INTERPRETATION AND GARDEN-PATH EFFECT

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Resumen

En este articulo se intenta probar que la teoría de la Relevancia de Sperber & Wilson tiene que ser reforzada con una teoría psicolingüística del procesamiento del lenguaje para explicar de forma satisfactoria los dobles sentidos. Para ello se sugiere un análisis comparativo (inglés-español) en tres niveles de ambigüedad: sintáctica, semántica y fonética.

Palabras clave: Relevancia, procesamiento, ambigüedad, garden-path', publicidad.

Summary

This paper tries to prove that Sperber & Wilson's Relevance Theory needs to be implemented with a psycholinguistic theory of language processing in order to effectively account for punning. To see the extent of this claim I suggest a crosslinguistic comparison (English-Spanish) at three levels of ambiguity: syntactic, lexical and phonetic.

Key words: Relevance, processing, ambiguity, garden-path, advertising.

Résumé

Dans cet article on essai de prouver que la théorie de la Pertinance de Sperber & Wilson doit être renforcée avec une théorie psycholinguistique sur le processeur du langage à fin d'expliquer convenablement les doubles sens. L'article présent une analyse comparée (anglais-espagnol) en trois niveaux d'ambiguïté: syntaxique, sémantique et phonétique.

Mots-clés: Pertinance, processeur, ambiguïté, garden-path', publicité.

1. A model of communication

For years, the prevalent method to explain communication has centred around Jakobson's model. If we adopt a view that, in saying something, we really mean to assert one proposition, this suggests that we believe that there is a single, conventionally agreed interpretation which can be assigned to each word in isolation from any context, and that the 'real meaning' of a sentence is constructed compositionally, by putting together the set of conventionally agreed single senses which are assigned to each word. It also implies that we believe that there is a correct procedure for using language to talk about the world.

However, communication does not consist of a fail-safe exchange of the same thought, but is, rather, a system which requires effort on the part of the speaker in constructing a helpful message and also on the part of the hearer in working out what the speaker might have meant. This implies the possibility that one individual may arrive at a different interpretation from that intended by the speaker, or a different interpretation from that constructed by another listener.

The shift of interest from the code model is partly due to the later work of Wittgenstein (1978) who insisted on the importance of looking at examples of particular instances of use in attempting to determine the meaning of a specific utterance. A further seminal influence has been the work of Grice (1975), in giving an account of (non-conventional) meaning which rests on the hearer's recognition of the speaker's intention to communicate a given proposition. Thus frankly pulling into the study of meaning the cognitive dimension of the speaker's intentions in uttering. The second crucial contribution of Grice was in showing a way to give a principled account of how much more can be understood from the interpretation of an utterance in a co-operative conversation than is directly encoded in words.

From his initial outline of the Conversational Maxims, there has flowed a rich literature, which provides insights not only into how we arrive at interpretations of expressions which relatively transparently encode the speaker's intention, but also how we interpret expressions which indicate only subtly and indirectly what the speaker wishes to convey.

A metatheoretical movement informally known as radical pragmatics has been remarkably successful in arguing in favour of the reduction of pragmatic theory to a few grand principles. This attitudinal drift has led to what Richardson & Richardson (1990) have termed "pragmatic minimalism", that is, to tackle all pragmatic phenomena using fewer maxims than those proposed by Grice, even enfolding the co-operative principle into one of the few remaining maxims.

Without any doubt, the most well-known reductivist theory has been Sperber & Wilson's proposal, whose Relevance Theory (henceforth RT) subsumes all Gricean maxims under the single Principle of Relevance. Needless to say such a framework has not gone unchallenged. Thus Green (1990), for example, one of Grice's strongest defendants, sees a misunderstanding of Grice's ideas at the core of the reductivist option.

Be it as it may, the truth remains that Sperber & Wilson (1986) have given shape and fully developed the inference model of communication. According to them, communicative behaviour must be deliberate and involves intentions. Inferential processes are directed towards interpreting the communicator's intention; they are characterised by being deductive (deductive inference is a formal operation which takes propositions as premises and yields propositions as conclusions) and non-demonstrative (the interpretation recovered from an utterance cannot be deduced directly from the content of the utterance and the interpetation is only likely to be correct, rather than guaranteed to be correct).

As known, Sperber & Wilson's principle of relevance revolves around two central ideas. First, they put forward the notion of contextual effect (Sperber & Wilson 1986: 158), which makes relevance a matter of degree, since the greater the contextual effects of a newly presented item of information, the more relevant it is. This is linked to the second central idea, namely, processing effort. The human parser is guided by a principle of economy in such a way that the most relevant interpretation should be the most easily retrievable. Simultaneously, if a given interpretation requires extra processing effort, the reward will come up in the form of more contextual effects.

To our present purposes, RT offers the possibility of explaining the type of communication we find in advertising, in other words, covert communication. Its use obeys two main purposes (Tanaka 1994: 43-44): at a very general level, there is a constant tendency for the advertiser to try to make the addressee forget that he is trying to sell something. The second purpose is to avoid taking responsibility for the social consequences of certain implications arising from advertisements. Successful communication can be achieved through weak implicatures, which depend on their consistency with the principle of relevance (the hearer will use the principle in deciding what has been communicated). Further, the addressee will draw implicatures that fit in the search for maximal relevance; that is, never beyond the point where the processing

effort outweighs the effects achieved from the derived conclusions.

As Tanaka indicates, the distinction between informative intention and communicative intention is also of crucial significance in characterising covert communication. In this type of communication, the speaker intends to achieve the fulfilment of his informative intention without the aid of communicative intention. In other words, the addresser does intend to affect the cognitive environment of his addressee by forcing the recovery of certain assumptions, but he does not publicise his informative intention. Advertisers' aim is not to inform their potential audience, rather to influence and move them to choose one product instead of another.

Once I have talked about the merits of RT and how it can be used to explain communication in advertising, we are going to examine some possible extensions or revisions of the theory.

2. Should the concept of Relevance be revised?

It is fair to say that from its very onset RT has been subject to close examination in order to discover some possible weaknesses that would subsequently lead to a revision of the theory.

Thus, we find O'Neill (1988/89) who claims that Sperber & Wilson's concept of relevance is not adequate to account for a general theory of communication. He attacks the deductivist account of pragmatic inference as well as the strictly cognitivist approach to pragmatic theory. Instead he defends a probabilistic account of pragmatic inference which makes central use of Keynes's (1921) concept of relevance. He reaches the conclusion that Sperber & Wilson's relevance should be broadened. His pretence to counterargue RT is rather unfortunate though, as he does not sustain his proposal with sound arguments, at the same time that the work as a whole suffers from clarity of exposition.

Another attempt at revising RT is due to Jaszczolt (1996). She tries to bring together Sperber & Wilson's work and the theory of conversation included in Levinas's (1961) Totality and Infinity. She aims high as she addresses such interesting questions as how assumptions schemas are filled out and what determines the order of accessibility of hypotheses in the process of utterance interpretation, but she seeks too narrow a solution concentrating on the influence that psychological processes (anger, anxiety and the like) have in the derivation and creation of assumptions. Further she insists that the process of discourse interpretation is doubly dynamic: interpretation is created in-between the interlocutors and the hearer may be given freedom to create, rather than recover assumptions. I believe, however, that this idea is already incorporated within RT

from the moment that the drawing of weak implicatures is the addressee's sole responsibility, something that is beautifully illustrated in covert communication.

The underlying problem is that a theory which seeks to study meaning (even if it is characterised as the recognition of the speaker's intentions) should aim at something else than pragmatics. It is not only that there exists a dependence relation between semantics and pragmatics (see Kempson (1992) for an overview) either with the primacy of one over the other (semantic perspective that tries to incorporate pragmatic notions (Chierchia & McConell-Ginet 1990); pragmatics with a concesion to semantics (Carston 1990)) or a peaceful coexistence of both (Lasersohn (1993) appeals to the pragmatics of verification to solve the semantic problem of the 'truth-value gap').

But apart form this much needed link with semantic theory, my claim is that pragmatics, and more precisely RT, needs to establish an association with psycholinguistics, that is, with theories of natural language processing. Not in vain the principle of relevance is based upon economy in processing tasks. Thus there are some aspects (about processing) for which RT cannot provide a satisfactory explanation. Tanaka (1994: 62) tries to exemplify how puns function from the RT point of view. Unfortunately, her account opens up more questions than the ones she tries to answer. Let's concentrate specially on three points:

1. The meanings of a pun.
The author maintains that for the addressee to realize an expression is a pun, two meanings or more should be triggered by the speaker. While this claim is unobjectable (that all puns require more than one interpretation is at the very essence of pun definition), it remains unclear how the speaker manages to make the addressee notice that more than one interpretation is possible. Does the author defend that all possible meanings of a polysemous item are activated simultaneously? If this were the case, the second point would not make much sense.

2. Tanaka (1994: 68) remarks that puns attract attention because they frustrate initial expectations of relevance.
I fully agree with this assertion, but it is worthless unless one can explain why a certain meaning is more accessible than another. Obviously, the answer cannot go along the lines that the most accessible is the most relevant and the most relevant the most accessible, vacuous argumentation does not solve doubts.

3. Finally, Tanaka (1994: 72) points out that in puns the rejected interpretation is used to process the intended interpretation.
The problem here is to make explicit what motivates rejection of relevance and 'adoption' of new relevance.
I strongly believe that all these issues go beyond the domain of a pragmatic

theory, hence cannot be attributed to the workings of the principle of relevance. Instead one should turn to a discipline specialised in natural language processing, which offers solutions to the problems posed above.

My proposal, then, is not oriented towards a revision or broadening of the concept of relevance. That concept has been devised according to a pragmatic nature, and as such responds to pragmatic needs. The conflict arises when relevance is used to justify options that are not pragmatically motivated. On the contrary, if we maintain the notion of relevance within its domain, at the same time that implement our explanation with well-grounded psycholinguistic arguments, we are gaining in explanatory adequacy and credibility.

The next section is devoted to set out my approach to psycholinguistics, the processing theory I consider more appropriate, as well as the different effects that affect parsing.

3. A problem solved

I have tried to prove that a mere pragmatic theory does not completely explain how retrieval and inhibition of meaning is performed by the human parser. This type of knowledge appears to be fundamental when we talk about aspects related to the use of ambiguity, as punning.

It is commonly accepted among language researchers that our everyday communicative exchanges contain a high amount of ambiguity. Not surprisingly such peculiarity is far from preventing understanding, since thanks to the context most of the times ambiguity passes unnoticed to the listener. Because it disregards the effect on the listener, it is not this ambiguity on which I want to concentrate, but rather on the one that is the result of careful message design, that is, on the ambiguity found in advertising slogans.

To analyse the extent of this claim, this paper explores the use of ambiguity at various levels: structural, lexical (polysemy, idiomatic expressions) and phonetic. I offer a comparative study in two languages (English and Spanish), which permits to discover analogies in the treatment of such linguistic devices, as well as some differences in their productiveness.

Psycholinguistic investigation around structural ambiguity is rather indicisive, thus while some authors (Bresnan 1981; Gazdar et al. 1985) feel inclined to associate it with big processing effort, others (Carrithers 1989) prefer to separate neatly complexity and structural ambiguity. The only data I can add to help settle down this controversy is the strikingly low occurrence of syntactically ambiguous slogans, perhaps not so striking if

we admit that structural ambiguity is both more difficult to design and more difficult to perceive.

More interesting to the purposes of the present paper is the exploitation of lexical ambiguity which will be analysed at a double level. On the one hand, I examine the use of polysemous items; on the other, the behaviour of idiomatic expressions.

Jones (1989) has conclusively proved that given a lexical item all its meanings are simultaneously activated and immediately afterwards the human parser selects the most appropriate to the context. Nevertheless, there is one important restriction to this claim that is known as 'semantic priming'. Hirst defines the concept as follows

> A phenomenon whose psychological reality is well established is Semantic Priming: the fact that the mental processing of a particular concept will facilitate processing of other concepts that have a semantic relationship to the first.(Hirst (1992: 86))

But it is necessary to determine how the human parser decides on the most appropriate meaning of a polysemous item in non-biased contexts. Hogaboam & Perfetti (1975) have concluded that it is always possible to distinguish between a dominant meaning and secondary ones. This prevalence appears to obey frequency of use, semantic preferences or even semantic judgements. For working purposes I will consider all these factors under the cover term of the Priority Principle. The meaning of a lexically ambiguous item is thus ruled either by issues independent of the immediate context in which such item appears (triggered by the Priority Principle) or by the influence of preceding elements (the result of priming).

So far I have just mentioned polysemous items, but lexical ambiguity can equally make use of idiomatic phrases. In spite of the fact that there is no unanimous approach to idiom processing (there are three proposals ranging from the literal processing model, the simultaneous and the idiomatic), recent investigation (McCarthy 1992; Forrester 1995) seems to favour the processing of idioms as lexicalised expressions but with the literal meaning playing a crucial role in the process of interpretation.

Given the approach I have taken towards psycholinguistic research, problems one and (partially) two from the previous section can be solved. Now it is possible to explain why certain meanings can be more accessible than others, and I can anticipate that the speaker's role in such a carefully planned communication as advertising will be to manipulate the context in such a way that the presence of an item will activate a meaning at the same time that may inhibit others.

But at this point the picture is not yet complete. I still need to account for what motivates rejection of activated meanings together with inhibition and subsequent

activation, no doubt a highly effortful process. I must now turn to a strategy that has always been linked to syntactic ambiguity but that as I have argued elsewhere (D'ez Arroyo 1995) can rightfully be applied to lexical ambiguity, I am referring to the garden-path effect. Marcus defines it as:

> Sentences which have perfectly acceptable syntactic structures, yet which many readers initially attempt to analyse as some sort of construction, i.e. sentences which lead the reader "down the garden-path". (Marcus (1980: 202))

It is of interest to analyse how this definition can clarify some of the problems raised with respect to punning. Firstly, it provides the clue to the real worth of ambiguity. In the previous section we saw that Tanaka remarked the surprise effect associated with punning, although she did not offer an answer for it. But the answer is precisely a garden-path effect which forces upon the addressee a new processing of the sequence. This is completely unexpected since the first interpretation is supported by economic processing and the principle of relevance. However, in a skilfully designed attempt at attracting the reader's attention, the advertiser does not comply with the principle of relevance from the very beginning, rather his strategy is directed towards making the reader aware of what he is reading, an automatic and careless reading should be totally discarded.

Secondly, the garden-path effect may help us understand why syntactic ambiguity is not so productive as the lexical one. Ambiguity appears to be productive in so far as it raises the addressee's awareness. The speaker can more or less easily manipulate the context so that meanings are elicited or inhibited. But structural ambiguity depends on constituent grouping, and while it is not specially difficult to devise a slogan in which phrases can be paired up differently, it seems terribly complex to implement the structure with a garden-path effect. Probably then, advertisers are not willing to spend so much time and effort in a linguistic resource with dubious relevance (if there is no garden-path effect, how can they be sure that the ambiguity has been noticed?).

This point leads us to a question that I consider of the highest importance. I started arguing in favour of extending the notion of garden-path to lexical ambiguity, but this claim involves a slight change in the consideration of the concept; what I mean is that the garden-path effect does not necessarily impose a single new interpretation (destructive garden-path), it can just as well alert the reader on the other possible meanings of the item that have been discarded under the workings of either priming or the priority principle. I call this last instance "cumulative garden-path", since the implicatures activated do not clash with the initial ones, and a mixture of them will give

way to the final interpretation.

This view leads us to a better understanding of Tanaka's words in problem three in the immediately preceding section. That is, the original interpretation that initially was felt so relevant is not pushed out by the new one, more in agreement with the principle of relevance, in contrast, thanks to a cumulative garden-path effect both are able to contribute to the recovering of the intended message.

Finally I must allude to the last resource of ambiguity, the one that results from the use of items that have the same or near pronunciation as others that are spelt differently. Again the context (both linguistic and non-linguistic) plays a fundamental role in helping the addressee establish the intended connection and thus the double meaning.

4. General discussion

4.1 Structural ambiguity

Judging by the corpus I have used, this kind of ambiguity does not seem to be particularly popular among advertisers, this is so to the extent that I have just found one example written in English but not even one in Spanish. I have already alluded to some possible reasons for this that hopefully will become clearer through the detailed analysis of the data presented.

The example showing structural ambiguity is the following:

(1) Discover Dalepak's new taste in vegetables. Woman's Own 12th August 1991.

Two different constituent groupings are available:

i) discover [NP Dalepak's new taste] [PP in vegetables]
ii) discover [NP Dalepak's [NP new taste [PP in vegetables]]

Each structure is associated with its own interpretation. Thus (i) seems to imply that the firm Dalepak manufactures (certain) vegetables for the first time. The bodytext confirms such reading ("our new Vegetable Burgers"), at the same time that informs the consumer where to look out for them ("in your supermarket's freezer cabinet"), an obvious sign of the novelty of the product. Alternative (ii) is equally plausible: it attributes a new flavour to Dalepak's vegetables, as if they had been improved. Such an interpretation is also backed by the bodytext ("finest quality vegetables"; "a delicious

blend of ..."). But according to RT a difference can be drawn between the two. While the former is more informative, and hence more relevant, the second is somehow taken for granted (it is a common practice among advertisers to declare their goods as the best in the market!).

Provided this distinction is accepted, it could arguably be said that interpretation (i) comes first than (ii). But the fact is that both readings contribute to the ultimate message the advertiser longs for. I would like to insist on the low effectiveness of this type of ambiguity as it stands in the slogan: it does not involve special effort in its processing; in addition there does not exist an element that will ensure the reader's awareness about the two possible constituent groupings. They are confirmed, as we have just seen, in the bodytext, a part of the advertisement very unlikely to be read unless the addressee is specifically directed towards it.

More interesting is the use of lexical ambiguity that I examine in the following section.

4.2 Lexical ambiguity: polysemy

This is by far the most popular linguistic strategy among advertisers, a popularity that may be due to the infinite capacity for surprise it encloses. The reader's expectancies about what will follow in the slogan are systematically violated, hence the addressee's attention is guaranteed beforehand. RT makes it clear that human beings draw interpretations that (supposedly) are relevant, but the garden-path effect put to use with this resource ensures that the addressee will be taken off-guard. Such a strategy offers limitless usage, what to me lies at the heart of advertisers' preference for lexical ambiguity.

The analysis starts with English examples:

(2)   The Greeks, Romans and Moors raised their standards here.
       We've kept the flag flying ever since. <España> The Economist 12th March
       1994.

The item standards is primed above all by the verbal form raised which imposes upon it the interpretation "degree of excellence". This reading is relevant since these peoples are associated with high cultural level, innovation, adventurous spirit, etc. But as the reader proceeds he finds the item flag which can be a synonym of standard. It is now when by a garden-path effect the item standard is regarded as flag. The implicatures at issue have to do with colonization. However, this garden-path effect is not destructive

but cumulative, note that the initial interpretation can be maintained, resulting in a country, Spain, which keeps the best of those invaders.

Consider next:

(3)   This year, put the star at the bottom of the tree. <Movie Stars> People 26th December 1994.

The date in which the advertisement appeared (Christmas time) represented in the slogan by this year primes the item star, activating the meaning "a star-shaped mark" which one puts on top of a Christmas tree. However, the rest of the ad clashes with this practice: there is no reason to put the star at the bottom of the tree. Facing this incongruity, the reader will try to find more information that allows deciphering of the message. In this example, the garden-path effect is due to the trademark Movie Stars which manufactures videos, responsible for inhibiting the first interpretation and activating "the most prominent performer in a film". Unlike example (2), number (3) shows destructive garden-path. The initial reading is discarded in favour of the last message: give videos as a Christmas present.

Because of its unexpectedness, ambiguity is usually paired up with humour (Cook 1992; Tanaka 1994), although humour is not necessarily associated with double meanings.

More examples are:

(4)   Sun Alliance. The people behind Britain's industrial might. The Economist 23rd April 1994.

This slogan is a bit special in that it contains an item, might, which is not really an ambiguous lexeme, but two different lexemes which share the same pronunciation. From this perspective, it would belong to another section (namely phonetic ambiguity), however, given the data presented there, I do believe it appropriate to include the example now. Hence, disregarding the Concise Oxford Dictionary's choice I have decided to treat might as an instance of lexical ambiguity.

According to this, might is primed by people and Britain that activate in it the meaning of "power". Nevertheless, there are several sentences in small print inside red colour bubbles which contain the item might:

It might break down. It might fail. It might sink. It might crash. It might get stolen. It might explode. It might catch fire.

This text provokes a garden-path effect over the initial interpretation, activating the reading of "possibility". Again, garden-path is cumulative since the message to be recovered is that this powerful insurance company protects Britain's powerful industry from possible risks.

Double lexical priming can also be enough to impose activation. See how this works in:

(5)   After years spent protecting you from an impact, a Volvo designed to create one. She November 1997.

The item protecting primes the polysemous word impact in such a way that the most accessible meaning is "the action of one body coming forcibly into contact with another". This available interpretation is processed in agreement with the principle of relevance. As the reader continues, he finds elements such as Volvo and designed that in turn prime the pro-form one. The pro-form is in place of impact, however, the previoulsy activated meaning does not fit into the new context created by the aforesaid elements which elicit a new meaning of the word, namely, "strong influence". The reader is only aware of this change when he comes across the pro-form, hence the surprise.

The following slogan equally illustrates the garden-path effect disclosed by the trade-mark, even though it is restricted to those familiar with industrial products:

(6)   After all these years, we thought we'd go out for a spin on our own. <Sorvall> Science September 1996.

Again, the linguistic context is manipulated by the placement of the expression after all these years, together with the phrasal verb to go out for, which prime the item spin understood in its colloquial usage as "a brief drive for pleasure". However, Sorvall being a company specialised in centrifuges is relevant enough to activate in spin the meaning of "a spinning motion, a whirl". The garden-path effect is cumulative, not destructive, since some of the previously activated weak implicatures can survive in the new context: this firm has detached itself from another company in the market and from now on it will work autonomously.

I shift now to the illustration of lexical ambiguity in Spanish examples:

(7)   Regálelo y verá. <Canal +> Blanco y Negro 24th December 1994.

The Spanish verb ver has got multiple meanings, but the presence of the verbal from regúlelo limits all the possibilities to "be a witness of something fantastic". The implicatures activated have to do with a nice behaviour of the givees towards the giver

because of this marvellous gift. Needless to say, Christmas time (the moment the ad was issued) is a period of the year in which people buy more presents, and gift-giving can become hard work, so good ideas are always welcome. However, the occurrrence of Canal + provokes a garden-path effect over verá, eliciting the meaning of "watch". The initial interpretation will not be rejected, since advertisers wish Canal + to be considered a fine gift.

There is a small difficulty with this slogan, though. Whenever you offer a present you are not supposed to benefit from it, unless it is not something personal and the receiver is someone who lives with you. This is background knowledge, knowledge that will be made use of by most readers (maybe a selfish way of giving a gift).

The same word verá appears in the next slogan too:

(8)   No verá nada mejor. <Multiópticas> El País Semanal 2nd April 1995.

According to the priority principle, the item verü is interpreted as "find", however, the company which signs the ad activates the meaning of "look at". Both readings are relevant for the ultimate message intended by the advertiser, hence the garden-path effect is cumulative.
Let's move to:

(9)   Del éxito de la serie 3 hay versiones para todos los gustos. <BMW> El País Semanal 19th March 1995.

In this example, the reader finds the item versiones primed by the presence of the item éxito, which activates the meaning of "opinions". The implicatures relevant to the context are about the envy that results from other people's success and the subsequent comments. Activation of such implicatures is considered by the addresser stimulating enough for the reader, who will feel compelled to know more about those opinions'. This sort of covert gossiping leads the reader to the bodytext where he will discover that the word versiones means in fact models suited to please anyone. Once more the garden-path effect is cumulative because, even though the advertiser cannot be held responsible for claiming that these cars are much admired and envied, the implicatures are easily retrieved in the created context. This is a nice example of how covert communication works.

More examples are:

(10)   Para algunos de nuestros coches, la única línea que cuenta es la línea de llegada.
        Para otros, la línea. Sencillamente. <Rénault Laguna> El País Semanal 30th April
        1995.

(11)   Anda, ponme un Ballantine's con hielo mientras llega la panda... El País Semanal
        9th April 1995.

These two advertisements are important above all because of the close dependency established between the image and the text. The first one is divided into two parts (corresponding to the two sentences in the slogan), each with its own picture. The reader can see a racecourse and a racecar, so the item l'nea is associated with the beginning of the race or with its end. The information that follows activates implicatures relative to winners, high technology, power and so on. The next page of the magazine contains a picture of a beautiful car in the country, which primes the item l'nea in the second part of the slogan, understood as "design". This is a rather complex example given the activation and inhibition processes involved. But all the implicatures that the reader activates are useful to understand a message that combines high technology, precision, etc. on the one hand, and beauty and environmental care on the other. So the processing effort is rewarded with contextual effects.

Number (11) is equally preceded by a big picture showing a panda bear. Such a presentation activates the meaning of a female panda bear as a possible referent for la panda. However, the reader is aware that the bear cannot speak and even less ask for a whisky. The noun phrase la panda is understood as "a group of friends" thanks to what has just been said and thanks also to the presence of the expression un Ballantine's con hielo: a finest drink to be enjoyed with the best company. These implicatures are activated as a result of the ambiguity created by the picture. A more in-depth analysis should explore possible connections between ambiguity and metaphor (a process of personalization), but it requires more time and space and goes clearly beyond the limits of the present paper.

Once lexical ambiguity with polysemous items has been illustrated, I would like to turn to the use of idiomatic expressions.

4.3 Lexical ambiguity: idioms

As has already been pointed out, I believe that when the native reader comes across an idiomatic expression, the most accessible interpretation is the figurative one. Nevertheless, the literal reading plays an important role in the recovering of the message

intended by the addresser, a reading that will be elicited by manipulation of the context, as I will try to show in this section.

I am going to start the exemplification in English discussing two examples subject to a priming effect due to the pictures:

(12)   Why be in the dark about Pakistan's products? <Export Pomotion Bureau> The Economist 8th January 1994.

(13)   It's always wise to make reservations for dinner. <After Eight> She November 1997.

The first slogan is printed in yellow type on a black page. Such a colour affects the phrase in the dark making the reader aware of a componential analysis of the expression. At the bottom of the page several small pictures in lively colours are included, showing oranges, carpets and other products from that country. So the literal reading opposes black, a dark colour, associated to dullness or the unknown, to the range of bright colours to be found in the products. But there is still another interpretation to be retrieved: the figurative one. Contrary to what happens with the literal meaning, the idiomatic reading is the one that comes naturally to the reader's mind, even when there is a priming effect. Thus the expression in the dark is parallelly understood as "lacking information", which is confirmed in the bodytext ("Let's enlighten you about our whole range of products.").

Example (13) is preceded by a picture of chocolates carefully displayed in a box, over some of them there is the label 'reserved'. This presentation imposes a literal reading on the collocation make reservations for dinner, an expression that figuratively activates weak implicatures about having dinner at a restaurant, booking a nice table, etc. So the addresser benefits from the common usage of the expression, but at the same time achieves a new interpretation thanks to the priming effect.

Consider next:

(14)   How to kill athlete's foot before it reaches your athlete's foot. <Clorox> Family Circle 28th June 1994.

The slogan presents a repetition of the item athlete's foot which is a lexicalized expression for an illness. In agreement with the processing theory defended, that interpretation is the most directly accessible one. As the reader proceeds with the rest of the slogan, he finds again the expression athlete's foot whose interpretation, primed by the first occurrence of the item, should coincide. It happens, however, that there are

other elements in between the two repetitions, namely the verbal form reaches and the possessive adjective your, which can be said to prime the componential analysis of the phrase.

Finally, I am going to give an example of garden-path effect:

(15)   You'll find us in stores
        with health food.
        Not junk food. <Solgar> She November 1997.

Although at first sight this could be seen as a straightforward slogan, indeed it presents some level of complexity. The referent of the pronoun us is found in a double image containing on the left hand side a bottle of tablets (the vitamins that the ad intends to sell), and on the right hand side some fresh fruit. This picture, together with the original layout of the slogan that I have respected here, can be said to give way to syntactic ambiguity:

i) [VPfind us [PPin stores] [PPwith health food]]
ii) [VPfind us [PPin stores [PPwith health food]]]

According to (i), the product will be found in stores next to health food, while (ii) implies that the stores where you can buy the vitamins are those that have health food. But it happens that health food is a lexicalized expression that means "natural food thought to have health-giving qualities". The fixed meaning is subject to the priming influence of the image with the fresh food, eliciting the reading "good, tasty food". This meaning is backed up by the syntactic structure in (i) above. However, the addresser wants to make sure that such interpretation is available and thus introduces a garden-path effect in the last part of the slogan by means to the expression not junk food. The garden-path effect is meant to apply on the lexicalized meaning of the phrase health food, which in turn implies that the advertiser is not completely sure about the influence of the image to elicit the componential analysis, as well as the syntactic ambiguity.

Arguably this can reinforce my thesis that structural ambiguity is not used as a consistent device in the language of advertising, most probably owing to the difficulty in making the reader aware of such a possibility.

The next examples show the use of idioms in Spanish advertisements.

(16)   Conservando los bosques hacemos un buen papel. <BASF> El País Semanal 21st
        September 1997.

(17)   Cada día en Antena 3, una noche buena. <Antena 3 Televisión> Blanco y Negro 24th December 1994.

These two slogans have in common the inclusion of an idiomatic expression subject to lexical priming. Thus in the first example, the noun phrase los bosques primes the idiom hacer un buen papel, which is interpreted literally. The activated implicatures have to do with the good quality of recycled paper, and so on. But idioms are so deeply rooted in human minds, that even in these cases in which the context is biased, the figurative reading continues to be activated. This second interpretation, according to which Basf is behaving correctly, makes sense in a world concerned with environmental care, rainforest protection, recycling, etc.

Slogan (17) contains the item d'a, which primes the expression una noche buena. The opposition día/noche works in favour of a componential analysis of the lexicalized Noche Buena. But given the processing theory defended in the present work, together with the time of the year when the ad was published (Christmas), the reader can equally well activate the fixed meaning of the phrase. Both interpretations coexist, in fact the literal reading takes advantage of the implicatures drawn from the figurative one, since the evening before Christmas Day is a very special occasion.

The slogan that follows illustrates a double priming effect:

(18)   Este invierno, hogar dulce hogar. <La Lechera> El País Semanal 15th January 1995.

A picture of a cake and a coconut in two halves besides a bottle of the advertised product is enough to activate in the fixed expression hogar dulce hogar a literal reading. But it cannot be forgotten that the slogan contains the word invierno, an item placed to back the figurative interpretation of the phrase: winter season is associated with low temperatures, hence an invitation to stay at home, comfortably protected from cold weather. These two interpretations can be accommodated within the same context; a context full of implicatures about sweet activities that can be enjoyed in winter.

Let's examine

(19)   Regalos a la vista. <Alcon> El País Semanal 21st September 1997.

The slogan results in a slight contradiction as a consequence of the priming effect exerted by the word regalos over the idiomatic phrase a la vista: presents are usually wrapped so that emotion is pent up. In order to solve this slight incongruity, the reader is pushed to find more information in the bodytext, where he will discover that the

advertised products are for the eyes. This elicits the literal reading of the idiom and solves the initial problem. However, the first interpretation is not meant to be discarded altogether, remember that the figurative meaning of an idiom is important even in non-neutral contexts. The bodytext also explains that the mere purchase of these products guarantees a gift that will be notified to you right in the shop. This piece of information supports the original interpretation, according to which there is no trick in the offering of gifts, it is a straightforward process.

The information contained in the bodytext is also important to understand our last two examples.

(20)   La Rioja da que hablar
        a 400 millones de personas...
        ...en todo el mundo. <Gobierno de La Rioja> El Suplemento Semanal 21st December 1997.

(21)   Telefónica da crédito a sus palabras. Blanco y Negro 18th December 1994.

The layout found in (20) is designed to elicit a literal reading of the idiom *dar que hablar*. First of all the reader interprets the fixed phrase idiomatically applied to a place, La Rioja, that is associated with peacefulness. This creates certain uneasiness in the reader, generating the desire to know more. What follows, namely, 400 millones de personas and en todo el mundo, provokes a garden-path effect over the idiom, with the subsequent activation of the literal interpretation. The text confirms the garden-path reading in the following extract: "un monje anónimo escribió las primeras palabras en español hace más de mil años dando origen a un idioma que hoy compartimos más de cuatrocientos millones de personas". Funnily enough, this information can be a sound reason to maintain the initial reading, according to which La Rioja is a famous place people talk about.

As far as the second slogan is concerned, the expression *dar crédito* is the positive version of the idiom *no dar crédito a*, in spite of this alteration, the reader understands the fixed phrase idiomatically as "believe". The complement *a sus palabras* can be taken ambiguously meaning either sus as "its" (in this case the addressee would activate implicatures about Telefónica as a reliable company, a company that keeps its promises, etc.), or sus as "your", the user's words, which could give way to weak implicatures about the importance of the clients for the company, the need to keep them satisfied, etc.

The bodytext opens up another possibility without excluding these ones, so the garden-path would have cumulative nature. In this part of the ad the reader discovers

that dar crédito is intended as give credit, that is, Telefónica has issued a credit card to be used in any phone either public or private and from any country.

Once the use of lexical ambiguity has been examined, I would like to look at some examples that show phonetic ambiguity.

4.4 Phonetic ambiguity

The examples in this section are exclusively in English. There are no examples of phonetic ambiguity in Spanish in my corpus, which may indicate that given the near identity between what is pronounced and written, this ambiguity is not productive. By contrast, a language such as English in which there can be a dramatic difference between spelling and pronunciation favours ambiguity at the phonetic level. The context usually plays an essential role in helping the reader recover the possible intended meanings.

(22)   A taste that was meant to bee. <Kraft> Family Circle 28th June 1994.

Given the placement of the item bee at the end of the slogan, all the other elements within it have a priming effect. This implies that the reader creates expectancies about what will come, trying to finish the sentence with the verb be. Obviously, the presence of the noun bee does not fit syntactically but the addressee will make an effort to interpret this change. The advertised product is mustard with honey, which explains the alteration in the sentence.

Let's move to:

(23)   We're berry proud to present:
        new sugar free Berry Blue Jell-O. Family Circle 28th June 1994.

The first part of the slogan contains an item, berry, that does not fit in the context and which is clearly in place of very. The change, however, is highly informative for the reader, who becomes on alert about what is to follow. Then in the second part, he finds the reason for the change: a jelly that is made of berries. Replacement of expected items by others that share a phonetic and spelling resemblance with them makes the reader pay more attention to what he has in front of him. As happened with other examples, the original sentence and the slight change produced contribute to the final intended interpretation.

Another interesting example is found in

(24)   BEEGGXACT. <Sigma> Science September 1996.

I have respected the original print of the slogan, so that the intended effect can be better appreciated. The advertisement appears to contain only one item that, paradoxically, does not exist in English, yet which is understood as the familiar expression be exact. Recognition is based on spelling and phonetic likeness (note that there is an attempt at writing the pronunciation of the word exact, since the 'x' in between vowels is pronounced as the cluster /gz/), but it has consequences for the interpretation of the message, an interpretation that is not directly accessible. Thus the advertiser's first aim (to attract the reader's attention) has been achieved. In the bodytext, the addressee discovers that Sigma is a company which offers products for use in the in vitro manipulation and maintenance of preimplantation mouse embryos. This information fully explains the motivation for the placement of the item egg. Parallelly, the notion of exactness is supported by the high level of technology involved in reserach of this kind.

The next ad is made up of two phrases which keep a nearly perfect parallelism:

(25)   Buy hours. By ours. <Becton Dickinson> Science May 1996.

The reader finds a phonetic equivalence between the items buy/by and hours/ours, in such a way that the first part of the slogan survives in the second part, conversely the second part survives in the first by a garden-path effect. As the principle of relevance explains, the addressee is aware that so unusual a choice (hence the extra processing effort) has a strong motivation; the task, then, is to discover it. The bodytext discloses the reason behind such a choice: "...this easy-to-use reagent system provides comprehensive cell-by-cell flow cytometric results from whole blood in only a few hours, instead of days".

These lines help the addressee understand the efficiency of a new system which makes scientists save time, and thus money (this is derived from the use of the verb buy in the slogan). Therefore the conclusion drawn is that this company is a good asset (by/buy our technology).

I would like to finish the exposition with the following example:

(26)   When was the last time you had a totally organic experience? <Clairol> Glamour
        October 1995.

I consider it helpful to point out that the slogan is placed next to an article on birth control. From my point of view, this strategic location acts as a priming effect,

together with the sentence of the slogan itself, so that the reader is able to anticipate the most probable end of the sentence: "... orgasmic experience". However, such contextual grounded expectancies are flouted by the presence of the item organic. Note the extraordinary similitude between the two words both in spelling and pronunciation.

What is the intended effect sought for? The addresser looks out for the activation of weak implicatures about the sexual experience that can favour the natural product. On the one hand, the advertised products (shampoo and conditioner) are made of "organic herbs and all natural botanicals, drenched in pure mountain water". On the other hand, the whole paragraph contains allusions to the suggested interpretation: overwhelmed' or excited' are expressions to characterise feelings, emotions, which would be out of place in a hair cosmetics ad if it were not for the resemblance between the terms organic/orgasmic.

5. Conclusion

In this paper I have made an important objection to RT, namely, that the Principle of Relevance alone cannot account for the activation and inhibition of meanings. I have tried to prove that the pragmatic approach needs the help of psycholinguistics to render sound arguments about why certain interpretations seem more accessible than others. The framework chosen for the demonstration has been the language of advertising, a particularly useful field since the context in which the slogan is placed appears to be subject to the addresser's manipulation.

The manipulation takes the form of priming effect or either its opposite, the garden-path effect, which I have considered in a new light from traditional analyses. The contextual manipulation allows a better understanding of how certain types of ambiguity (i.e. lexical ambiguity) are particularly welcome by advertisers while others (i.e. structural ambiguity) are hardly made use of.

The crosslinguistic comparison carried out unveils interesting results about the universality of advertisers' methods, at the same time that reveals English as a more resourceful language as far as the exploitation of ambiguity is concerned. This last claim is based on the exemplification available to illustrate the levels studied, which in turn is supposed to take advantage of the specifics of the language itself.

References

BRESNAN, J. (ed) (1981), *The Mental Representation of Grammatical Relations*,Cambridge, Mass., MIT Press.

CARRITHERS, C. (1989), "Syntactic complexity does not necessarily make sentences harder to understand", *Journal of Psycholinguistic Research* 18-1, 75-88.

CARSTON, R. (1988) 1990, "Implicature, explicature, and truth-theoretic semantics". In Kempson, R. (ed) (1988) 1990, *Mental Representations*, Cambridge, CUP.

COOK, G. (1992), *The Discourse of Advertising*, London, Routledge & Kegan Paul.

CHIERCHIA, G. & MCCONNELL-GINET, S. (1990), *Meaning and Grammar*, Cambridge, Mass., MIT.

DIEZ ARROYO, M. (1995), "Lexical ambiguity in ads", *Estudios Ingleses de la Universidad Complutense* 3, 187-200.

FORRESTER, M. (1995), "Tropic implicature and context in the comprehension of idiomatic phrases", *Journal of Psycholinguistic Research* 24-1, 1-22.

GAZDAR, G., KLEIN, E., PULLUM, G. & SAG, I. (1985), *Generalized Phrase-Structure Grammar*, Oxford, Blackwell.

GREEN, G. (1990), "The universality of Gricean interpretation", *Berkeley Linguistic Society* 16, 411-428.

GRICE, H. P. (1975), "Logic and converstion". In Cole, P. & Morgan, J. (eds) (1975), *Syntax and Semantics 3: Pragmatics*, New York, Academic Press.

HIRST, G. (1992), *Semantic Interpretation and the Resolution of Ambiguity*, Cambridge, CUP.

HOGABOAM, T. & PERFETTI, C. (1975), "Lexical ambiguity and sentence comprehension", *Journal of Verbal Learning and Verbal Behavior* 16, 265-274.

JASZCZOLT, K. (1996), "Relevance and infinity: implications for discourse interpretation", *Journal of Pragmatics* 25, 703-722.

JONES, J. (1989), "Multiple access of homonym meaning: an artifact of backward priming?", *Journal of Psycholinguistic Research* 4, 417-432.

KEMPSON, R. (1977) 1992, *Semantic Theory*, Cambridge, CUP.

KEYNES, J. M. (1921), *A Treatise on Probability*, London, MacMillan.

LASERSOHN, P. (1993), "Existence presuppositions and background knowledge", *Journal of Semantics* 10, 113-122.

LEVINAS, E. (1961), *Totality and Infinity*, Pittsburgh, Duquesne University Press.

MARCUS, M. (1980), *A Theory of Syntactic Recognition for Natural Language*, Cambridge, Mass., MIT Press.

McCARTHY, M. (1992), "English idioms in use", *Revista Canaria de Estudios Ingleses*
    25, 55-65.
O'NEILL, J. (1988/89), "Relevance and pragmatic inference", *Theoretical Linguistics*
    15-3, 241-261.
RICHARDSON, J. & RICHARDSON, A. (1990), "On predicting pragmatic relations",
    Berkeley Linguistic Society 16, 498-508.
SPERBER, D. & WILSON, D. (1986), *Relevance, Communication and Cognition*,
    Oxford, Blackwell.
TANAKA, K. (1994), *Advertising Language*, London, Routledge.
WITTGESTEIN, L. (1978), *Philosophical Investigations*, Oxford, Blackwell.