c) and (8d).

(8)   Ann: Will you have your car serviced today?
        Ted: My mechanic has expired.
(8a)   *Explicature*: THE SPEAKER'S [CAR] MECHANIC HAS **EXPIRED**$_1$ [=DIED].
(8b)   *Strong implicature*: The speaker will not have his
        car serviced on the day of the utterance.
(8c)   *Weak implicature 1*: The speaker may not be able to have his car
        serviced in the near future.
(8d)   *Weak implicature 2*: The speaker will have to find another me-
        chanic.

In this inferential model of utterance comprehension words and phrases are assumed to encode mentally-represented concepts which become activated in the mind of the language user making available three types of information: lexical, logical and encyclopedic. The lexical entry of a concept specifies the phonetic structure of the linguistic form that encodes the concept as well as its phonological and grammatical properties, including its lexical category. The logical entry specifies the inference rules which apply to logical forms of which that concept is a constituent. The encyclopedic entry of the concept comprises knowledge about the objects, events and/or properties instantiating the concept, including folk and specialist assumptions, cultural beliefs and personal experiences stored in the form of propositional representations, scenarios or scripts and mental images.

On this view, a lexically ambiguous word, such as *bank,* would encode several concepts, such as BANK$_1$, BANK$_2$, BANK$_3$, etc, which have the same lexical entry but whose logical addresses are different and which provide access to a different set of encyclopedic data. One of the tasks the hearer has to conduct during the process of interpreting an utterance containing the word *bank*, such as (9), (10) or (11), is to select the concep intended by the speaker, based on the assumption made available by the concepts and other concepts present in the logical form of the utterance. A possible representation of the word in the mental lexicon has been given in Table (1).

(9)   The pilot *banked* the aircraft sharply to avoid a crash.
        [BANK$_1$ (=tilt)]
(10)   The worker *banked* the furnace up with coke.
        [BANK$_2$ (=heap up)]

(11) My father *banked* half his salary every month. [BANK $_3$ (=deposit in a bank)]

Table 1.

A possible representation of the word *bank* in a speaker's mental lexicon:

conceptual address:	bank$_1$	bank $_2$	bank $_3$
linguistic entry:	V$_{tr}$ /bænk/	V$_{tr}$ /bænk/	V$_{tr}$ /bænk/
logical entry:	inferential links to concepts: TILT, SLANT, TIP, SLOPE	inferential links to concepts: HEAP, PILE UP, AMASS ARRANGE AT AN ANGLE	inferential links to concepts: DEPOSIT IN A BANK
encyclopedic entry:	particular schema: an action performed by a person (e.g. pilot or driver) on a motorcar or aircraft causing it to incline laterally specific mental image	particular schema: an action involving amassing some material (e.g. snow, coal, sand) and forming it into a slope specific mental image	particular schema: an action performed by a person involving taking money to a special establishment for safekeeping specific mental image

It is a matter of contention whether vague expressions, such as *cool,* are vague because, as argued by Franken (1997), they encode concepts which are vague themselves, or whether they encode concepts which require fine-tuning in order to yield a relevant interpretation. For instance, in (12), the adjective *cool,* whose possible mental representation is given in Table (2), would encode a concept COOL that serves as a springboard for constructing the occasion-specific concept COOL*, which is derived via an inferential lexical adjustment process, during which the comprehender selects some of the assumptions the lexically encoded concept makes available and modifies them in the context of the assumptions made available by other concepts occurring in the discourse.

(12) On a hot day Ted likes to wear a *cool* shirt. [COOL* (=permitting relief from heat)]

Table 2.

A possible representation of the word *cool* in a speaker's mental lexicon:

conceptual address:	cool
linguistic entry:	Adj, /ku:l/
logical entry:	inferential links to concepts: NEITHER HOT NOR COLD
encyclopedic entry:	particular schema: - allowing a feeling between warm and cold (e.g. room, drink, garment) - imparting a sensation of coolness (e.g. a breeze) - permitting relief from heat (e.g. a garment) specific mental image(s)
ad hoc concept	cool*

The idea recently developed in the Relevance Theory is that in on-line communication people adjust virtually all of the mentally-represented concepts, including the disparate concepts encoded by ambiguous words, thus creating occasion-specific, or *ad hoc* concepts, derived from the encoded concept under considerations of relevance. For example, in (13) and (14) the verb *banked* unambiguously refers to amassing some material and forming it into a sloping ridge, yet something different is involved in a person piling up snow along a path and in ocean waves creating a sandy mound round a lagoon.

(13) The janitor *banked* the snow along the path.
[BANK $_2$* (=heap up with a shovel)]
(14) The ocean *banked* the sand round the lagoon.
[BANK $_2$**(=heap up by forces of nature)]

As demonstrated by Carston (2002a, 2002b), Barsalou (1983, 1987) or Wilson (2004), the process of lexical adjustment may result in narrowing, broadening or even changing the linguistic denotation of the encoded concept.

In the case of narrowing, the word expresses a concept more specific than the encoded one. For example, sentence (15) does not normally convey the obvious truth that the speaker has some temperature but rather that her temperature is high enough to merit comment. In (16) the noun *lamb* refers to the flesh of a young sheep served as food and in (17) to the young of the animal called sheep.

(15) I have a *temperature*.   (Wilson, 2004: 344)
(16) At dinner Ted especially liked the *lamb*.
(17) At the farm the children especially liked the *lamb*.

In broadening, the concept communicated by the use of the word is re-laxed, either slightly or so much as to include cases that may fall beyond its denotation. The many varieties of broadening include approximation, hyperbole, category and metaphorical extension. In approximation, given in (18), and in hyperbole, given in (19), the linguistically encoded meaning becomes a proper subpart of the derived meaning. In category extension, such as (20), and metaphorical extension, such as (21), the denotations of the basic and the *ad hoc* concepts might overlap, or their denotations might not intersect at all.

(18) The children stood in a *circle*.
     [APPROXIMATION; (CIRCLE =a formation resembling a circle)]
(19) *Your suitcase weighs a ton.*
     [HYPERBOLE; (*WEIGH A TON* =be very heavy)]
(20) Last month Cindy was pestering us to buy her a gerbil. Now it seems a hamster is the new *gerbil*.
     [CATEGORY EXTENSION; (*GERBIL* =a new kind of pet animal)]
(21) Don't be such a *rabbit;* stand up for your rights!
   [METAPHORICAL EXTENSION; *RABBIT* =a timid person)]

The possible outcomes of the different processes can be graphically rep-resented in the following five diagrams (see Carston, 2002: 353), in which L stands for the linguistically encoded meaning, and C* stands for the derived meaning, or the *ad hoc* concept:
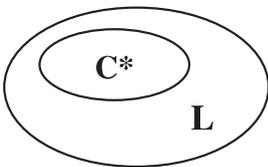
Diagram 1: Concept narrowing
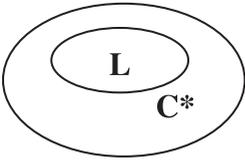
Diagram 2: Concept broadening (approximations)
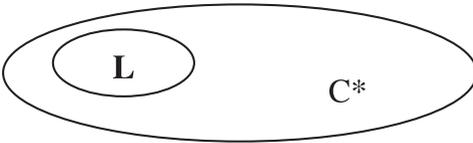
Diagram 3: Concept broadening (hyperboles)
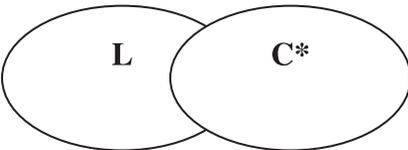
Diagram 4: Concept broadening (some cases of metaphorical and category extensions)
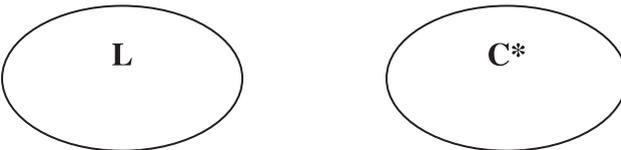
Diagram 5: Concept broadening (some cases of metaphorical and category extensions)

3. Representing and processing zeugmatic structures

How can the model of lexical pragmatics outlined here be used to handle the issues we are trying to address in this paper? What can it tell us about the way zeugmatic structures are mentally represented and processed? How can it account for the fact of comprehenders' accessing two meanings simultanously?

Zeugma employs both ellipsis and parallelism. It often takes the form of a series of similar phrases joined or yoked together by a word which

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is first expressed, then implied, as in example (1), though in some cases, such as example (2), a pro-form is used. This indicates that deriving the explicature of a zeugmatic structure involves constructing not one but two propositions, each with a distinct set of truth-conditions, resulting from the diverse concepts each of them contains. For instance, during the decoding phase of utterance interpretation the comprehender of (2), repeated as (22), has to decide which concept is encoded by the ambiguous verb *expire*. Following the procedure presented above, he uses information stored in the encyclopedic entries of other concepts present in the logical form under construction in order to form a hypothesis about the specific sense he should select. The pronoun *he* suggests the sense pertaining to human beings, i.e. "die," while the presence of the concept PASSPORT suggests the sense pertaining to documents, i.e. "lose validity." The only way to resolve the resulting semantic conflict is to assume that the utterance contains two concepts sharing the same lexical entry and conveys two diverse propositions containing these two concepts. The possible explicature that can be derived has been presented in (22a):

(22)   Ted could well *expire* before his passport does.
(22a) Ted$_x$ could well EXPIRE$_1$ [=DIE], before Ted$_x$'s passport EXPIRES$_2$ [=LOSES VALIDITY].

In interpreting (23), where the verb *sank* applies to the noun phrase *his boat* in its literal sense and to the phrase *his dreams* in a metaphorical sense, the addressee follows the same procedure of drawing from the encyclopedic knowledge of the concepts made available by the utterance in order to test the hypotheses about the meaning of the word *sank* in the context of its use. The presence of the word *boat* gives access to a concept indicating a vessel used for traveling on water, which can go down before the surface of the water and fall to the bottom of the sea. At the same time, the presence of the concept encoded by the word *dreams* forces the addressee to extend the pivotal concept encoded by the word *sink* so that it can apply to people's dreams. Again, the sentence will only make sense if it is understood to express two propositions containing two different though related *ad hoc* concepts, which again share the same lexical entry. Example (23a) shows a possible outcome of the interpretation process.

(23) His boat and his dreams sank.
(23a) HIS BOAT SANK$_{\text{LITERAL}}$ [=WENT TO THE BOTTOM] AND HIS DREAMS SANK*$_{\text{METAPHORICAL}}$ [=DECREASED IN NUMBER, SCOPE OR INTENSITY].

There is a somewhat bizarre kind of zeugmata, such as (24) or (25), in which the key word has a different grammatical subcategory on each of its two different readings.

(24) All my friends are *getting* Firsts (=first class university degrees) and married.
(25) The farmers *grew* potatoes and bored.

The explanation the relevance theory can provide for such utterances might be that in the process of utterance interpretation the addressee draws not only from the encyclopedic but also from the lexical entry of the encoded concept, which makes accessible information about the grammatical properties of the word instantiating the concept. As in the other cases, a relevance-driven adjustment process will allow the comprehender to make the decisions about the subcategory as well as the meaning of the words *getting* and *grew* and derive the explicatures represented as (24a) and (25a), respectively.

(24a) ALL THE SPEAKER'S FRIENDS ARE GETTING$_{\text{TRANSITIVE}}$ [=RECEIVING] FIRSTS AND ALL THE SPEAKER'S FRIENDS ARE GETTING$_{\text{INTENSIVE}}$ [=BECOMING] MARRIED.
(25a) THE FARMERS$_{\text{X}}$ IN THE VALLEY GREW$_{\text{TRANSITIVE}}$ [=CULTIVATED] POTATOES AND THE FARMERS$_{\text{X}}$ GREW$_{\text{INTENSIVE}}$ [=BECAME] BORED.

4. Factors involved in triggering and blocking the zeugmatic effect

Let us now turn to the question of how it is possible for a hearer to entertain two senses of one word at once? This odd phenomenon seems to be a direct consequence of the relevance-theoretic procedure the comprehender employs in interpreting verbal inputs. If two disparate concepts connected with a single lexical expression are equally prominent at the cognitive level,

both will be accessed at the same time and simultaneously used in the interpretation process. These two disparate concepts can be encoded by the pivotal word or pragmatically derived in the process of lexical adjustment. However, in order for the zeugmatic effect to arise, the two *ad hoc* concepts must be sufficiently distinct from each other in terms of their denotations. The prediction would thus be that apart from homonymous words the obvious candidates for triggering the zeugmatic effect are metaphorically used words and idiomatic expressions. Indeed, examples where a word either oscillates between a literal and a metaphorical meaning, such as examples (26) – (29), are particularly common as are zeugmata built around an expression serving as part of a literally meant phrase and of an idiomatic expression, such as examples (30) and (31):

(26)   He *drowned* his sorrows and his cat.
(27)   *Rend* your heart, and not your garments. (Joel 2:13)
(28)   This is the city of *broken* dreams and windows.
(29)   ... and *covered themselves with* dust and glory.
       (Mark Twain, *The Adventures of Tom Sawyer*)
(30)   The addict *kicked* the habit and then the bucket.
(31)   By the time we left the bar, I'd *bought* her story, as well as her three drinks.

On the other hand, sortal crossing should not arise if the denotations of the two derived concepts intersect or are subsets of each other. This might explain why approximations, such as (32), and narrowings, such as (33), do not normally yield a zeugmatic effect in coordinated constructions. In (32), the encyclopedic information provided by other concepts present in the set of propositions under processing does not allow the comprehender to accurately fine-tune the basic concept FLAT into two dissimilar concepts FLAT* and FLAT**. As for utterance (33), it cannot be taken to mean that Ted liked the meat (concept LAMB*) and the children liked the animal (concept LAMB**), since both concepts, i.e. LAMB* and LAMB** are merely subsets of the same basic concept LAMB.

(32)   My garden is *flat* and so is my ironing board.
(33)   Ted and the children liked *the lamb*.

Interestingly enough, hyperboles, such as (34), and some narrowings, such as (35), can in fact produce zeugma.

(34)   This insect *has a brain the size of a pinhead* and so does my boss.
(35)   Rembrandt and our janitor *used a brush*. (Laskarides et al., 1996)

In example (34), the encyclopedic information provided by the lexical items *this insect* and *my boss* precludes the addressee from forming the hypothesis that both referents could have brains of exactly the same size and makes him search for a more relevant hypothesis, such as the one provided in (34a).

(34a)   THIS INSECT **HAS A BRAIN THE SIZE OF A PINHEAD*** [=HAS A BRAIN OF A SPECIFIC SIZE] AND MY BOSS **HAS A BRAIN THE SIZE OF A PINHEAD**** [=IS VERY UNINTELLIGENT].

A detailed discussion of sentence (35) can be found in Lascarides, Copestake and Briscoe (1996), who treat it as an example of pragmatic ambiguity resulting from the fact that the unambiguous word it contains, i.e. *brush,* gets conflicting default interpretations in different contexts. A relevance-based explanation (Solska, forthcoming) would be that a more general concept BRUSH, or rather the complex concept USE A BRUSH, makes available an ordered array of encyclopedic assumptions from which the comprehender of (35) can select an appropriate subset. In order to do so, he will form hypotheses about what is involved in using a specific kind of brush and will test these hypotheses against the encyclopedic data activated in his mind by such concepts as REMBRANDT and JANITOR. Searching for an interpretation that fulfills his expectations of relevance he will first consider the most general representation and will narrow it down to a more specific one. A comprehender with some knowledge of the Dutch painter will manage to adjust the more general concept into two occasion-motivated ones and derive an explicature given in (35a). A comprehender ignorant of Rembrandt's artistic achievements will be unable to see that the sentence expresses two different concepts and will remain oblivious to the zeugmatic effect.

(35a) Rembrandt used a brush* [=for painting pictures] and our janitor used a brush** [=for painting walls].

It would seem then that it is possible to find some borderline cases which may but do not have to be perceived as zeugmatic. Depending on the contextual assumptions resulting from the content of encyclopedic entries which individual language users can bring to bear, even unambiguous and vague words can occasionally produce sortal crossings.

5. Conclusions

Zeugma occurs relatively rare and is often seen as a semantic anomaly. We may, however, conclude from the analysis provided here that there is in fact nothing anomalous about the processes which trigger it. The zeugmatic effect is caused by the same mechanisms which are always employed by language users in fleshing out the meaning of utterances of any kind.

A more unexpected finding revealed by the analysis presented above is that approximations, unlike metaphorical and hyperbolical uses of word, do not seem to produce crossed readings. This finding poses a problem for the relevance-theoretic position on metaphor (Wilson, 2004, Carston and Powell, 2005), which is that metaphors do not represent a natural kind but are one of many types of concept loosening forming a continuum of cases including approximations and hyperbolical uses. The fact that approximations and metaphorical extensions behave in drastically different ways in parallel constructions shows a possible need to revise the relevance-theoretic treatment of metaphor.

References

Barsalou L., "Ad hoc categories", *Memory and Cognition* 11, 1983, 211–227.
Barsalou L., "The instability of graded structure: implications for the nature of concepts". In: U. Neisser (ed.), *Concepts and Conceptual Development: Ecological and Intellectual Factors in Categorization*, Cambridge University Press, Cambridge 1987, 101–140.

Carston R., *Thoughts and Utterances: The Pragmatics of Explicit Communication*, Blackwell, Oxford 2002.

Carston R., "Metaphor, ad hoc concepts and word meaning – more questions than answers", *UCL Working Papers in Linguistics* 14, 2002a, 83–105.

Carston R. & G. Powell, "Relevance Theory: New Directions and Developments", *UCL Working Papers in Linguistics* 17, 2005, 279–299.

Channell J., *Vague Language*, Oxford University Press, Oxford 1994.

Cruse D.A., *Lexical semantics*, Cambridge University Press, Cambridge 1986.

Fine K., "Vagueness, truth, and logic", *Synthese* 30, 1975, 265–300.

Franken N., "Vagueness and approximation in relevance theory", *Journal of Pragmatics* 28(2), 1997, 135–151.

Kempson Ruth, *Semantic Theory*, Cambridge University Press, Cambridge 1977.

Lascarides A., A. Copestake & T. Briscoe, "Ambiguity and coherence", *Journal of Semantics* 13:1, 1996, 41–65.

Mioduszewska E., "Multiplicity of Senses, Relevance-Theoretic Comprehension Procedure and Metarepresentation". In: A. Korzeniowska & M. Grzegorzewska (eds.), *Relevance Studies in Poland.* Vol. 2, Institute of English Studies, Warszawa 2005, 29–36.

Pustojevsky J., "The semantics of lexical underspecification", *Folia Lingusitica* 32, 1998, 323–347.

Solska A., forthcoming, "A relevance-theoretic perspective on understanding zeugma".

Sperber D. & D. Wilson, *Relevance: Cognition and Communication*, Blackwell, Oxford 1986–95.

Sperber D. & D. Wilson. "Relevance theory", *UCL Working Papers in Linguistics* 14, 2002, 249–287, reprinted in: L. Horn & G. Ward (eds.), *Handbook of Pragmatics*, Blackwell, Oxford 2004, 607–632.

Wilson D., "Relevance and lexical pragmatics", *UCL Working Papers in Linguistics* 16, 2004, 343–360.

Zhang Q., "Fuzziness–vagueness–generality–ambiguity", *Journal of Pragmatics* 29, 1998, 13–31.

Zwicky A.M. & J.M. Sadock, "Ambiguity tests and how to fail them". In: J. Kimball (ed.), *Syntax and Semantics*, Academic Press, New York 1975, 1–36.

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Polysemy in Relevance Theory

1. Introduction

Polysemy is hard to ignore in any systematic account of meaning – according to some estimates, it may affect as much as 98% of the most frequently used English words (Lee 1990). Traditionally, polysemy is distinguished from homonymy, the difference being that in the case of homonymy, one lexical form realises different unrelated lexemes, for example *pen*$_1$ ('a writing implement') and *pen*$_2$ ('an enclosure'), whereas in the case of polysemy, a lexeme has a number of different though related senses, for example *mouth* ('a body part', 'the opening of a bottle or 'an entrance of a cave', etc.). Basically, this distinction underlies the design of most dictionaries, where homonymous items are listed under separate entries, while polysemous senses are grouped under the same entry (Lyons 1995: 27–28; Saeed 2003: 64).

This paper looks into the question of how polysemy should be treated in relevance theory. Thus, it reverses the usual order of presentation found in relevance-theoretic literature, where polysemy is mentioned in passing. The aim of the paper is twofold: to justify the need to account for the phenomenon of polysemy in a pragmatic theory and to present sample analyses of polysemy taking up suggestions found in relevance-theoretic literature as well as using insights gathered from other approaches.

2. Word meaning and concept communication
in relevance theory

Relevance theory provides a pragmatic account of utterance interpretation rooted in cognitive psychology. With the rise of lexical pragmatics, whose main goal is "to explain how linguistically specified ('literal') word meanings are modified in use" (Wilson 2004: 343), or to explore "the application of the semantics-pragmatics distinction at the level of individual words" (Wilson and Carston 2007: 230), relevance theory has extended the focus of interest from sentences to words. The relevance-theoretic approach to lexical pragmatics assumes that the concept conveyed by the use of a word does not have to be the concept encoded by that word. The word then might merely serve as a pointer to a concept involved in the speaker's meaning or even to the conceptual space in which the conveyed non-lexicalised concept originates.

According to the relevance-theoretic view, a mental concept is a relatively stable and distinct structure in the human mind (Sperber and Wilson 1997: 1), an address or node in memory which makes available three kinds of information: logical (defining or essential properties of the concept), encyclopaedic (expert and lay assumptions, cultural beliefs and personal experiences stored in the form of propositional representations, scenarios or scripts and mental images) and lexical (the phonetic structure and grammatical properties of a word corresponding to a concept) (Sperber and Wilson 1986/1995: ch. 2; Carston 2002: 321–322).

It is possible, however, that many words, e.g., *my, have, near* or *long*, do not encode full-fledged concepts, but rather so-called 'pro-concepts' (Sperber and Wilson 1997: 2) or 'concept schemas' (Carston 2002: 360). Sperber and Wilson (1997) admit that such words have some conceptual content, but their semantic contribution necessarily requires contextual specification for an utterance containing them to have a truth-value. Carston (2002: 362) describes such words as "pointers to a conceptual space, on the basis of which, on every occasion of their use, an actual concept is pragmatically inferred." She further explores this issue and suggests that even though some lexically-encoded verbs and adjectives might indeed encode concept schemas, it seems implausible for natural-kind terms such as *cat, lion, water* or *tree* (2002: 362).

Relevance theorists claim that basically any content word, even linguistically unambiguous, can be used to convey a number of distinct, though related, meanings, in different contexts (Sperber and Wilson 1997: 15; Carston and Powell 2005: 3). The meanings which are not lexically-encoded, but derived pragmatically by hearers in the process of utterance interpretation "in response to specific expectations of relevance raised in specific contexts" are called 'ad-hoc concepts' (Carston 2002: 322).

The outcome of ad-hoc concept construction is either the narrowing of a lexically-encoded concept or its broadening (Carston 1997; Wilson 2004; Wilson and Carston 2007). In narrowing, the ad-hoc concept expressed by the use of a word is more specific than the concept encoded by that word, and thus has a narrower denotation. For example, in (1a), the ad-hoc concept BIRD* is narrower than its lexically-encoded counterpart in that it denotes only those birds which are kept in captivity as pets; in (1b), the same word is used to convey a different ad-hoc concept, excluding, among others, live or inedible birds; in (1c), the use of the word *bird* points to a narrower category of birds of prey.[1]

(1)   a. While I looked round the room, the *bird* returned to its cage.
       b. At Christmas, the *bird* was delicious. (Wilson 2004: 344)
       c. Suddenly, a large *bird* caught a mouse with its talons.

In broadening, "a word is used to convey a more general sense, with consequent widening of the linguistically-specified denotation" (Wilson 2004: 344). In examples (2–4), which illustrate approximation, hyperbole and metaphor, respectively, the concepts expressed by the use of the italicised words are more general (broader) than their lexically-encoded counterparts:

(2)   I was born with a *square* mark on my foot. (Vega Moreno 2004: 305)
(3)   You are a *genius*! (Vega Moreno 2004: 305)
(4)   Sally is a *chameleon*. (Wilson and Carston 2007: 235)

In (2), the word *square*, which has a strict sense, may be broadened to refer not only to perfect squares, but also to those imperfect ones which are

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[1] According to the standard practice, ad-hoc concepts are marked as starred concepts.

close enough to being SQUARE for the differences to be inconsequential. In (3), the concept GENIUS may be broadened to denote not only people endowed with a great and rare natural ability of the mind, but also those who have proved to be substantially more skilful than expected. In (4), the concept CHAMELEON may be broadened to CHAMELEON* so as to denote not only chameleons but also people who can easily change their behaviour according to the situation. It is worth mentioning that approximation, hyperbole and metaphor form a continuum on the broadening scale, with approximation involving a relatively marginal broadening and metaphor involving a more radical broadening than the remaining two types. Moreover, metaphor often combines broadening and narrowing (Carston 1997, 2002) as shown in (5):

(5)   My daughter is a princess (based on Vega Moreno 2004: 305),

where the ad-hoc concept PRINCESS* is both broader and narrower than the lexically-encoded concept in that it refers to some females who do not belong to the royal family and excludes those actual princesses who are not spoiled, etc.

3. Polysemy and relevance theory

Relevance theory at first ignored the issue of polysemy as if it fell outside the domain of a pragmatic theory of communication and cognition. If polysemy was mentioned in some analyses, it was explained away or quickly dismissed. For example, Papafragou (2000), in her monosemous analysis of modals, criticised polysemy-based accounts, relegating the alleged instances of polysemy to the realm of semantic indeterminacy. With the rise of lexical pragmatics and the work on ad-hoc concepts, polysemy has started to be mentioned in relevance-theoretic accounts (see Sperber and Wilson 1997, Carston 2002, Wilson and Sperber 2002). Some attention is given to polysemy by Sperber and Wilson (1997) in their discussion of possible relationships between words and concepts they encode and/or they are used to communicate. Sperber and Wilson (1997) observe that the position they take that certain words may act as pointers to indefinitely many notions or concepts sheds some light on the phenomenon of polysemy. To

illustrate this observation, they use an example of the polysemous verb *open*, which is assumed to be able to communicate indefinitely many concepts. In some cases such as *Open the washing machine* used in an ordinary sense of opening the lid (not, for example, unscrewing the back), when the intended concept is indicated by the whole verb phrase headed by *open*, the inferential route to the intended concept is short and obvious and thus likely to become a routine pattern. Such routinely reachable and thus easily retrievable senses tend to become lexicalised over time. An interesting voice in the relevance-theoretic discussion of the verb *open* comes from Carston (2002). Basing on the observation that this verb "points us to a particular region in encyclopaedic memory at which all manner of information about kinds of opening is stored, or at least made accessible," Carston (2002: 361) tentatively assumes that the verb *open* does not encode any concept but a schema, or a pro-concept. Carston, however, does not further develop this idea, merely suggesting that her conception "goes at least some way towards accounting for the phenomenon of polysemy" (Carston 2002: 362).

Having started investigating the area of lexical pragmatics, relevance theorists apparently felt the need to justify the budding interest of a pragmatic theory in the phenomenon of polysemy, commonly regarded as falling within the domain of semantics, or at least to dismiss potential questions about the status of polysemy in relevance theory. For example, Wilson and Sperber (2002: 267) observe in a footnote "that the variation in interpretations of a word such as *square* or *silent* applied to different objects in different circumstances is so great as to make purely semantic or default-pragmatic explanations seem unfeasible." They also admit in the same footnote that some of the examples they discuss to illustrate pragmatic broadening (e.g. *square* or *hoover*), from a synchronic point of view, are just cases of polysemy. They note, however, that the question of whether a given word has acquired an extra stable (polysemous) sense is largely irrelevant since what they are interested in are "the pragmatic micro-processes" that might have led to the lexicalization of particular senses. This observation fully agrees with their earlier assumption that "polysemy is the outcome of a pragmatic process whereby intended senses are inferred on the basis of encoded concepts and contextual information" (Sperber and Wilson 1997: 15). Those inferred senses might be one-off affairs or stable concepts easily retrievable, might be shared by very few speakers or by large communities, etc. I would like to add that

basing on the apparent analogy between the lexical pragmatic processes of broadening and narrowing involved in the ad-hoc concept construction, and the historical processes of broadening and narrowing, associated with semantic change, and often responsible for the emergence of polysemous senses, one might say that the only difference is historical perspective, which could be ignored if one is not interested in the final product of those processes, but in the processes themselves.

In their recent discussion of the relevance-theoretic approach to metaphor, Wilson and Carston (2006: 429) suggest that their inferential account of metaphor "may shed interesting new light on the widespread phenomenon of polysemy in natural language (...)". To illustrate the issue, they take an example of so called 'double-function' adjectives such as *hard, rigid* or *cold*, which are plausibly regarded as polysemous between the basic physical sense (a physical description) and the psychological sense (a description of human psychological properties). They suggest two possible inferential routes by which polysemy may arise. They propose that polysemy may arise through an inferential process of concept broadening, with the derived sense being superordinate to the basic sense; alternatively, this superordinate sense may undergo a further inferential process of concept narrowing to produce a non-overlapping sense. Ultimately, the resulting superordinate and non-overlapping senses get lexicalised in time. For example, the polysemy of the word *cold* might be the result of the combined processes of broadening and narrowing. First, the concept of COLD would undergo broadening, then the resulting superordinate sense COLD* would be narrowed, bringing about a distinct non-overlapping sense COLD**. Presumably, this superordinate sense has to be unspecified with regard to both the physical sense involving a property of having a very low, and thus unpleasant, temperature and the psychological sense involving a property of being unemotional or unfriendly.

4. Towards a relevance-theoretic account of polysemy

The analysis of polysemy in terms of inferential routes is intuitively appealing and seems to be a milestone in the relevance-theoretic investigation of polysemy. What remains to be seen is whether this proposal could be successfully applied to various types of polysemy. Polysemy is, in fact,

a very complex phenomenon, far from homogeneous, ranging from highly systematic to completely idiosyncratic cases, or from highly lexicalised to fully pragmatic ones (e.g. Nunberg and Zaenen 1992). Cruse (2000: 108–109), for example, distinguishes between 'polysemy' and what he calls 'coerced polysemy'. The former term is used to describe those related senses of a word which have been 'established' and "are permanently stored in the mental lexicon" (Cruse 2000: 109). The latter term refers to those potential usages of words which are different from their default (context-free) interpretations. There seems to be an indefinite number of coerced polysemes since almost all words are subject to this type of polysemy, for example (6):

(6)   The *pizza* doesn't look too happy with what he's been given. (Cruse 2000: 108)

where the sense of the word *pizza* is not registered in a dictionary nor is it permanently stored in the mental lexicon. It is worth noting that cases of coerced polysemy correspond to ad-hoc concepts as described in relevance theory.

The claim that polysemy is by no means homogeneous could be substantiated by the fact that there are several typologies of this phenomenon, more or less detailed, employing different criteria and, obviously, dependent on theories or approaches in which they are rooted.

For example, there are two prominent types of polysemy which can be traced back to Apresjan (1974): metaphorically motivated polysemy and metonymically motivated polysemy (see also Cruse 2000; Lakoff 1987). The former could be illustrated by the word *foot*, whose primary (literal) sense is that of the bottom part of the leg, while one of the derivative senses can be seen in phrases such as *at the foot of the page* or *at the foot of the mountain*, where the bottom end of an object is meant. In the latter type, both the primary and derivative senses are literal, for example, the word *chicken* in its primary sense refers to a farm bird, whereas its metonymically derived sense means 'the meat of that bird'. It is reasonable to suppose that from a pragmatic perspective, disregarding the lexicalisation, both these types should be analysed in the same way as their source phenomena, that is metaphor and metonymy, respectively.

The complexity of polysemy is shown in the typology worked out by Copestake and Briscoe (1995), who focus on cases of what they call system-

atic polysemy, distinguished from cases of unsystematic and idiosyncratic polysemy. Systematic polysemy is further divided into constructional polysemy (sense modulation) and semi-productive sense extension (sense change), both described by Copestake and Briscoe (1995) as productive processes requiring 'generative' lexical mechanisms, in the sense of Pustejovsky (1991).

Sense extension, typically associated with cases of metonymy, makes use of so-called semi-productive lexical rules, by means of which it is possible to derive different but related senses from the basic ones. One common example of the sense extension lexical rules is a general abstract rule of grinding, whereby a count noun (denoting an individuated entity) becomes a mass noun (denoting some related substance), thus producing what may be regarded as metonymically-induced polysemy. For instance, in an appropriate, sufficiently marked context, this rule will turn the count noun *mole* denoting an animal into a mass noun denoting meat, which is illustrated in (7):

(7)   Badger hams are a delicacy in China while mole is eaten in many parts of Africa. (Copestake and Briscoe 1995)

In constructional polysemy, there is one underspecified lexical entry and a single sense assigned to this entry is contextually specified by means of processes of syntagmatic combination, in other words, it undergoes the process of sense modulation. Basically, the term 'modulation' describes the effect of a context on a single sense which "can be modified in an unlimited number of ways by different contexts, each context emphasizing certain semantic traits, and obscuring and suppressing others" (Cruse 1986: 52).

According to Copestake and Briscoe (1995), there are two kinds of constructional polysemy: specialisation and broadening. An example of specialisation could be adjectival premodification. The meaning of an adjective depends on the nature of a premodified noun, consequently the adjective *sad* in the phrases *a sad day, a sad poem* and *a sad poet* should be interpreted differently. Broadening, on the other hand, describes a situation where the basic sense of a word gets subsumed by the contextually available usages of that word and, typically, a feature characteristic of that basic sense becomes overridden in context. For example, the word *cloud* is usually used with the meaning 'water vapour', which is no longer present when this noun gets postmodified with *of*-phrases to yield less conventional, possibly metaphorical, expressions

such as *cloud of mosquitoes* or *cloud of dust*. Moreover, in broadening, unlike specialisation, only one (basic) sense is conventionally evoked; other, non-default, interpretations are given by context, in other words, the word *cloud* will never be conventionally interpreted as 'cloud of mosquitoes'.

Obviously, Copestake and Briscoe (1995) are interested in rule-governed semantic phenomena, their approach, nevertheless, might offer some valuable insights for a pragmatic analysis of polysemy along the lines suggested by relevance theory. Although Carston (2002: 374, n. 15) notes that the type of polysemy illustrated by *sad* in expressions such as *sad person, sad face, sad day* or *sad music*, which occurs across different languages, seems too systematic to be part of pragmatics, this remark seems unjustified for two reasons: first, it is not the case that pragmatic phenomena cannot be systematic especially that they concern human cognition; second, these examples are not much different from the case of *open*, discussed earlier.

It seems that the polysemy of the adjective *sad* is a result of the lexical pragmatic process of concept modulation or adjustment. I would like to claim that this adjective does not encode a fully-fledged concept, but a concept schema (pro-concept), something along the lines of RELATED IN SOME WAY TO THE FEELING OF SADNESS, which necessarily requires narrowing in the direction indicated by the premodified noun. This would involve accessing encyclopaedic assumptions associated with the concept encoded by the noun in order to infer the kind of relation in question, for example 'causing sadness', 'experiencing sadness' or 'expressing sadness'.

On the other hand, the polysemy of such nouns as *foot* and *cloud* seems to result from the combined processes of broadening and narrowing not unlike those suggested by Wilson and Carston (2006) in their analysis of metaphor, which is not surprising since both the nouns are classified as cases of metaphorically motivated polysemy. The basic physical sense of *foot* ('the bottom part of the leg') is broadened to the superordinate ad-hoc concept FOOT* ('the bottom part'), which is so abstract and underspecified that it requires narrowing in the direction indicated by the 'of'-phrases following the noun, giving rise to another ad-hoc concept FOOT** (for example, 'of the page' or 'of the mountain'). The superordinate concept FOOT* seems to be a concept schema, while the resulting concept FOOT** is non-overlapping with the basic sense.

In the case of *cloud*, the basic sense 'a mass made of very small drops of water' is broadened to the superordinate concept schema CLOUD* (a mass

made of very small entities) to be further narrowed in the direction indicated by the 'of'-phrases following the noun, specifying the entities making up the cloud, in order to give rise to another ad-hoc concept CLOUD** ('of mosquitoes', 'of smoke'). As before, the two senses – the basic one and the final one – do not overlap.

It appears that the two types of constructional polysemy distinguished by Copestake and Briscoe (1995), specialisation and broadening, involve distinct inferential routes. In specialisation, the basic concept, which is actually a pro-concept or concept schema, is narrowed, producing a new sense. In broadening, the basic sense, which might be physical, is first broadened to a concept schema which is later narrowed, resulting in a sense non-overlapping with the basic sense. The classification of *sad* as a concept schema is furthermore consistent with the view, proposed by Carston (2002: 362), according to which verbs and adjectives often encode pro-concepts (rather than full-fledged concepts).

5. Conclusions

Until relatively recently, polysemy has been largely ignored by relevance theory. The recent growth of interest in pragmatic aspects of lexical meaning, known as lexical pragmatics, resulted in, among other things, the first attempts to analyze some instances of polysemy within the theory. Such a development is welcome, especially given that polysemy is a widespread phenomenon which cannot be confined to semantics as it forms a continuum ranging from fully lexicalised cases to fully pragmatic ones, and even if the senses of a polysemous word have been lexicalised, lexical pragmatic processes which gave rise to them might be still investigated. Sample analyses of polysemy provided here agree with what has been hinted at in the recent relevance-theoretic literature. In particular, the processes postulated for metaphor: broadening and narrowing, are directly applicable to metaphorically motivated polysemy. Moreover, the analyses make use of Carston's proposal that at least some verbs and adjectives might encode pro-concepts or concept schemas. Further research is needed to analyse other types of polysemy, especially metonymically motivated polysemy.

References

Apresjan J., "Regular polysemy", *Linguistics* 142, 1974, 5–32.

Carston R., "Enrichment and loosening: complementary processes in deriving the proposition expressed?", *Linguistische Berichte* 8, 1997, 103–127.

Carston R., *Thoughts and Utterances: The Pragmatics of Explicit Communication*, Blackwell, Oxford 2002.

Carston R. & G. Powell, "Relevance Theory: New Directions and Developments", *UCL Working Papers in Linguistics* 17, 2005, 279–299.

Copestake A. & T. Briscoe, "Semi-productive polysemy and sense extension", *Journal of Semantics* 12, 1995, 15–67.

Cruse D.A., *Lexical semantics*, Cambridge University Press, Cambridge 1986.

Cruse D.A., *Meaning in language. An introduction to semantics and pragmatics*, Oxford University Press, Oxford 2000.

Lakoff G., *Women, fire, and dangerous things. What categories reveal about the mind*, The University of Chicago Press, Chicago 1987.

Lee Ch., "Some hypotheses concerning the evolution of polysemous words", *Journal of Psycholinguistic Research* 19, 1990, 211–220.

Lyons J., *Linguistic semantics. An introduction*, Cambridge University Press, Cambridge 1995.

Nunberg G. & A. Zaenen, „Systematic polysemy in lexicology and lexicography". In: H. Tommola, K. Varantola, T. Salmi-Tolonen & J. Schopp (eds.), *Proceedings of Euralex II*, University of Tampere, Tampere 1992.

Papafragou A., *Modality: Issues in the semantics-pragmatics interface*, Elsevier, Amsterdam 2000.

Pustejovsky J., "The generative lexicon", *Computational Linguistics* 17, 1991, 409–441.

Saeed J., *Semantics*, 2nd ed., Blackwell, Oxford 2003.

Sperber D. & D. Wilson, *Relevance: Cognition and Communication*. Blackwell, Oxford 1986/95.

Sperber D. & D. Wilson, "The mapping between the mental and the public lexicon", *UCL Working Papers in Linguistics* 9, 1997, 107–125, reprinted in: P. Carruthers`& J. Boucher (eds.), *Language and Thought:*

Interdisciplinary Themes, Cambridge University Press, Cambridge 1998, 184–200.

Sperber D. & D. Wilson, "A deflationary account of metaphors", *UCL Working Papers in Linguistics* 18, 2006, 171–203. To appear in: R. Gibbs (ed.), *Handbook of metaphor*, Cambridge University Press, Cambridge.

Vega M. R., "Metaphor interpretation and emergence", *UCL Working Papers in Linguistics* 16, 2004, 297–322.

Wilson D., "Relevance and lexical pragmatics", *UCL Working Papers in Linguistics* 16, 2004, 343–360.

Wilson D. & R. Carston, "Metaphor, relevance and the 'emergent property' issue", *Mind and Language* 21, 2006, 404–433.

Wilson D. & R. Carston, "A unitary approach to lexical pragmatics: Relevance, inference and ad hoc concepts". In: N. Burton-Roberts (ed.), *Pragmatics*, Palgrave, Basingstoke 2007, 230–259.

Wilson D. & D. Sperber, "Relevance theory", *UCL Working Papers in Linguistics* 14, 2002, 249–290.