*Idioms, Transparency and Pragmatic Inference**

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Abstract

This paper presents a relevance-theoretic approach to idioms which accounts for the inferential route a hearer may take to bridge the gap between the literal and idiomatic meaning of these expressions and which helps him to perceive the idiom as relatively transparent. The different layers of inference which make up this inferential route may be gone through very fast in the interpretation of familiar idioms, or be modified in the interpretation of idiom variants. In either case the depth to which the encoded concepts are processed and the direction of the inference is strongly constrained by considerations of relevance.

1 Introduction

The traditional approach to idioms is right in saying that the meaning of an idiom is not the result of a compositional analysis of the literal meanings of its parts (e.g. the idiomatic meaning of the expression *to spill the beans* is not its compositional meaning). However, the fact that the meanings of idioms are not compositionally derived does not necessarily entail that they must be arbitrarily stipulated in memory (a position frequently adopted by traditional views). It may still be possible to infer some meaningful relation between the literal and idiomatic meanings, and this relation may be exploited in using and interpreting idioms in everyday conversation. Explicitly or implicitly, current psycholinguistic models agree that the comprehension of idioms depends to a certain extent on the existence of a non-arbitrary relation between the meanings of the constituent words and the overall idiomatic meaning (e.g. Cacciari and Tabossi, 1993; Everaert et al, 1995; Gibbs, 1994; Glucksberg, 2001; Nunberg 1978, Nunberg et al, 1994; Wasow et al, 1983). As I have pointed out is previous work (see Vega Moreno, 2001, 2003), the main problem with these models is that they do not examine in any detail the pragmatic processes that enable these meanings to interact in on-line comprehension. Pursing the pragmatic framework of Relevance Theory (Sperber

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and Wilson, 1986/1995) and its current lines of research on Lexical Pragmatics (Carston, 1997, 2002; Wilson, 2004; Wilson and Sperber, 2002), I will try to shed some lights on this issue.[1]

The pragmatic approach to idioms I propose here is grounded on two main assumptions. On the one hand, I accept the relevance-theoretic idea that there is not a clear-cut distinction between literal and loose interpretations, but a continuum of cases. On the other hand, I suggest that most idioms lie along that continuum of looseness and as a result they vary in the extent to which the overall idiomatic meaning can be inferred from the meanings of the parts and their manner of combination (i.e. in their degree of transparency). The relevance-driven comprehension procedures that apply to utterances containing idioms, I claim, will constrain the direction of the inference process and the depth to which the encoded 'literal' meaning is processed. Repeated processing of familiar idioms may result in the development of a pragmatic routine which directs the hearer along a certain inferential route, and towards shallow processing of the encoded concepts.

2 Idioms, metaphors and unfamiliar words

Much of the literature on metaphor has focused on the interpretation of nominal metaphors of the sort *X is Y*. Much ordinary speech, however, involves the comprehension of verbs, compounds and even whole phrases which are metaphorically intended, such as those in (1)-(6):

(1) My father is *glued* to the computer for hours.
(2) His conscience has *rotted* after so many years in power.
(3) I know I cannot be *first violin* but I deserve a better job in the company than this.
(4) I'll do my best to convince them of the advantages of the new product but I will not *clean anybody's shoes*.
(5) Since I work at university, I feel I am *swimming with sharks.*
(6) Supervisions are mentally stimulating. I like the way my supervisor *squeezes my brain* to make me solve the problems I encounter.

According to Relevance Theory, the comprehension of the utterances in (1)-(6) would proceed in just the same way as the comprehension of any utterance. Following a path of least effort, the hearer takes the encoded concepts as a starting

[1] I will henceforth assume the reader is familiar with the pragmatic framework of Relevance Theory and its approach to Lexical Pragmatics (i.e. the fine-tuning of encoded concepts in on-line comprehension) (see Wilson, 2004 and Wilson and Sperber, 2004 for good recent overviews).

point for deriving the speaker's meaning. A consequence of taking the path of least effort is that he often finds his expectations of relevance satisfied after considering only a subset of the encyclopaedic assumptions associated to the encoded concepts. This relatively shallow processing generally results in the construction of an ad hoc concept on-line. In (1), for instance, the hearer might construct an ad hoc concept GLUED*, which is broader than the encoded concept in that it denotes situations in which someone is very close to and inseparable from something, even if not actually glued to it. In (2), he might construct an ad hoc concept ROTTED*, which is broader than the encoded concept in that it denotes certain states of moral corruption or degeneration as well as those involving flesh, vegetation, etc. In (3), the encoded 'literal' meaning of the compound *first violin* may be broadened to create an ad hoc concept [FIRST VIOLIN]*[2], which denotes people who have an important leadership role and who enjoy the praise and success proper to that position. Finally, the hearer of (4), (5) and (6) might understand the phrases *to clean someone's shoes*, *to swim with sharks* and *to squeeze someone's brain* as conveying the phrasal ad hoc concepts [TO CLEAN SOMEONE'S SHOES]*, [TO SWIM WITH SHARKS]* and [TO SQUEEZE SOMEONE'S BRAIN]*. These concepts may denote not (just) the situations described by the expressions taken literally but something more general: in (4), a situation in which people are degraded, humiliated, doing something unpleasant and below their social status; in (5), a state of affairs in which people are in an environment where they feel uncomfortable, unsafe, surrounded by entities which they do not trust and which they fear will harm them; and in (6), a state of affairs in which people are forced to think very hard.

It could be argued that there are at least two ways in which the hearer of such examples may enrich the encoded sentence meaning to warrant the expected cognitive effects. On the one hand, he may adjust the individual concepts encoded by the words in the utterance, creating unlexicalised concepts which are broad enough to warrant the expected cognitive effects (e.g. SWIM*, SHARK*, GLUED*). On the other hand, he may understand a combination of words or a whole phrase as expressing a concept whose denotation is broad enough to warrant these effects. I believe that, providing that the resulting enriched proposition makes the utterance relevant as expected, it does not matter much which way the inferential fine-tuning goes. In (1)-(3), for instance, it may not matter whether the hearer constructs the ad hoc concepts GLUED*, ROTTED*, and [FIRST VIOLIN]* or the phrasal ad hoc concepts [TO BE GLUED TO X]*, [TO HAVE ROTTED]* and [TO BE FIRST VIOLIN]*. Different people may enrich the explicit content in different ways, constructing different concepts, all of which may yield roughly the same implications for

[2] Brackets indicate that the whole string is metaphorically interpreted, and not just the last word.

roughly the same processing effort, and hence make roughly the same contribution to relevance.

On other occasions, however, as in (4)-(6), in order to arrive at the intended implications, the hearer would need to add to the context both assumptions retrieved or derived from the encyclopaedic entry of the encoded concepts (e.g. the assumption that sharks are dangerous creatures) and assumptions derived from the compositional meaning of the phrase (e.g. the assumption that swimming with sharks is a dangerous activity). Since the pragmatic adjustment of the encoded concepts alone may not warrant the intended implications (e.g. the implications that the speaker feels unsafe, uncomfortable in his job, etc.), pragmatic adjustment at word level may need to be complemented with pragmatic adjustment at phrase level. As a result, the hearer may construct a phrasal concept (e.g. [TO SWIM WITH SHARKS]*) whose denotation is broader than that of the compositional meaning of the phrase. This fine-tuning process operating at phrase level can be seen as taking place in the interpretation of (4)-(6). Thus, comprehension of these metaphorical uses may involve the construction of a phrasal ad hoc concept which would be understood as a constituent of the proposition expressed, as in (7)-(9). Moreover, such constituents would contribute to the truth-conditional content of the utterance, as shown in (10)-(11) where the truth or falsity of the proposition expressed in each case depends on whether it is the literal or ad hoc phrasal concept that is intended:

(7) THE SPEAKER WILL NOT [CLEAN ANYBODY'SHOES]*
(8) THE SPEAKER IS [SWIMMING WITH SHARKS]*
(9) THE SPEAKER'S SUPERVISOR [SQUEEZES HER BRAIN]*

(10) If your supervisor squeezes your brain, she'll go to jail
  a. SQUEEZE X'S BRAIN – true
  b. [SQUEEZE X'S BRAIN]* – false
(11) If your supervisor squeezes your brain, you'll produce a good thesis
  a. SQUEEZE X'S BRAIN – false
  b. [SQUEEZE X'S BRAIN]* – true

I have argued that the formation of the new concepts is a by-product of the pragmatic fine-tuning of the encoded concepts during the mutual adjustment process. This is not to say that all the information used in the construction of an ad hoc concept is retrieved ready-made from the encyclopaedic entry of the encoded concept. These assumptions are simply the starting point for an inferential process in which they are combined with other accessible hypotheses about explicit content, context and cognitive effects to yield implications which may themselves be used as premises for further inference (see Vega Moreno, 2004). The resulting

ad hoc concepts may warrant a diverse range of implications derived from different combinations of these assumptions. Although the same comprehension procedure and mutual adjustment process are at work in interpreting every utterance (whether literally, approximately or metaphorically intended), the hearer is not always familiar with the concepts encoded by the speaker's words and may therefore have no direct access to the encyclopaedic information normally associated to these concepts, and no direct knowledge of their denotations. On these occasions, arriving at the intended combination of explicit content, context and cognitive effects may involve the construction of an ad hoc concept. However, this concept cannot be formed by pragmatic fine-tuning of the concept encoded by the unfamiliar word, but must be accessed indirectly, using hypotheses about the speaker's meaning derived from other sources during the interpretation process. Consider (12) and (13), for instance:

(12) The plane could not take off and we had to return to the airport. They said it was due to technical problems: one of the *turbines* was damaged and needed to be replaced.
(13) My knee is really bad. The results from the *arthroscopy* show there is hardly any cartilage left.

In engaging in ordinary conversation, listening to the news, speeches, etc. we often encounter words which we do not understand but whose meaning we can work out from other clues. Considering hypotheses about explicit content, context and cognitive effects, the hearer of (12) and (13) may be able to assign some tentative content to the concept conveyed by the unknown word. The new concept may contribute to relevance in the expected way, by warranting the derivation of appropriate cognitive effects. In (12), for instance, the hearer may construct the hypothesis that a turbine is a part of a plane. If the resulting interpretation satisfies his expectations of relevance, he will be entitled to assume that his hypothesis was correct. The word *turbine* may be (incompletely) understood as expressing a certain concept, say TURBINE*, which denotes a certain kind of plane part. In the same way, the hearer of (13) may be able to construct the hypothesis that an arthroscopy is a certain kind of medical procedure which may be used on knees, and construct a partly understood concept, say ARTHROSCOPY*.[3]

[3] Sperber and Wilson (see Sperber, 1997; Sperber and Wilson, 1998) have developed a more detailed account based on the distinction between intuitive concepts and attributive or reflective concepts. Many concepts encoded by unfamiliar words are initially attributively (or reflectively) understood (e.g. "arthroscopy, whatever people mean by that"). After enough exposure, they may get an intuitive grasp of the concepts and no longer need to attribute their content to anyone else (e.g. the concepts encoded by the words 'bread', 'chair', etc.). Some concepts always remain attributive, at least for the majority of language users (e.g. the concepts encoded by the words

I want to propose that unfamiliar idioms lie somewhere in between novel metaphorical expressions (such as those in (1)-(6)) and unknown lexical items (such as those in (12)-(13)), varying in the extent to which their meanings can be fully inferable, partly inferable or not inferable from the encoded 'literal' meaning of the string on a first encounter.[4] A feature of idioms, even the most opaque ones, is that, unlike lexical items, they are generally composed of words which are familiar to the hearer. The degree of transparency of an idiom would be determined by the extent to which some of the encyclopaedic information made accessible by these words can actually help the hearer to derive an appropriate overall interpretation. At one end of the transparency spectrum, we find very opaque idioms, for which none of the encyclopaedic assumptions made accessible by the words in the string (separately or in combination) helps with the identification of the speaker's meaning, as in (14)-(15):

(14) *Jason:* The old man did not want to sell his house so the council waited until he *kicked the bucket* to get hold of everything he owned.

(15) *Tom:* Where is Vanessa?
Carol: I don't know, she is probably *chewing the fat* with her friends somewhere.

Using encyclopaedic assumptions about buckets or the kicking of buckets would not help the hearer of (14) to derive implications about dying, and using encyclopaedic assumptions about fat or the chewing of fat would not allow the hearer of (15) to derive implications about talking. Although the first time these opaque idioms are encountered, the hearer may explore these assumptions in an attempt to assign a plausible interpretation to the string, he would need to reject them for not helping to make the utterance relevant in the expected way. On some occasions, the hearer may be able to assign some tentative content to the idiom along the lines suggested above for the unknown words in (12)-(13). On some other occasions, explicit learning would be needed.

'witch', 'neuron', 'planet', etc.). Although I agree with this account, my aim here is simply to show how hypotheses about explicit content, context and cognitive effects constructed during the mutual parallel adjustment process play an important role in assigning meaning to unfamiliar words on hearing them for the first time. The resulting concept is indeed unlikely to be a full-fledged concept but merely attributively or reflectively understood.

[4] I believe this claim holds whether the hearer is unfamiliar or familiar with the expression. Although this section is mostly concerned on how idioms may be acquired, as the paper progresses, I will show that familiarity with an idiom does not necessarily make comprehension less inferential.

Contrary to standard assumptions, modern research on idioms has shown that opaque idioms are rare and that most idiomatic expressions enjoy at least some degree of transparency, as with the examples in (16):

(16) *To hold all the aces, to speak one's mind, to lay one's cards on the table, to stab s.o. in the back, to miss the boat, to pull strings, to be on cloud nine, to change one's mind, to have one's feet on the ground, to turn over a new leaf, to be the icing on the cake, to keep s.o. at arm's length, to be the last straw (that broke the camel's back), to cost an arm and a leg, to go over the line, to fill the bill, to add fuel to the fire, to get out of the frying pan into the fire, to be in the same boat, to lose a train of thought, to slip one's mind, etc*.

Accessing some encyclopaedic assumptions associated to the concepts encoded by the words in these strings, or derivable from their combination, generally helps a hearer unfamiliar with the expressions to infer an appropriate idiomatic interpretation. Consider (17) and (18):

(17) There is no way I will get the job. Peter, however, *holds all the aces.*
(18) John is a very disloyal person I would not be surprised if he *stabs you in the back.*

The idioms in (17)-(18) are relatively transparent, in that even when a hearer is unfamiliar with their meaning, he can easily infer it given the encoded 'literal' meaning. Comprehension would proceed along the same lines as for the phrasal metaphors in (4)-(6) above. The hearer, following a path of least effort, would consider assumptions made highly accessible by the encoded concepts (e.g. the assumption that the ace is the highest and therefore best card; that those who hold all the aces are likely to win; that stabbing in the back is a cowardly act of betrayal, etc.), and fine-tune the encoded 'literal' meaning of the phrase until he arrives at an interpretation that satisfies his expectations of relevance. The output of this pragmatic adjustment process would generally be a phrasal ad hoc concept broader in its denotation than the compositional meaning of the phrase (e.g. [TO HOLD ALL THE ACES]* would denote situations in which someone has every chance of winning something; the concept [TO STAB IN THE BACK]* would denote acts of betrayal). It is this ad hoc concept that the hearer would take to be part of the speaker's meaning.

At some point on this spectrum of transparency are what we can call 'partially transparent' idioms. These are idioms for which encyclopaedic assumptions associated to some, but not all, of the encoded 'literal' concepts may help to derive an appropriate idiomatic interpretation. This may happen because the hearer is not

familiar with one of the words in the string, as with the Spanish idioms *pensar en* (think of) *las musarañas*, meaning roughly 'to be absent minded' or *meterse* (to get into) *en un embolao,* meaning roughly 'to get into trouble'. Many people who use the former idiom do not know that musarañas are a type of mice (shrews). To make sense of the expression, they simply take it to refer to something not particularly significant. The rationale for this is that thinking about something insignificant would prevent the hearer from paying attention to what really matters causing him to be absent-minded.[5]

Notice, too, that even when the hearer is familiar with the words in the idiom, the information associated in memory to the concept it encodes may not help him to make sense of the idiomatic meaning. This is the case, for instance, with the phrase *the beans* in the English idiom *to spill the beans* or *the buck* in *to pass the buck*.[6] In making sense of the expression, the hearer may sometimes add to his encyclopaedic entry for the encoded concept the sort of assumptions that would make the expression transparent in the expected way. On learning that the Spanish idiom *acostarse con las gallinas* (*to go to bed with the hens*) means 'to go to bed very early', for instance, the hearer may assume that hens go to bed very early even if this assumption was not there to begin with. Similarly, on learning that the English idiom *to pass the buck* means 'to pass over a problem', the hearer may infer that a buck is sometimes a problem or a burden which one may want to get rid of.

My main concern in this work is not so much with opaque idioms but with idioms which enjoy at least some degree of transparency. I will argue that these expressions are initially understood very much like metaphors: by exploring the encyclopaedic entries of the encoded 'literal' concepts, the hearer looks for implications that would make the utterance relevant in the expected way. Repeated processing of the same expression may result in the hearer using roughly the same encyclopaedic assumptions and deriving roughly the same implications on numerous occasions and so that the expression would become a kind of standardised loose use. The most essential feature of idioms is in fact this ability to move back and forth between literalness and looseness, creativity and standardisation.

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[5] Because of the phonological relation between the words *musarañas* and *arañas* (spiders), I originally took the word to refer to some spider-like animals. I made sense of the idiom by assuming that thinking about these small, arguably meaningless, creatures would stop someone from concentrating on more important things, causing him to be absent-minded.

[6] Some scholars (e.g. McGlone, Glucksberg and Cacciari, 1994) have proposed that the idiom *spill the beans* is more transparent than an alternative expression *spill the mud,* might be suggesting that the phrase *the beans* does make some contribution to idiom meaning (e.g. in that beans, like secrets, are many and countable).

3 Making sense of idioms

Although pragmatics is concerned with the on-line comprehension process and not with the historical events that gave rise a certain expression or meaning, looking at how the meanings of words, and of idioms, have evolved over time may shed some light on issues which are central to pragmatics. The idea that many idioms started out as literal utterances that underwent, over time, a metaphorisation process, provides an interesting test case for the relevance-theoretic claim that understanding metaphorical meaning involves pragmatic broadening of the encoded meaning.

Tracking back the events that gave birth to various idiomatic expressions researchers have found that many idioms were originally intended literally (Dunkling, 1998; Parkinson, 2000). Thus, *spill the beans* was originally used to refer to the spilling of beans, *barking up the wrong tree* was used to refer to hunting dogs barking at trees where there was no prey, and so on. Some studies suggest that the expression *spill the beans* might have originated as part of a game played in rural fairs in America. This game involved contestants guessing the number of beans in a jar. The correct number was revealed by spilling the beans after bets had been made. Asking someone to (literally) spill the beans was asking them to reveal the concealed information (Dunkling, 1998). If the idiom did originate in this way, we can assume the expression must have been repeatedly used to convey roughly the same implications (e.g. the implication that the speaker wants someone to reveal some hidden information, that performing the act of spilling beans would result in the revelation of this information, etc.). We can see also how the popularity of this game at the time might have led to the loose use of the expression *spill the beans* to convey some of these implications. That is, the expression could have been used at the same time both literally, to refer to the spilling of real beans during the game, and by extension, to refer to other types of events which involved the revelation of some hidden information.

From a relevance-theoretic perspective, the comprehension of *spill the beans* when used in this loose way would be no different from the comprehension of approximations and metaphorical uses. The literal compositional meaning of the expression would give access to a range of encyclopaedic assumptions; during on-line interpretation, these assumptions would be considered, in their order of accessibility, in the search for implications that would satisfy the expectations of relevance raised by the utterance. These expectations may be satisfied by a loose interpretation on which the expression *spill the beans* is taken to refer to events in which information is revealed, with the literal spilling of beans in the game-setting as a special case.

The Spanish idiom *tirar la casa por la ventana* (*to throw the house out of the window*) seems to have followed the same broadening process over time. The

origin of the idiom goes back to the end of the XVIIIth and beginning of the XIXth centuries when it was traditional in Spain for people who won the lottery to throw their furniture and old possessions out of their windows so as to show off their wealth and indicate that they were about to commence a new life of luxury (Buitrago, 2002).[7] Knowing this, we may assume that people living in Spain at that time must have used the expression "literally" to convey roughly the same implications.[8] These might have included the implication that the people who throw their possessions out of their windows are wasting or losing money, that they would need to spend a great deal of money buying new things, that this expenditure of money is unnecessary, that they are not behaving in a very sensible or discriminating way, etc. Familiarity with the expression (in its literal sense) may have led native speakers to start using the expression loosely, to refer to situations in which someone is spending or losing large amounts of money somehow unreasonably.

For both the English and the Spanish expressions, what might have started as a novel extension of the literal meaning of a familiar phrase may have eventually turned into a standardised metaphor which was repeatedly used to convey roughly the same implications. These standardised uses with broader meanings may have continued even after the allusion to the original tradition was no longer comprehensible to most people. Even without knowing the origin of the expression and the sort of implications it was originally used to convey, modern speakers still use it to convey roughly the same implications, as in (19) and (20):

(19) Nobody but you knows what is happening in that office. Only you can *spill the beans.*

(20) La boda va a ser perfecta, mi padre esta decidido a *tirar la casa por la ventana.*
The wedding is going to be perfect, my father is determined to *throw the house out of the window.*

In this way, many current idiomatic expressions might have moved over time from a literal or approximate use, to a novel loose use (e.g. as metaphor or hyperbole), to

[7] According to Buitrago (2002), the tradition is still observed in some places in North Italy, where people throw old things into the street at the end of the year as a sign of a better start for the new year.

[8] This idiom is interesting because, although one can say that, at the time, the expression was literally used, a strictly literal interpretation could not have been intended, since it is physically impossible to throw a house through one window of the house. In deriving the "literal" interpretation of the utterance, hearers would need to enrich their interpretation in such a way as to take the word *house* to refer not to the house as such but only to the things inside the house, or to some things inside the house.

a standardised loose or idiomatic use. Other idioms, however, might never have been literally intended but have started out as loose uses, which would later become standardised in the language (e.g. *to slip one's mind, to lose a train of thought, to change one's mind, to burst into tears, to cry one's eyes out,* etc.). This diachronic movement from a literal meaning to a loose interpretation which is later standardised is often also seen in the acquisition of these expressions by modern language users. In what follows, I will suggest that in making sense of unknown idiomatic expressions, people generally process them very much as they process the metaphorical uses in (4)-(6). That is, they take the encoded 'literal' meaning of the phrase as input to inferring a broader (looser) meaning. After enough exposure, this broader meaning may become standardised as an idiomatic meaning.

3.1 Synchronic rationale

That current native speakers are not aware of the link between the present meaning of many idioms and their original use does not necessarily mean that they perceive the idiom as opaque, or that its meaning is now arbitrarily learned. An idiom is (relatively) transparent to an individual if he can infer at least some of the idiomatic meaning from the encoded 'literal' meaning. In acquiring the meaning of an idiom, as in understanding a literal or metaphorical use of a word, the hearer may use encyclopaedic information made accessible by the encoded concepts merely as a starting point for inferring the speaker's meaning. Although the assumptions used in the interpretation process may differ from those which gave rise to the idiom, they may allow the hearer to provide some kind of "synchronic rationale" for why the idiom means what it does and so may allow him to perceive the idiom as relatively transparent.

In a series of interesting experiments, Keysar and Bly (1995, 1999) tested whether a single string may be perceived as transparent by subjects who assumed it had a certain meaning as well as by subjects who assumed it had the opposite meaning. They presented subjects with some unfamiliar idioms in a scenario biasing the interpretation towards either the expression's real idiomatic meaning or a meaning which was the opposite of this meaning. For instance, some subjects were encouraged to think that the expression *to applaud to the echo* meant 'to demonstrate high acclaim' (original meaning), whereas others were encouraged to believe that it meant 'to criticise or ridicule'. Similarly, some subjects were presented with a context in which the expression *to play the bird with the long neck* meant 'to be looking out for someone or something' (original meaning) whereas others were presented with a context in which it meant 'to avoid encounters'. After reading the text, subjects were asked to guess the meaning of the expression by choosing between the two meanings above (and an unrelated meaning). The results showed that subjects systematically chose the idiomatic

meaning which was consistent with the overall context. Crucially, when asked to predict what meaning they would predict an overhearer would assign to the expression when it was presented to them in isolation, they systematically reported that he would take the idiom to have just the same meaning as they chose.

The authors took these findings to suggest that subjects in both scenarios had constructed a story that had allowed them to make sense of the expression and perceive it as relatively transparent. Thus, subjects who were presented with the expression *to applaud to the echo* in a context in which it could plausibly mean 'to demonstrate high acclaim' may have focused on the word *applaud,* because of its positive connotations and its association with the demonstration of high acclaim. By contrast, subjects who were encouraged to believe that the expression meant 'to criticise or ridicule' may have focused on the word *echo* and on its negative connotations. Similarly, people who thought that the expression *to play the bird with the long neck* meant 'to be looking out for someone or something' may have assumed that the long neck allowed the bird to look around, just as it does for giraffes. By contrast, those who thought the expression meant 'to avoid encounters' may have assumed the long neck allowed the bird to hide its head in the sand in the way ostriches do.

My interpretation of Keysar and Bly's findings is that, when presented with the idiomatic expression in a biasing context, the subjects should have had quite precise expectations of relevance. Comprehension would then have involved a considerable amount of backward inference in which attention would be selectively allocated to encyclopaedic assumptions from the encoded concepts that might warrant the expected implications. The same process can be seen operating in (21) and (22):

(21) The young lawyer gave an excellent performance. I wouldn't have been surprised if the audience had stood up and *applauded to the echo.*

(22) The young lawyer gave an appalling performance. I wouldn't have been surprised if the audience had stood up and *applauded to the echo.*

In (21), the information that the lawyer gave an excellent performance may direct the hearer's attention to some aspects of his encyclopaedic knowledge about applauding, and applauding loudly enough to produce an echo, which are consistent with this assumption and so help to achieve relevance in the expected way. He may assume, for instance, that the echo is the outcome of intensive energetic applause. In (22), the information that the lawyer gave an appalling performance, however, may guide the hearer in a different direction. He may consider the hypothesis, for instance, that the type of applause described is a sign of sarcastic mockery. In each case, the more or less precise expectations of relevance generated by the speaker's utterance, and the accessibility of interpretive

hypotheses, constrain the direction of the inference, allocating the hearer's attention and processing resources in different ways. In each case, the hearer, in the search for an optimally relevant interpretation, would be encouraged to supply a different subset of encyclopaedic assumptions, and derive different ad hoc concepts and implications. The hearer of (21) may construct a phrasal ad hoc concept [APPLAUD TO THE ECHO]* which denotes acts of giving intense praise, while the hearer of (22) may construct a phrasal ad hoc concept [APPLAUD TO THE ECHO]** which denotes acts of ridicule. Provided that the content assigned to these concepts is partly recovered from the meanings of the words in the idiom (e.g. by considering assumptions associated to applause and to the production of an echo while applauding), the expression may be perceived as at least partly transparent (as Keysar and Bly's findings suggest).

Contrary to the standard view that idioms are understood as lexical items, a wide range of on-line and off-line experimental research on acquisition of idioms has shown that the interpretation of unknown idioms seems to be affected not only by contextual cues (as in the above examples) but, crucially, by the internal semantics of the string (e.g. Cacciari, 1993; Cacciari and Levorato, 1989, 1991, 1998; Flores d'Arcais, 1993; Forrester, 1995; Gibbs, 1991; Levorato, 1993; Levorato and Cacciari, 1992, 1995, 1999). For instance, results from the on-line experiments carried out by Cacciari and Levorato (1999), show that context and word meaning play two independent but interactive roles in idiom comprehension. These experiments showed that idioms which are at least partly transparent are easier to understand than opaque idioms, because people can use the meanings of the individual constituents of in the expression and the structure of the phrase as clues to the overall idiomatic meaning. Context does play an important role, and is exploited by children in acquisition as they develop the ability to integrate linguistic and extralinguistic knowledge in the processing of an utterance or a text (Levorato, 1993; Levorato and Cacciari, 1992, 1995), but it cannot by itself explain how children make sense of idiomatic expressions. Idiom acquisition seems to depend on the accessibility of information both from the context in which the expression is processed and from the concepts encoded by the words in the idiom.

A number of off-line studies have been carried out to analyse the strategies which people use in interpreting unknown idiomatic strings (see Cacciari, 1993). Typical answers included one from a child who reported having made sense of the Italian idiom *to be on the seventh heaven/sky,* meaning 'to be extremely happy', in the following way: "we all know that heaven/sky is wonderful, so if there was a seventh one, can you imagine?" This and other answers provided by both children and adults suggests that people systematically use the encoded 'literal' meanings in working out the meaning of the overall string. A similar conclusion can be drawn from other experiments, such as that by Forrester (1995), which shows that people

understand unknown idiomatic expressions by treating them as if they were metaphorically intended.

Although the approach to idioms defended in this work is largely theoretical, it is consistent with experimental research on idiom acquisition reported in the literature. Here, I find Keysar and Bly's findings particularly interesting, because they seem to suggest not only that people explore context and the literal meaning of the words in interpreting an idiom, but that they may do this in different ways, so that a single expression can be taken to convey different meanings. Shedding light on the processes which direct the hearer towards a certain interpretation is crucial to understanding how people acquire idiomatic expressions. I would like to suggest that selection of the contextual assumptions (from the concepts encoded by the words in the idiom, the rest of the utterance and from background knowledge) which people use to make sense of idiomatic expressions, and the direction of the inferential process in which these assumptions are used as premises, are constrained at every point by the hearer's search for an optimally relevant interpretation. It is selective, relevance-driven processing which allows the hearer to construct a number of different interpretations for a single phrase on different occasions. In line with this, we can imagine, for instance, how a phrase such as *to burn the house* may be potentially used to convey a wide range of loosely intended (and equally transparent) meanings, any of which may be standardised in the English language, as in (23):

(23) a. To do something big, wild.
e.g. Tom's party is going to be great. He has promised *to burn the house.*

b. To abandon everything, give up.
e.g. I know you failed the exam, but there is no reason *to burn the house,* you need to keep trying.

c. To do something drastic with negative consequences.
e.g. I know that the company is going through difficult times and some changes are needed, but what you are proposing (firing half of the staff) is to *burn the house*! People won't accept that.

d. To incur big expenses.
e.g. Since she is the only daughter, her father will *burn the house* to give her the best wedding ever.

e. To give up something valuable for a good reason/cause.
e.g. When you have to decide between a life of luxury and the love of your life, you don't mind *burning the house.*

The different expectations of relevance generated by these utterances may not only add an extra layer of activation to some of the encyclopaedic assumptions

associated to the encoded concepts, but may also, crucially, encourage the hearer to use these assumptions as premises in following a certain inferential route. By inferential "route", or "path", I mean a combination of selected assumptions and computations used to derive a certain set of implications. In (23b), certain contextual assumptions (e.g. the assumption that burning a house would result in the destruction of something valuable) may be added as a premise to a context of selected contextual assumptions (e.g. assumptions about surrender). The resulting contextual implications may also provide input to further inference processes, yielding further implications (e.g. implications about abandoning something valuable one has worked hard for, etc.). Since the hearer may consider only a subset of encyclopaedic assumptions from the encoded concepts and process them following a different inferential route, the same expression can be loosely used to convey a wide range of different meanings. Furthermore, since each of these meanings would be (slightly or considerably) different extensions of the compositional meaning of the phrase, only a subset of the implications derivable from the compositional meaning may be understood as part of the speaker's meaning in each case. The point here is that although the hearer may follow a number of different inferential routes to make the meaning of the expression transparent, only one of these may be standardised in the language he uses. The (initially one-off) inferential route built to understand this particular use may therefore be systematically (re)constructed as the hearer encounters the expression in further utterances.

3.2 The contribution of word meaning

One main assumption in current line of work in Relevance Theory is that the concept encoded by a word can give access in memory to a wide array of different encyclopaedic assumptions, some of which may be added to the context in order to derive the intended interpretation. The argument I am proposing here is that the same process may be used in interpreting idiomatic utterances where different encyclopaedic assumptions associated to an encoded concept may be used to infer the overall idiomatic meaning. The concept encoded by the word *wing*, for instance, gives access in memory to a range of encyclopaedic assumptions, different subsets of which are selected in processing different idioms. So, in processing the idiom *to clip someone's wings,* the hearer may consider the assumption that wings are used to fly, which itself may provide input for further inference. In processing the idiom *to take someone under one's wing*, however, he may consider the encyclopaedic assumption that birds protect their young with their wings, and this, again, may provide input for further inference. Although the same word is used in both expressions, selective processing of encyclopaedic assumptions yields a range of different implications in each case (e.g. implications

about freedom of movement, or lack of it, and implications about love, help and protection). It is the derivation of these implications (as well as other implications which these assumptions make accessible) which allow the utterance to achieve relevance in the expected way and lead the hearer to perceive the idiom as relatively transparent.

Sometimes a word appears in several different idioms in which it is understood in roughly the same ways. The word *ace*, for instance, gives access to the encyclopaedic assumption that aces are the highest (and therefore best) cards. This assumption would be highly accessible to the hearer in processing any of the following idiomatic expressions *to be an ace at something, to hold all the aces, to have an ace up one's sleeve, to have an ace in one's hand* and *play your ace*. As suggested for the examples *to applaud to the echo* and *to burn the house* above, a single assumption such as this may be combined with a range of different contextual assumptions in every case. It may be combined, for instance, with assumptions derivable from the compositional meaning of the phrase (e.g. assumptions about holding aces, having aces up one's sleeve, etc.). This combination may therefore yield different implications on each occasion (e.g. implications about luck, cheating, etc.). These implications may be seen as part of the speaker's meaning or used to derive a further set of implications that the speaker might have intended to convey. Again, it is the choice of an inferential route which takes as input contextual assumptions made accessible by the words in the string and yields those implications as output which allow the hearer to perceive the string as relatively transparent.

3.3 Conclusions on acquisition

If the arguments defended here are right, what is important in acquiring an idiom such as those presented here is not whether the hearer becomes aware of the historical story underlying the original use of the phrase, but whether he can construct an inferential path by which the overall idiomatic meaning can be at least partly inferred from encyclopaedic information associated to the encoded concepts, either alone or in combination. My suggestion is that, although both the Spanish and the English idioms in (19) and (20) may be unfamiliar to a hearer who does not know the story that motivated their original use, he may still be able to perceive the idioms as transparent or relatively transparent. Taking the encoded 'literal' meaning of the Spanish idiom *to throw the house out of the window* as input to pragmatic inference, he may be able to derive a number of implications (e.g. about the intentional destruction of valuable property and the waste of money that this entails) which may result in a loose interpretation of the string (e.g. one in which the phrase is taken to denote actions in which money is wasted in a rather crazy manner). The idiomatic meaning of the English expression *spill the beans,*

however, is not as easily inferable from the meaning of the words in the string. I have suggested that to most English native speakers, the expression would be only partly transparent. This is because, although the concept encoded by the word *spill* may be loosely understood as indicating the act of letting something out or even revealing something, there is nothing in the hearer's encyclopaedic knowledge of beans that would allow him to derive implications about secrets or the revelation of hidden information.

These examples may be taken to suggest that there are, after all, two ways in which an idiom may be transparent. On the one hand, an idiom may be 'directly transparent', in that the hearer can see how some of the assumptions associated to the encoded concepts or derived from their compositional meaning are conveyed by an idiomatic use of the string (e.g. with the Spanish idiom *to throw the house through the window* or the English idioms *to hit the nail on the head, to miss the boat, to give up the ship, to hold all the aces,* etc.). On the other hand, the idiom may be 'retrospectively transparent' if the hearer can only identify encyclopaedic assumptions that would make the idiom relatively transparent AFTER a potential meaning for the expression has been constructed (e.g. *to spill the beans, to pass the buck, to hit the sack, pensar en las musarañas, meterse en un embolao,* etc.) (as defended in Nunberg, 1978; and see also Cacciari, 1993). I have claimed here that since comprehension typically involves mutual parallel adjustment, both processes may take place in parallel. That is, the hearer may use highly accessible encyclopaedic assumptions to derive implications, as well as consider highly accessible hypotheses about implications and use them to enrich the explicit content and the context by backward inference. These hypotheses about the speaker's meaning are tested in their order of accessibility until the hearer arrives at a combination of explicit content, context and cognitive effects which satisfies his expectations of relevance. I have suggested that this mutual adjustment process takes place not only in understanding the alternative meanings of an idiom (e.g. *applaud to the echo, burn the house*), and in understanding an idiom regardless of its degree of transparency (e.g. *kick the bucket, spill the beans, hold all the aces*), but in interpreting virtually every utterance, whether it contains unknown words or words which are literally or loosely used.

The examples presented here suggest that transparency and opacity are not fixed properties of idioms, but dimensions along which they can be characterised by a particular person on a particular occasion (e.g. at a particular point in time). Whether an idiom is perceived by an individual as more or less transparent at a certain moment would largely depend on the assumptions available to him at the time, and their degree of accessibility. Generally, the greater the number of implications which are also derivable from the literal meaning of the phrase, the easier the derivation of the (loose) interpretation will be and the more transparent the idiom seems to the hearer.

I have suggested here, for instance, that the idiom *spill the beans* is generally perceived as only partly transparent by current native English speakers, even though it may have seemed rather more transparent to people in the past. The reason for this difference is that language users may once have had access to encyclopaedic information about the popular game the expression refers to, and to the sort of implications which the idiom was used to convey in those situations. It is through our knowledge of everyday affairs, including current sports and games, that many idioms are perceived as transparent by the modern language user, as transparent as the idiom *spill the beans* might once have been to English native speakers. Consider, for instance, the English idioms in (24):

(24) *To hold all the aces, to be an ace, to hide an ace up one's sleeve, to lay the cards on the table, the ball is in your court, to throw in the towel/the sponge, to be a team player, to bark up the wrong tree, to call a spade a spade, to flog a dead horse, to start/get the ball rolling, to keep the ball rolling, to hit below the belt, to be off the hook, to jump the gun*, *to be back to square one, etc.*

The idioms in (24) vary in their degree of transparency. What makes some of them quite transparent to current native speakers is the easy access they provide to encyclopaedic assumptions about the type of activity, sport or game which the expression alludes to, and the ability to derive implications using these assumptions. Since different people have different knowledge and experience, an idiom which is transparent to one person may remain opaque to others. For those familiar with ball games (e.g. tennis) and with boxing, for instance, it might be easy to supply the assumption that when the ball is in our court, it is our turn to act, and that throwing in the towel is a sign of surrender. These people would see the idiomatic expressions *the ball is in your court* and *to throw in the towel* as considerably more transparent than those people who do not have access to these assumptions or have not been able to infer their relation to the idiomatic meaning.

Acquiring native speaker command of an idiom, then, should involve on the one hand, seeing how the sort of implications the idiom is used to convey can be inferred from the encoded 'literal' meaning of the string, and on the other hand, fine-tuning these implications so that they accord with those derived by other members of our linguistic community. In line with this idea is the finding by Keysar and Bly (1999) that the more the subjects gain familiarity with an expression (e.g. by using it in novel utterances), the more confident they become about the meaning they have assigned to it, and the more reluctant they are to accept that the idiom is transparent with a different meaning. Thus, just as current English speakers find it hard to see how the expression *to spill the beans* can be used to mean 'to keep a secret', so do people who acquire the meaning of the

idiom *applaud to the echo* in a context biased towards the interpretation 'to ridicule' find it hard to see how this expression could be used to convey the (actual) meaning 'to demonstrate high acclaim'. These results suggest that not only do people form hypotheses about the relation of word and idiom meaning in making sense of the idioms in context, they also seem to retain these assumptions and assume that other people interpret idiom transparency in similar ways.

My proposal is thus that, in interpreting an utterance containing an unfamiliar idiom, as in interpreting any other utterance, the hearer takes the encoded conceptual representation as the starting point for inference. Following a path of least effort, he adds associated encyclopaedic assumptions to the context in order of accessibility, taking a particular inferential route whose output should be the range of implications the speaker might have intended to convey. This selective relevance-oriented process directs the hearer to a combination of assumptions and computations which should help him infer the speaker's meaning. The reason for spelling out the processes I see as involved in selecting these inferential routes is that I believe they play a fundamental role in the comprehension of idiomatic expressions as the hearers become more familiar with them. In the next section, I will argue that repeated processing of an idiom may recurrently direct a hearer along the same inferential route, which may at some point develop into a full-fledged pragmatic routine.

4 Familiar idioms: representation and processing

The crucial thing about idioms is that they are generally used to convey roughly the same meaning in different situations. We may conclude from this that, in interpreting an utterance containing an idiom, a hearer aiming to satisfy his expectations of relevance would repeatedly follow roughly the same inferential route. That is, he would consider roughly the same (highly accessible) encyclopaedic assumptions, use them as premises in the same inferential computations, derive roughly the same implications and enrich the proposition expressed by adjusting the encoded concepts in roughly the same way. Thus, although the expectations of relevance raised by different utterances would often be satisfied by different combinations of explicit content, context and cognitive effects, processing an idiom may repeatedly direct the hearer to the same sort of hypotheses about the speaker's meaning. In line with the relevance-oriented view of cognition and communication defended in Relevance Theory, I want to suggest that the more a certain inferential route is followed, the more accessible and cheaper in processing terms it will become. Having helped to achieve relevance on previous occasions, it is likely to become highly accessible for use on subsequent similar occasions.

The upshot of repeated use may be that the hearer develops a pragmatic routine for the processing of some familiar idioms: that is, on hearing the idiom his attention and processing resources would be automatically directed along the same inferential route which has been followed in processing the string on previous occasions. Let's illustrate how this account would work for the comprehension of the idiom *to hold all the aces*, as in (25)-(26):

(25) There is no way I will get the job. Peter, however, *holds all the aces.*
(26) We will not know for sure who will win this year's general elections until the votes are counted, but everybody knows that Clinton *holds all the aces.*

Rather than needing to dig into the encyclopaedic entries of the encoded concepts or search for the best inferential route as might happen on first encounter (as claimed in presenting example (17)), a hearer familiar with the idiom *to hold all the aces* may find his attention and processing resources automatically directed towards the sort of contextual assumptions and implications that have generally led to a successful outcome in processing this idiom, such as those in (27):

(27) Assumptions: An ace is the best (highest) card
Someone who holds all the aces is likely to win
Someone who holds all the aces is a very lucky person
Etc.

Using these selected assumptions in processing different utterances containing the idiom (such as those in (25) and (26)) would generally yield roughly the same implications, with the compositional meaning of the phrase being adjusted in roughly the same ways (i.e. so as to warrant the derivation of these implications). In (25) and (26), this may involve broadening the compositional meaning of the phrase so that the resulting phrasal ad hoc concept denotes situations in which some individual is in a winning position, as in (28):

(28) [TO HOLD ALL THE ACES]* denotes situations in which some individual has every chance of winning or succeeding at something.

Since the hearer would generally broaden the meaning of the phrase in roughly the same ways across different occasions of use, it may be more economical to store this broader concept in memory rather than constructing it ad hoc. The sort of assumptions which are used in broadening the original concept may thus end up being stored as part of the encyclopaedic entry of the new concept, as in (29):

(29) Conceptual Address [TO HOLD ALL THE ACES]*[9]
Lexical entry: syntactic $_{vp}$[VNP] and phonological information
Encyclopaedic entry: assumptions about the state of affairs the concept denotes.
If someone holds all the aces then he is in a winning position
If someone holds all the aces then he has great chances of success
If someone holds all the aces then he is very lucky
Etc.

Provided that the hearer of (25)-(26) has the concept in (29) stored in memory, he should be able to access it at some point in processing the utterances in (25)-(26). As in processing any other encoded concept, he would use some encyclopaedic assumptions it makes accessible and look for enough implications to satisfy his expectations of relevance.

Whether the idiom has an independently stored conceptual address, as in (29), or whether it has only an associated pragmatic routine which is not yet lexicalised, the comprehension process would be roughly the same: selected encyclopaedic assumptions associated to the expression would be used to infer a range of implications, which may themselves be used as input to derive further utterance-specific implications. In (25), for instance, the assumption that Peter has great chances of success might be combined (among others) with the contextual assumption that Peter and the speaker are applying for a job to yield a range of implications which may make the utterance relevant in the expected ways (e.g. that Peter has every chance of getting the job, that Peter has a better chance of getting the job than the speaker, etc.). In (26), the assumption that Clinton has every chance of winning something may be combined with the assumption that he is a candidate in the US general elections to yield the implication that he has every chance of winning the US general elections.

I have suggested here that in interpreting an utterance containing an idiom, the hearer would generally take the compositional meaning of the string as input to pragmatic inference. For relatively transparent idioms, though not for opaque idioms, the hearer might develop a pragmatic routine that allows him to speed through the familiar inferential steps involved in inferring the idiomatic meaning. It is worth noticing that this process is not very different from those involved in the comprehension of familiar non-idiomatic expressions (e.g. 'I am *seeing my doctor'*, 'Mary and Peter *slept together'*) and of standardised metaphorical uses (e.g. 'John is a *pig*'). The hearer of these utterances would generally and

[9] The asterisk (*) here does not indicate that the meaning is created ad hoc but that it is a pragmatic adjustment of the compositional meaning which happens to have been stored in memory.

automatically derive a range of implications which are normally intended in using these expressions (e.g. that the speaker is having a medical appointment, that Mary and Peter had sex, that John is dislikeable, etc.) even those there are not necessarily the ones the speaker intended (e.g. she may have seen her doctor to play tennis, Mary and Peter may have simply shared a bed, etc.). Had the speaker intended the hearer to derive any of these non-standard implications, she should have predicted the hearer's line of thought and provided a different linguistic stimulus.

In line with this argument, it is possible that some people may never store a separate conceptual address for certain idiomatic expressions, but may process them very much like familiar metaphorical expressions. Idioms may therefore be seen as lying along a continuum depending on whether they are processed by an individual as standardised loose uses, which are not yet lexicalised, or as standardised loose uses which have been assigned their own conceptual address and encyclopaedic entry. My claim here is that the comprehension of a relatively transparent idiom is not essentially different in these cases (although the processing effort factor may vary). In fact, different individuals may represent the same idiom differently and still communicate efficiently. [10]

Although different idioms may be represented in different ways by different individuals we may assume that many familiar idiomatic expressions end up having a stable conceptual address which is accessed at some point in comprehension. For opaque idioms, the meaning assigned to the idiomatic string may be quite arbitrarily stipulated, as claimed by traditional accounts. However, most idioms are likely to be stored as standardised loose uses of one type or another. For these idioms, the activation and accessibility of assumptions associated to the concepts encoded by other constituents in the string need not disrupt the interpretation of the idiom but will often be consistent with it. One of the crucial features of (relatively transparent) idioms is in fact that they allow hearers to move along the continuum from literalness to looseness and

[10] Eizaga (2002) has proposed an approach to idioms from Relevance Theory which defends the following two ideas. Following ideas (defended in passing) by Pilkington (2000) and Papafragou (1996) about standardised metaphors and metonymies (respectively), she argues that many idioms which are not yet lexicalised, and some idiom variants, are understood via the activation of some set of mutually manifest hypotheses or metarepresented assumptions which are repeatedly accessed in processing the string. She refers to this process as a 'generalised pragmatic routine'. She also proposes that a lexicalised idiom often gives access to both conceptual information and to procedures which are used in interpreting the string and variants of the string. Although interesting attempts to capture idiom comprehension, I remain unconvinced by her approach for at least two reasons. On the one hand, the idea that idioms trigger 'generalised pragmatic routines' is assumed rather than developed. On the other hand, the notion of 'procedure' she uses seems to blur different relevance-theoretic notions (e.g. of procedural meaning, pragmatic routines and development of cognitive procedures).

metaphoricity as they adjust the compositional meaning of the phrase and consider the idiomatic meaning of the string during the interpretation process.

4.1 Activation and interpretation

There is existing experimental evidence that the meaning of familiar idiomatic expressions is not immediately activated as the first word in the string is heard but becomes active at a later point (see Cacciari and Tabossi, 1988; Tabossi and Zardon, 1993). In an utterance ending in an idiomatic phrase which is plausible on both literal and idiomatic interpretations, the idiomatic meaning was activated only after the point of idiom uniqueness (i.e. the point at which the string can be uniquely identified as an idiom) had been reached. Although for highly predictable idioms (e.g. *set his mind at rest*), the meaning of the idiom was activated slightly earlier than for less predictable idioms (e.g. *to hit the nail on the head*), in neither case was the idiomatic meaning accessed after the first content word. Familiarity with the string, and particularly the presence of a biasing context, has been shown to affect the point of idiom activation (or idiom recognition) so that it may no longer coincide with, but actually precede, the point of idiom uniqueness (e.g. Flores d'Arcais, 1993).

Cacciari and colleagues have generally analysed these findings as showing that the processing of an idiom remains literal until the idiomatic expression (or configuration) is activated by arriving at the idiom key, at which point both the idiomatic and the literal meaning compete until one of them is chosen. This approach is an updated version of the Simultaneous Processing model defended in the late seventies by Swinney and Cutler (1979), who suggested that the literal and idiomatic meanings of an idiom are processed in parallel until the hearer makes a choice. Although the above experiments shed interesting light on the point at which an idiom is activated and so becomes accessible to the hearer, they do not say much about how that idiom is actually interpreted. They do not explain how a hearer might decide which interpretation the speaker might have intended on that particular occasion, or whether he establishes a relation between the compositional and idiomatic meaning of the phrase in constructing this interpretation. For instance, they don't discuss whether the assumptions the hearer considers in processing the string 'literally' before the idiomatic meaning is accessed are integrated into the comprehension process or simply rejected at that point.

I believe that talking of 'literal' processing or 'idiomatic' processing in the way these scholars do is not entirely accurate. In line with Relevance Theory, I want to suggest that processing should not be seen as literal, metaphorical or idiomatic but simply as relevance-driven. The rather selective, and therefore initially quite shallow, relevance-oriented processing of an utterance would lead the hearer to consider only highly accessible encyclopaedic assumptions from the encoded

concepts in looking for implications. At some point, the concept encoded by the idiom may itself be accessed, with some highly accessible encyclopaedic assumptions associated to this concept being added to the context to derive further implications. Whether the contextual assumptions already present in the context are strengthened by the new information, combine with it to yield implications or are rejected and eliminated for not contributing to relevance in the expected ways would vary from idiom to idiom, depending on their degree of transparency and so therefore on whether the idiomatic meaning can be inferred, or partly inferred, from the compositional meaning of the phrase. Let's look at some examples:

(30) *Janet:* Is your boyfriend coming to the party?
Jenny: I am afraid not. He is spending Sunday with his mother, as always. I cannot stand the way he *is tied to his mother's apron strings.*
(31) *Sue:* I really love that dress but it *costs an arm and a leg.*
(32) *Sue:* Me encanta ese vestido pero *cuesta un ojo de la cara.*[11]
Sue: I really love that dress bit it *costs an eye of the face.*
(33) *Tim:* We have been very affected by the accident but I think it is time we *turn over a new leaf* and get on with our lives.
(34) *Jason:* The old man did not want to sell his house so the council waited until he *kicked the bucket* to get hold of everything he owned.
(35) *Tom:* Where is Vanessa?
Carol: I don't know, she is probably *chewing the fat* with her friends somewhere.
(36) *Joe:* Don't take it seriously. I am sure he was only *pulling your leg.*

Following a route of least effort, the hearer of (30)-(33) may start considering a certain subset of encyclopaedic assumptions made accessible by the encoded concepts or the compositional meaning of the phrase (e.g. in (30) the assumptions that tying involves attachment or in (32) that turning over involves a change of position). This relatively shallow processing may yield a range of implications which can be seen as part of the speaker's meaning or can be used to derive the sort of intended implications. In other words, since the idiomatic meaning of relatively transparent idioms like these can be inferred or partly inferred by

[11] Notice that the account on implications defended here has important consequences also for second language learning and issues on translation. As pointed out by Gutt (1991) a good translation of standardised figurative uses like idioms or proverbs is that which uses the expression in the other language which conveys roughly the same implications. The English idiom *to cost an arm and a leg* would so be adequately translated into the Spanish *to cost an eye of your face* and into the Italian *to cost an eye of your head* which are used in roughly the same contexts to convey roughly the same sort of implications.

adjusting the encoded concepts, using selected encyclopaedic assumptions associated to these concepts in order to derive implications may be a step towards a certain (loose) interpretation which will be later fine-tuned towards an idiomatic interpretation.

By contrast, in processing the utterances in (34)-(36), the shallow processing of the encoded concepts may lead to the hearer initially considering some contextual assumptions (e.g. about chewing, kicking, pulling, etc.) and deriving tentative implications, which will later be rejected and eliminated as not contributing to relevance in the expected ways. Since the idiomatic meanings of these opaque idioms cannot be inferred or partly inferred from the encoded meanings of their parts, accessing selected assumptions associated to these concepts would not help to derive the implications or other cognitive effects. We can therefore conclude that although hearers follow the same comprehension procedure in interpreting any idiomatic expression (and indeed any utterance), the selection of tentative contextual assumptions and implications needs to be adjusted in deriving the idiomatic interpretation, or to be rejected as making no contribution to this interpretation.

It would be interesting to conduct on-line experiments which might test this claimed difference. Although the finding that analysable idioms are understood faster than unanalysable idioms (e.g. Gibbs, 1991) is consistent with the view of idioms presented here, it is important to bear in mind that the notion of analysability or compositionality used in these experiments does not always coincide with the notion of transparency I have defended here (i.e. transparency as the extent to which the idiomatic meaning can be inferred from the encoded 'literal' meaning of the string). The closest the literature has come to testing the distinction between transparent and opaque idioms has been the eye-tracking experiments carried out by Titone and Connine (1994, 1999). These experiments presented ambiguous idioms in a context biased towards their literal or their idiomatic meaning. The aim was to test duration of eye-fixation in the ambiguous regions of the idiom while the text was read. The results showed that the duration of eye fixation was longer for opaque idioms than for transparent idioms. Given the relevance-theoretic approach to idiom comprehension outlined above, we can assume that the shallow processing of the encoded concepts leads the hearer to start enriching the proposition expressed in a certain way and, to start deriving a tentative set of implications. In the case of relatively transparent idioms, but not in the case of opaque idioms, this enrichment and these implications may be compatible with both a literal and an idiomatic interpretation. Further processing of the utterance may direct the hearer to fine-tune the meaning of the expression in either direction, so that a literal or an idiomatic interpretation is finally derived.

5 Pragmatic adjustment

In Vega Moreno (2003: 320-321) I showed that the broader (metaphoric or hyperbolic) concept an idiom encodes may itself sometimes need to be pragmatically adjusted into a new ad hoc concept which contributes to the truth-conditional content and warrants the expected implications. The example discussed included some of the following:

(37) Since the Paddington derailment, trains run *at a snail's pace.*
(38) Since she broke her hip, my grandma walks *at a snail's pace.*
(39) My husband is very handy. He painted the house *in the blinking of an eye.*
(40) My husband got dressed *in the blinking of an eye.*
(41) Mi padre *ha perdido la cabeza* por esa mujer. Está locamente enamorado.
My father *has lost his head* for this woman. He is madly in love.
(42) Mi padre *perdió la cabeza* cuando le dijimos que mi hermano había muerto.
My father *lost his head* when I told him my brother had died.
(43) Mi padre *ha perdido la cabeza,* no reconoce a nadie
My father has *lost his head*. He cannot recognise anyone anymore.
(44) Mi padre *ha perdido la cabeza*. Quiere dejar su trabajo en el banco para hacerse marinero.
My father has *lost his head.* He wants to give up his job in the bank to become a sailor.

Let us assume along the lines argued above that the expression *at a snail's pace* encodes a concept [AT A SNAIL'S PACE]*, which denotes states of affairs in which something happens very slowly. Similarly, the expression *in the blinking of an eye* might encode a concept [IN THE BLINKING OF AN EYE]*, which denotes states of affairs in which something happens very fast, and the expression *to lose one's head* might encode a concept [TO LOSE ONE'S HEAD]*, which denotes situations in which someone has lost the capacity to reason. What the examples in (37)-(44) seem to indicate is that these concepts often have to be pragmatically enriched in order to warrant the derivation of the expected cognitive effects.

In (37), for instance, the concept [AT A SNAIL'S PACE]* may need to be adjusted to a point where it warrants the conclusion that trains are running at many fewer kilometres per hour than before, whereas in (38) it would need to be adjusted to a point where it warrants the conclusion that the speaker's grandma walks much more slowly than an average adult. It is the concept resulting from this adjustment that seems to contribute to the truth-conditional content of the utterance. In (39), for instance, the proposition expressed would be judged true if the speaker's husband took only three hours to paint a three-bedroom house. The same would

not hold for (40), however, as taking three hours to get dressed is quite a long time. In this case, the concept encoded ([IN THE BLINKING OF AN EYE]*) would need to be adjusted to a point where it warrants the conclusion that the speaker's husband got dressed in just a few minutes, enabling them to leave promptly.

The examples in (41)-(44) suggest that the Spanish phrase *perder la cabeza*, or its rough English equivalent *lose one's head,* can also be used in different utterances to convey slightly different meanings, and so to yield a different range of conclusions. It may be used, for instance, to convey a concept which denotes the state of being deeply in love, as in (41); the state of being in despair, as in (42); the state of being mentally disabled, as in (43); the state of being a bit mentally unstable, as in (44). Comprehension of these utterances may involve both pragmatic broadening of the compositional meaning of the phrase and pragmatic narrowing of the metaphorical meaning stored in memory. Here, as always, pragmatic adjustment leads to the construction of an ad hoc concept which yields enough implications (e.g. about the type and degree of mental instability and inability to reason) to satisfy the hearer's expectations of relevance.

I want to propose (in line with my work in Vega Moreno, 2004) that the interpretation of idioms, such as those in (37)-(44), may involve the pragmatic adjustment of some of the encyclopaedic assumptions associated to the concept encoded by the idiomatic string. In Vega Moreno (2004), I proposed that in understanding metaphors such as 'my boss is a wolf', the encyclopaedic property of BEING AGGRESSIVE as applied to wolves may be pragmatically adjusted so as to apply to warrant the derivation of implications that apply to men. With regard to idioms such as those in (37)-(44), we might consider the possibility, for instance, that the encyclopaedic property of MOVING SLOWLY made accessible by the idiom *at a snail's pace* or the encyclopaedic property HAPPENING FAST made accessible by the idiom *in the blinking of an eye* may need to be adjusted in context so as to warrant the derivation of the expected implications. The different positive adjustments of these concepts will be linked to different inferential routes and different cognitive effects. These cognitive effects may lead by backward inference to the construction of different ad hoc concepts. In (37)-(40), the resulting concepts might denote the particular type and degree of speed required to make the utterance satisfy the hearer's expectations of relevance.

If this approach is along the right lines, then, at some point in interpreting an utterance containing an idiom, the hearer would have access to the concepts encoded by the words in the idiom, the concept encoded by the idiom as a whole, and often also to a pragmatic routine for bridging the gap between the compositional meaning and the idiomatic meaning. Following a path of least effort in confirming hypotheses about the speaker's meaning, he may move back and forth between the compositional and idiomatic interpretations until he arrives at a particular interpretation which satisfies his expectations of relevance. The selective

relevance-oriented comprehension procedure would favour the most accessible hypotheses at every point where he has to make a choice. The processing of the concept encoded by the idiom and, particularly, the concepts encoded by the words in the string, would therefore be relatively shallow, with only highly accessible encyclopaedic assumptions being considered.

5.1 Word meaning and idiom meaning

It has been pointed out that idioms generally make use of what Coulmas (1981) refers to as 'idiom-prone lexemes'. These may be light verbs, or verbs which, in relevance-theoretic terms, are seen as encoding pro-concepts, which need to be enriched on each occasion of use (e.g. Sperber and Wilson, 1998). Examples include verbs such as *put, take, make, do, have, be,* etc. in English, and *poner* (put), *coger* (take), *hacer* (make/do), *tener* (have), *ser* (be – permanent state), *estar* (be – temporary state), etc. in Spanish. Coulmas (1981) suggests that the presence of 'idiom-prone lexemes' may be taken by hearers unfamiliar with the string as indicating that an idiomatic expression is being used. However, my interest in these verbs is closer to that of Nunberg (1978), who argued that language users often take a single word (e.g. *hit*) to have different meanings in different idioms (e.g. *to hit the sack, to hit the panic button, to hit the road,* etc.). I want to argue here that in interpreting an idiom, people generally fine-tune the encoded concepts so that the whole expression can be loosely interpreted in a particular way. This is true, not only of the verbs mentioned above but of virtually every verb and every word in an idiom. To illustrate my argument here are some examples:

(45) a. PUT: *put words in someone's mouth, put the lid on something, put the genie back in the bottle, put a finger on the wound, put your life in someone's hands, put the cat among the pigeons, put on a brave face.*
b. BREAK: *break the ice, break someone's heart, break the news, break ground, break one's back, break a leg, break the bank.*
c. BITE: *bite the hand that feeds you, bite the bullet, bite someone's head off, bite the dust, bite your tongue*.

Interpreting the above expressions would involve some degree of pragmatic fine-tuning at both word and phrase level. At the level of the word, the hearer of the idioms in (45) may need to fine-tune the meanings of the words *put, break* and *bite* narrowing or broadening them in appropriate ways. Understanding the expressions *bite one's tongue, bite the bullet* or *bite the hand that feeds you,* for instance, may involve the hearer narrowing the concept encoded by the word *bite* so as to warrant some implications normally derived from literal uses of the word. Some of these

implications might then be seen as part of the idiomatic meaning that the speaker intended to convey by that particular utterance.

Thus, the meaning of relatively transparent idioms is often inferable by taking the individual words in the string as literally, approximately or loosely intended, and by taking the whole phrase as conveying a loose (metaphoric or hyperbolic) meaning. In the course of comprehension, some of the assumptions more accessible by the encoded concepts, and the sort of implications they can be used to convey may be accepted as part of the idiomatic interpretation, placing idioms somewhere along a continuum from literalness to looseness. So, in saying that someone has *missed the boat,* the speaker may convey that he has missed something (literal or approximate use of *miss*); in saying that someone is *giving up the ship,* she conveys that something is being abandoned (literal or approximate use of *give up*); in saying that someone is *crying their eyes out* she conveys that someone is extremely upset (hyperbolic or metaphoric use of *crying*); in saying that someone has *broken the ice,* she may want to convey that something (e.g. silence or tension) is being overcome (approximate or metaphoric use of *break*), and so on. Crucially, pragmatic fine-tuning would also operate at phrase level, so that the whole string can be loosely (e.g. hyperbolically or metaphorically) understood, as in the idioms *to lose one's nerve, to bury the hatchet, to jump down someone's throat, to slip one's mind* and *to change one's mind.*

One of the reasons why idioms are of interest to pragmatics is in fact that the encyclopaedic assumptions associated to the encoded concepts point the hearer towards the right fine-tuning required to make the utterance relevant in the expected ways. Acquiring an idiom involves sorting out the best encyclopaedic assumptions and best inferential route involved in fine-tuning the idiom in the right direction. In interpreting a familiar idiom one simply follows this familiar inferential route in order to construct a hypothesis about the speaker's meaning. In the next section I will look at how people interpret variants of idiomatic strings and at the role that accessible encyclopaedic assumptions and inferential routes may play in the comprehension process.

6 Interpreting idiom variants

Evidence of the intimate relation between the literal and the idiomatic meaning of idioms is provided by examining real occurrences of these expressions in everyday use. Corpus research has shown that many idioms allow a considerable degree of lexical flexibility, as illustrated by the examples below:

British English - most examples from corpus research in Moon (1998a; 1998b):

(46) *Have/keep/be with your feet on the ground*
(47) *Get/have/keep your eye on*
(48) *Burn your boats/bridges*
(49) *Hit the roof/ceiling*
(50) *Take the biscuit/cake*
(51) *Throw/toss/chuck in the towel/ the sponge*
(52) *Sweeten/sugar the pill*
(53) *Lower the guard/let your guard down*
(54) *Drag your feet/heels*
(55) *Take something with a grain/pinch of salt.*
(56) *Come/fall down to earth*
(57) *Get out of bed on the wrong/right side*
(58) *Fight/defend tooth and nail*
(59) *Walk/tread on air*
(60) *Start/keep the ball rolling*

Spanish idioms (examples from dictionary of Spanish idioms, Buitrago, 2002)

(61) *Poner/colocar/tener (a alguien) contra las cuerdas* (to put/place/have (someone) against the ropes).
(62) *(No) echar/lanzar campanas al vuelo* (to (not) throw/throw bells flying -> (not) to announce good news, generally a bit too soon).
(63) *Abrir/cerrar el pico/la boca* (to open/close one's beak/mouth -> to speak/to shut up)
(64) *Dejar/quedarse/estar en la estacada* (to leave/to be left/be in the stockade -> to be abandoned when needing help the most)

Although the syntactic flexibility of idioms has been of some interest to linguists, examples of lexical flexibility such as those presented here have not received much attention. The existence of lexical variability in idiomatic strings is only to be expected given the approach defended here. I have argued throughout this work that most idiomatic strings are to some extent transparent, in that their meaning can be at least partly inferred from the encoded concepts and the compositional meaning of the phrase. Selective processing of the assumptions more accessible by the encoded concepts yields some implications which may be attributed as part of the speaker's meaning. Altering the words used may therefore lead the hearer to consider slightly or substantially different implications.

Given this account, there may be at least two reasons for a speaker to use a lexical variant. First, one word may be substituted for another because it makes roughly the same contribution to the overall meaning yielding roughly the same implications and does not cause the hearer any more processing effort. Second, one

word may be substituted for another because it gives access to different assumptions, which yield implications not derivable (or not derivable with the same degree of strength) from the original form and which offset any extra effort required to derive them. Let's consider these possibilities in turn.

The nearly synonymous Spanish verbs *echar, tirar, lanzar* (all of which can be translated into English by the verb *throw)* may be used indifferently in some idioms, as in (65):

(65) a. *Echar/tirar la casa por la ventana* (to throw the house out of the window –> to make big expenses in a not very sensitive way)
b. *Echarlo/tirarlo/lanzarlo todo por la borda* (to throw everything overboard -> to ruin everything)
c. *Echar/lanzar campanas al vuelo* (to throw bells flying -> to announce good news, generally a bit too soon)
d. *Echar/lanzar el anzuelo* (to throw the hook -> to do something to trick someone)

My suggestion is that the reason why some of these verbs may be used interchangeably in (65) is that, in these cases, the concepts they encode make roughly the same contribution to the meaning of the idiomatic expression and the relevance of the utterance. For instance, in (65a), the verbs *echar* and *tirar* may be used to convey narrowed concepts which share roughly the same denotation: that is, they are used to indicate roughly the same type of throwing and thus warrant roughly the same implications. The words themselves are not exact synonyms (which are difficult to find in a language). The concepts they encode would therefore give access to different encyclopaedic assumptions, and would denote slightly different types of throwing. The verb *lanzar* (like the English verb *fling*), for instance, indicates a certain kind of gesture and a certain kind of movement through the air that is not required by the verb *tirar*. In idiomatic uses intended to indicate this particular type of throwing (e.g. the flinging of something in the air, as in (65c) and (65d)), the verb *lanzar* is often preferred.

I would claim that the use of an idiom variant is motivated by the sort of assumptions made most accessible by the encoded concepts, and the way in which these assumptions contribute to (or modify) the overall idiomatic interpretation. Since different words may encode concepts which make roughly the same contribution to overall meaning, all these uses may become standardised, or even lexicalised, as in (48)-(50), (52), (59), (63), (65), etc. Sometimes, different speakers, dialects or cultural groups prefer one use to another (as in American and British variants). Provided that these uses are equally easy to process, they may all achieve relevance in roughly the same way, yielding roughly the same implications.

The choice of one word (e.g. one verb) rather than another may be intended to point the hearer towards slightly different encyclopaedic assumptions and so to direct him along a (slightly) different inferential route. In (61), for instance, while the three verbs give access to a range of similar implications (e.g. about impotence, danger, etc.), they also yield some rather different implications. A change of perspective, for instance (e.g. whether someone is *put/placed/thrown against the ropes* or *has someone against the ropes*) may lead to certain specific implications. Also, the use of the verb *place* versus *throw* may yield different implications (e.g. about aggressiveness) or the same implications of differences of strength. Different implications may be conveyed by saying that someone '*has her feet on the ground'* rather than in saying that she 'needs to *keep her feet on the ground'*. Different surface forms may encourage the hearer to narrow the interpretation by focusing on different aspects of the situation the idiom is generally used to describe, as in utterances such as: 'I will *set the ball rolling*', '*the ball is rolling'*, 'we need *to keep the ball rolling'*, all three of which may be used in the same conversation, or even the same utterance. On some occasions, the implications derived from a variant may even be the opposite of those which would have been derived from the more standard use, as in: 'he *got out of bed on the right side'*. In processing this utterance, the hearer may use the highly accessible assumption that right is the opposite of wrong, and adjust the implications so that they are the opposite to those that would have been conveyed by the original form (i.e. *to get out of bed on the wrong side*). The substitution of a word by an antonym is indeed a common type of idiom variant, as in (58) and (63) (see McGlone, Glucksberg and Cacciari, 1994 for experimental research).

I want to propose that idiom variants lie along two continua which often run in parallel. On the one hand, they differ in the extent to which the assumptions they make accessible alter the interpretation slightly or substantially. On the other hand, they differ in the extent to which the particular meaning they convey is one-off, or standardised, (and even lexicalised). At one end of these spectra of novelty, we find cases in which the original idiom meaning is modified with both the surface form and their interpretation being rather standardised, as in (65). At the other end, there are cases in which the modification is greater and may involve the hearer treating the variant as an allusion to the stored representation, as in (66)-(74). A wide range of cases, such as many of those in (46)-(64) and those in (75)-(80) may fall somewhere in-between:

(66) He is very stubborn, but in the end he will have to *change his square mind* and accept the deal.

(67) I am fed up with this situation, let's just *throw the cards on the table* once and for all!

(68) During the meeting *all the cards were laid on the table.*

(69) Despite the torture, he didn't *spill a single bean.*
(70) He absolutely hates me, so if it is true he has found out about my affair, he must now be in my house *pouring the beans* to my wife.
(71) OK there! Now you are *barking up the right tree!*
(72) (Teacher to student) I think *we are barking at different trees.* (attested)
(73) (Teacher to student) We *are on different trains of thought.* (attested)
(74) Sin darme cuenta, *me metí de cabeza en la boca del lobo.*
Without realising, I *got head first into the wolf's mouth.*
Meterse en la boca del lobo (to get into the wolf's mouth) –> to get into a problematic or dangerous situation.

Other attested variants in the corpus (from Moon, 1998a) include:
(75) *Add fuel to the fire/throw fuel on the fire.*
(76) *Put someone off the scent/throw someone off the scent.*
(77) *To pass the buck/the buck stops here/the buck passes somewhere.*
(78) *Another nail in the coffin/a final nail in the coffin/to nail down the coffin/to drive the first nail into the coffin.*
(79) *The writing is on the wall/to see the writing on the wall.*
(80) *To let the cat out of the bag/the cat is out of the bag.*

Psycholinguistic research on lexical flexibility has generally been most interested in cases falling somewhere towards the creative end where the substitution makes a rather clear difference to meaning, as in (66)-(74). These are sometimes referred to as cases of semantic flexibility (see Cacciari and Glucksberg, 1991; McGlone, Glucksberg and Cacciari, 1994). My aim here is to propose a unified approach to idiom comprehension which can account for idiom variants falling anywhere along the continua just proposed. Having described how rather standardised and 'semi-standardised' idiomatic variants are understood, I will go on to consider more creative cases, such as those in (66)-(74).

The comprehension of more creative variants proceeds, I argue, in the same way as the comprehension of less creative cases with the concepts encoded by the words in the string and the string as a whole simply taken as cues to infer the speaker's intended meaning. Let's look at the example in (66). The speaker in (66) seems to have blended two different standardised metaphorical uses: *to have a square mind* and *to change one's mind*. Although different inferential routes may be taken to process this expression, let's assume the hearer accesses the concepts encoded by these familiar phrases following a path of least effort, and starts accessing some of their associated encyclopaedic assumptions. He may, for instance, consider assumptions about rigidity of thinking associated either to the loose use of the word *square* or to the phrase *square mind* and combine them with encyclopaedic assumptions from the concept [TO CHANGE ONE'S MIND]*. The

result may be the derivation of a range of implications which cannot be derived, or cannot be derived with the same strength, from using the original form *to change one's mind*. These include, for instance, implications about the degree of stubbornness of the person being talked about, the amount of effort that needs to be invested in making him consider alternative lines of thinking, etc.

Let's now look at (70). The similarity in form of the phrase *pour the beans* with the familiar phrase it alludes to (*spill the beans*) together with the expectations of relevance generated by the speaker's utterance may make the concept [SPILL THE BEANS]* highly salient at some point in interpretation. Both this concept, as it becomes available, and the concepts encoded by the words in the utterance would be taken by the hearer as cues to infer the ad hoc concept the speaker intended to express. Following a path of least effort, the hearer may consider, for instance, the assumption that the act of pouring generally entails some degree of intentionality (e.g. pour water in a glass) and combine it with assumptions accessed from the concept [SPILL THE BEANS]* (e.g. 'if someone spills the beans then someone reveals hidden information'). The result from this combination may be the derivation of a range of implications, such as the implication that the revelation of the hidden information was intentionally performed, and the construction of an ad hoc concept [TO POUR THE BEANS]* which warrants the derivation of these implications. Although these implications might have also been derivable from the speaker's use of the original idiom in this utterance, they would not have been derived with the same degree of strength. The use of the idiom variant thus leads the hearer in the right direction towards the derivation of the intended implications.

The existence of idiom variants is good evidence that the meaning of idiomatic expressions is not entirely arbitrary but at least partly inferable from the meaning of their parts. In (72), for instance, substituting the word *different* for the word *wrong* may result in the hearer not accessing the assumption that someone has made a mistake even though this is an assumption that would have been highly accessible had the speaker used the original form. Similarly, the hearer in (73) may not derive implications about something being forgotten even though these implications would have been rather strongly implicated had the speaker used the idiom in its original form (*to lose one's train of thought*). These examples suggest, once more, that in interpreting an idiom, the hearer processes the encoded concepts in the string, at least to a certain degree. A change in the constituents that compose the expression may lead the hearer not to consider some of the assumptions which would have been highly accessible had the original form being produced.

My proposal, then, is that all cases of idiom variants, from the rather straightforward to the more creative, are understood by the same comprehension procedure just described, where the concepts encoded by the words in the string and the whole phrase the variant alludes to are used as input to pragmatic inference. As in the comprehension of any utterance and any word, the

comprehension of idiom variants follows a path of least effort with the hearer investing only the necessary effort in processing the encoded concepts. The assumptions resulting from the rather shallow processing of the string can often be integrated with other contextual assumptions being considered in processing the utterance to derive the set of intended implications. As a result of this process, a novel ad hoc concept is generally formed by adjusting the concept associated to the original idiom in the ways, and to the point where, it can warrant the derivation of these implications.

Generally, the more a variant departs from the original form, the more processing effort the hearer may need to invest in searching for the right set of assumptions and inferential route. The acceptability of the novel use would depend on whether this investment of extra processing effort is offset by extra or different cognitive effects, which could not have been more economically conveyed by the use of another string. The reason why idiom variants such as those in (81)-(83) may not be generally acceptable is that the encoded concepts (GROUND, LENTIL and BULL) would not normally give access to encyclopaedic assumptions which can help in deriving extra or different cognitive effects.

(81) During the meeting, *the cards were laid on the ground.*
(82) Despite the torture, he didn't *spill the lentils.*
(83) Sin darme cuenta, *me metí en la boca del toro.*
Without realising, I *got into the bull's mouth.*
Meterse en la boca del lobo (*to get into the wolf's mouth*) – to get into a problematic or dangerous situation.

Combining these assumptions with the other assumptions made accessible by the concept encoded by the whole string may indeed yield some implications, but not of a type that the speaker could possibly have intended to offset the extra effort involved. Examples like these may be classified as errors typically made by children and second language learners.

7 Conclusion

We may conclude from the arguments presented here that only an adequate inferential approach to idioms can actually account for what is, arguably, their most crucial feature: that is, that their idiomatic meaning is not entirely arbitrarily stipulated but partly derivable from the compositional meaning of the phrase. The relevance-theoretic approach to idioms I have presented here is designed to complement the experimental literature by showing how the selective relevance-driven processing of the encoded concepts guides the hearer at every point to

follow the most accessible inferential route in deriving the overall (idiomatic) meaning. The different layers of inference which make up this inferential route may be gone through very fast in the interpretation of familiar idioms, or be modified in the interpretation of idiom variants. In either case it is the set of assumptions and computations which the hearer uses in interpreting the string which help to bridge the gap between the encoded 'literal' meaning of the phrase and the resulting idiomatic interpretation and which may help the hearer perceive the expression as relatively transparent.

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