Semantic Analyzability and Idiom Comprehension: A Case Study of Arab Learners

Anissa DAOUDI
University of Durham

Abstract: One of the reasons for the relevance of idiom studies is the pervasiveness of figurative language in everyday discourse (Cieślicka: 2005). However, despite the frequency of idioms, they remain an obstruction to a lot of foreign language learners. The comprehension and interpretation of idiomatic expressions has been the focus of much debate in recent literature. Yet, despite the fact that there exists extensive research on processing idiomatic expressions in the monolingual mode, much less has been written about the way in which bilingual language users comprehend and interpret idiomatic language. The present study aims to fill in the gap by highlighting the issue of bilingual figurative competence. It starts with a brief overview of idiom comprehension models. Then, it presents and analyses a study conducted on the strategies Arab learners use to decode idioms. The results of the field research are analyzed, discussed and conclusions are drawn, in a last instance.

Keywords: Context, Idiomaticity, Idiom types, Idiom decoding, Idiom encoding, Language transfer, Idiomatic strings, Figurative and literal interpretation, Target and source idioms, idiom decomposition, lexical ambiguity.

Introduction
“If natural language had been designed by a logician, idioms would not exist.” This quote, by Johnson-Laird (1993) shows the “non-logical” nature of idioms (Glucksberg, 2001: 68). It also indicates that there is no set of rules that a speaker or a hearer follows in order to be able to understand figurative language. Idioms are not organized in a systematic way that makes them easier to decode particularly in the L2 mode. An idiom is institutionalized linguistic expression whose meaning cannot be determined from the meaning of its parts. For
example, the meaning of the expression *kick the bucket* cannot be deduced from the literal meaning of *kick* and *bucket.*

In this paper, I present a case study of Arab learners of English decoding idioms. The following section sheds light on the literature related to the understanding of idioms by L2 learners.

**Research Context**

The comprehension and interpretation of idiomatic expressions has been the focus of much debate in the recent psycholinguistic literature (Cieślicka, 2004b). Broadly speaking, two opposing views on idioms have been proposed in psycholinguistic literature and the models of idiom comprehension developed by scholars can be divided into two classes, depending on which of these views they adopt. The two models are: non-compositional models on the one hand and compositional ones on the other. The former is based on traditional accounts of these expressions and treats idiomatic phrases as non-compositional strings whose figurative meanings are not directly related to the literal meanings of their individual words. Therefore, in the example *kick the bucket,* there is no direct literal link between the two words *kick* and *bucket.* The latter is the compositional approach, which believes that idioms vary in the degree to which the literal meanings of the idioms’ constituent words add to their overall figurative meanings. Glucksberg (1993) refers to non-compositional models as “direct look-up” models, because all of them share the idea that idiom meanings are stipulated arbitrarily and understood by retrieving the meaning of an idiom as a non-compositional, or direct look-up models have been advised. These are the *literal processing model* (Bobrow and Bell, 1973), the *lexical representation model* (Swinney and Cutler, 1979), and the *direct access model* (Gibbs, 1980; Gibbs, 1985; Gibbs, 1986).
Contrary to the non-compositional view of idioms explained above, compositional theories propose that idioms vary with respect to their compositionality. The latter means the degree to which the literal meanings of the idioms’ constituent words contribute to their overall figurative interpretation. Gibbs and Nayak, 1989; Gibbs, Nayak and Cutting (1989) have analysed idioms through an idiom continuum. By this, they mean that there are idioms that are semantically analyzable, i.e. grammatically and lexically decomposable. Having said that, they themselves agree that there are no well-defined procedures for confirming that an idiom is semantically decomposable (Gibbs, Nayak and Cutting, 1989). Idioms are therefore classified into three categories of compositionality that have been assigned to replicate the difference in an idiom’s semantic analyzability.

The first category includes the so-called normally decomposable idioms, consisting of figurative expressions in which there is a one-to-one semantic relationship between the idiom’s words and the components of the idiom’s meaning. Part of the idioms’ components is used literally, or because there are clearly distinct metaphorical correspondences between idiom’s constituent words and components of that idiom’s figurative meaning (Cieślicka: 2006: 115-144). A good example is, break the ice, where the word break corresponds to the idiomatic sense of “changing a mood” or tense atmosphere, while the word ice relates figuratively to social tension (ibid). Likewise, in the idiom pop the question, the noun question clearly refers to a “marriage proposal”, while the verb pop refers to “the act of uttering it” (Gibbs and Nayak, 1989; Gibbs, Nayak and Cutting, 1989). Such idioms, whose individual parts obviously contribute to their overall figurative interpretations, are also known as transparent (Glucksberg 1993; Gibbs and Nayak, 1989; Keysar and Bly, 1995), to reflect the fact that
these idioms’ conventional figurative interpretations are transparent extensions of their literal interpretations. The second category of compositionality comprises what is known as abnormally decomposable idioms. They are expressions where the referents of an idiom’s parts can only be identified metaphorically. Gibbs, Nayak, and Cutting (1989: 578) provide an example - carry the torch, where they argue that one can identify the figurative reference in the idiom only by virtue of our background knowledge of “torch” as a metaphor to describe warm feeling. Therefore, the difference between normally and abnormally decomposable idioms lies in the fact that while the meaning of the former is directly linked to some of the words (components) of the idiomatic expression, the meaning in the latter is related to some of the metaphorical relationships between individual parts and the referent (Gibbs, Nayak and Cutting cited by Cieślicka, 2004).

Finally, semantically non-decomposable idiom is a similar view to the traditional approach, which considers idioms as expressions whose figurative meaning cannot be compositionally derived from the words that comprise the string. In other words, the meaning of the string cannot be deduced from the interpretation of the components. For example, the individual components of kick the bucket or chew the fat are not in the same semantic field as their respective figurative referents i.e. “to die” and “to talk without a purpose” Gibbs, Nayak and Cutting (1989). Furthermore, the two strings should not be viewed as semantically decomposable. This view is particularly true for L2 learners who find these expressions difficult to understand, unlike native speakers who might be familiar with the historical origin of the expression. Non-decomposable idioms are also known as “opaque” idioms in contrast with transparent idioms, as there is no obvious relation between the idiom’s literal and figurative meanings.
Semantic decomposition in idiom processing also known as
decomposition hypothesis (Gibbs, Nayak and Cutting, 1989)
which assumes that various aspects of idiom processing are
affected by the degree of idioms’ semantic analyzability.
Therefore, learners comprehend normally and abnormally
decomposable idioms faster than they do with the semantically
non-decomposable ones. Gibbs, Nayak, and Cutting accredit
this finding to language users’ analysis of the idioms’
components when trying to infer the figurative meaning.
Semantically, non-decomposable idioms take longer to process
as their understanding does not come directly from the
interpretation of the idioms’ components. For example, kick
the bucket cannot be understood by simply interpreting the
phrase’s component literally.
Semantic analyzability or compositionality and its influence
were the area of interest of what is known as configuration
model by Cacciari and Glucksberg (1990) and Cacciari and
Tabossi (1988). This model suggests that the idiom meaning is
associated with a particular configuration of words. The idiom
is produced by the weights of connections between lexical
constituents composing the idiom, rather than being encoded as
a separate lexical entry. An example provided by Cacciari and
Tabossi explains this idea; the word take has a lexical entry
which gets activated when coming across the sentence the boy
took the book, which is, at the same time, part of the idiomatic
configurations as take the bull by the horns and take to heart.
Here, the meanings of the individual words of take the bull by
the horns are consequently represented by separate lexical
nodes, whereas the idiomatic meaning is represented by the
connections between the individual lexical nodes for take/ the/
bull/ by/ horns. These connections are much stronger than the
connections obtained between lexical nodes of non idiomatic
phrases. Therefore, each word is represented only once in the
mental lexicon and this representation should not be marked as either “figurative” or “literal” (Cieślicka, 2004 b: 121).

The Study

Subjects
The study is conducted with two different groups (total of 60 Arab students), namely, fourth year (BA) students studying English at the Department of Translation, King Saud University in Riyadh, Saudi Arabia and fourth year Licence (BA) students studying translation and interpreting at the Department de Traduction et Interpretariat, Université d’Alger, Algeria.

Methodology and procedures
Three instruments have been chosen for gathering data on how bilingual language users cope with interpreting figurative language: questionnaires, observation and interviews. The first data collection instrument used was the questionnaire, which contained 50 statements. The latter were grouped according to the stages believed to be the cycle adopted by learners when dealing with idioms, namely: idiom identification, comprehension and production phases (this paper reports on the comprehension phase only). The second data collection used was classroom observation. Subjects were given various tests. For example, to test comprehension, a list of 40 idioms was given in the form of a multiple choice exercise (idioms out of context). Then, subjects were given idioms in context to see if it influences comprehension. Other exercises tested recall, subjects were asked to fill in the gaps with the appropriate idiomatic expression. The third instrument for collecting data was group interviews, where answers from the above mentioned instruments used were confirmed or disconfirmed. The interviews were semi-structured and reformulated questions were asked in the questionnaire and in the classroom
tasks. I have classified idioms according to their semantic analysability:

Semantically decomposable idioms: e.g., to pop the question and to lay down the law.
Semantically non-decomposable idioms: e.g., kick the bucket and till kingdom come.
Abnormally decomposable idioms: e.g., hit the panic button, spill the beans and to carry a torch for someone.

This categorisation advocates that despite the fact that idioms were seen as non-compositional idioms (dead metaphors), many idiomatic expressions appear to be decomposable (Gibbs, 1991). Furthermore, it is argued that the more analysable an idiom is, the more syntactic flexibility it will have. For example, to lay the law down can be changed to the law was laid down by Henry. However, other expression (non-decomposable) like kick the bucket cannot undertake changes such as the bucket was kicked by Henry.

Analysis
Answers from the questionnaire on the idiom decomposition revealed similar scores. I concentrated on Statement (S40) (see Table 1 below) as a representative of this section, as this statement generated scores that are similar. Despite the results shown in (Table 1), both Saudi (40%) i.e. 12 and Algerian students (33.3%) i.e. 10 said that they “never” semantically decompose an idiom, the remaining two thirds in both groups varied between those who “always” interpreted an idiom word by word (7 Saudis (23%) and 8 Algerians (26%) and those who “often” did, i.e. 10 Saudis (33.3%) and 7 Algerians (23.3%). Interestingly, only one Saudi (3.3%) said that he “always” analyses an idiom semantically, compared with 5 Algerians (16.7%), who said they “always” did. The difference is non-significant as shown in the t. test (P=.383 (NS)).
**Statement 40:** I semantically decompose the idiom, i.e. I explain it semantically word by word

<table>
<thead>
<tr>
<th></th>
<th>Never %</th>
<th>Sometimes %</th>
<th>Often %</th>
<th>Always %</th>
<th>M</th>
<th>S.D</th>
<th>Sig. L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi</td>
<td>40</td>
<td>23.3</td>
<td>33.3</td>
<td>3.3</td>
<td>2.00</td>
<td>.947</td>
<td>P=.38</td>
</tr>
<tr>
<td>Algerian</td>
<td>33.3</td>
<td>26.7</td>
<td>23.3</td>
<td>16.7</td>
<td>2.23</td>
<td>1.104</td>
<td>3 (NS)</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>36.7</td>
<td>25</td>
<td>28.3</td>
<td>10</td>
<td>2.12</td>
<td>1.027</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Semantic decomposition of idioms (Statement 40)

At this stage, results from questionnaire do not tell us much about how the subjects decode idioms. What they do instead is to alert us that they want to show that they deal with phrasal idioms in English as one item and not as fragmented pieces. To get a clearer vision of what actually takes place when subjects are given idioms to decode, I gave two exercises with different lists of idioms, which I called “analysable idioms” and “non-analysable” ones. The following Table 2 shows the scores obtained by each group for the first category:

<table>
<thead>
<tr>
<th>Analysable idioms</th>
<th>Saudi</th>
<th>Algerian</th>
</tr>
</thead>
<tbody>
<tr>
<td>To break the ice</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>To lay down the law</td>
<td>26</td>
<td>28</td>
</tr>
<tr>
<td>The coast is clear</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>To zip one’s lips</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>To be in deep water</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>To put the cat among the pigeons</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>To pop the question</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 2: Processing Analysable Idioms
Expressions like to break the ice, the coast is clear and to put the cat among the pigeons were clearly understood by the two groups. The fact that they are not very opaque made them easy to understand. At the Interview, Algerian subjects explained that the above expressions were clear because of their concepts. The concept of “breaking the ice” gives indication that there is something “rigid” or “tough” that needs “loosening”. However, the expression to pop the question was not as clear. The word “pop” was literally interpreted as a “sudden or an unexpected” question, but there was no link with “marriage”. This could be related to Algerian and Saudi marriage customs and traditions. On the other hand, to put the cat among the pigeons was also computed with no difficulty because of the concept of “danger” or “risk”. Here, the students associated the image created by the literal with the actual act, in this case “the act of risking”. This expression does not exist in Arabic. The coast is clear is found to be an easy idiom for both groups. Non-analysable idiom such as kick the bucket was highlighted in the light of the semantic analysability theory. Table 3 represents the scores of Algerian and Saudi subjects dealing with non-analysable idioms.

<table>
<thead>
<tr>
<th>Non-analysable idioms</th>
<th>Comprehension Saudi</th>
<th>Comprehension Algerian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Till Kingdom come</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Red herring</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>To be seven sheets to the wind</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>To spill the beans</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>
To shoot the breeze | 10 | 24
To carry coal to Newcastle | 0 | 1
To bury the hatchet | 2 | 4

Table 3: Processing non-analyzable Idioms

At the interview, Algerian subjects referred to the metaphor to shoot the breeze, by invoking the idea of shooting something that cannot be touched, shooting the air, they then remembered a colloquial expression in Algerian Arabic to shoot the air with a stick, (meaning, to shoot aimlessly). No one among the Saudi group worked out the meaning of the expression to bring coal to Newcastle, while only one Algerian did. As for to bury the hatchet, Algerian subject did not know what the word “hatchet” meant and once clarified, they thought of the metaphor as meaning (hiding an instrument used in a crime, to kill someone and to bury him with the instruments used for his/her killing).

Idiom semantic analyzability as a strategy was used by subjects from both groups. As far as the semantic analyzability typology is concerned, both groups found analyzable idioms (semantically decomposable idioms) easier to decode due to their semantic transparency. On the other hand, non-analyzable idioms (semantically non-decompositional idioms) were found to be the most difficult ones to decode. Despite both groups being able to interpret the expression till kingdom come, they could not explain what made them work out its meaning. Again, no clear answer was given on what makes students decide that an expression is analysable or not.

Findings from this study revealed that metaphorical concepts differ from one culture to another, as seen in the example: to carry a torch, which was interpreted wrongly
because the metaphorical concept of the word “torch” in Arabic refers to “leadership” or “role model” and not to “to have feelings for someone”. Interestingly, the study revealed that while L2 learners are decoding the idiom semantically, they are interpreting it literally before thinking of its metaphorical meaning, i.e. the computation of the idiom went through a literal analysis prior to a metaphorical one.

The study discloses two interesting categories: idioms with dominant literal properties and idioms with dominant figurative properties. While the former revealed learners’ higher tendencies to interpret idioms literally, the latter exposed an inclination for a figurative one based mainly on the learner’s metaphorical conceptions, i.e. learners called on their metaphorical knowledge to work out the meaning of some idioms. The most frequent explanation was the one related to literal interpretation. Their literal explanation was noticed in the identification and comprehension phases and it could be accounted for by the straightforward relationship between the literal expression and its figurative meaning. This was elicited particularly with semantically decomposable idioms, which were found to be the easiest to decode, for example, to break the ice. However, there were cases where learners combined their literal interpretation of an idiom with their figurative one; for example, to play with fire was interpreted literally and was considered as something that cannot happen in reality and also was interpreted figuratively referring to the metaphorical concept of “danger”. The findings are in agreement with Cieślicka’s (1996), who refers to this category as analogies between literal referent and idiomatic referent.

Similarly, semantically non decomposable idioms were interpreted literally. Algerian and Saudi subjects relied heavily on literal explanation of idioms. Therefore, literal interpretations seem to be employed by both groups, irrespective of whether or not an idiom is semantically non
decomposable or semantically decomposable. The study also concludes that there is no typology that is found to be sufficient. Also, there is no clear difference between the boundaries of the different proposed types of idioms for native speakers, let alone non-natives. Furthermore, an idiom is not processed as a whole, but is processed literally word by word until the figurative meaning emerges. This does not imply that this is the only strategy learners adopt to decode idioms. There are other strategies such as guessing the meaning of an expression based on the interpretation of the key word. Prior knowledge or familiarity has also played an important factor. Algerian and Saudi learners complained that they are not exposed to the target culture, i.e. the different types of contexts, so their phraseological competence in the target culture is limited.

**Conclusion**

To sum up, this paper has examined the semantic analyzability of idioms by Arab learners and its effects on idiom comprehension. In accordance with the results of a similar study obtained by Ciacciari and Levardo (1998) and Cieślicka (2004), it was found that idioms that are semantically decomposable are the easiest to decode. However, in the case of this study, there were incidents were idioms were misunderstood due to the cultural differences in metaphorical concepts. For example pop the question was misinterpreted due to the differences in cultures as far as marriage traditions are concerned. While the act of asking for marriage is done by the groom in the west, it is done by the family in the Arab culture. The same thing applies to the concept of torch in to carry a torch for someone. The expression was also wrongly interpreted. As far as the rest of the list of analyzable idioms is concerned, comprehension did not pose a problem either because the expressions’ components were transparent or
because there exists an equivalent in the native language (Arabic).

The study reveals learners’ higher tendencies to interpret idioms literally, the latter exposed a tendency to look for a figurative interpretation based mainly on the learner’s metaphorical conceptions, i.e. learners called on their metaphorical knowledge to work out the meaning of some idioms. Again, what was interesting is the fact that learners frequently went for the explanation related to literal interpretation. However, there were cases where learners combined their literal interpretation of an idiom with their figurative one as in the example mentioned earlier; to play with fire. The case of literal interpretation was not restricted to the semantically decomposable idioms category only. The same thing applies to the semantically non decomposable idioms which were most of the time interpreted literally. Furthermore, evidence shows that an idiom is not processed as a whole, but is processed literally word by word until the figurative meaning emerges. These results contradict what both groups said in the questionnaire, when asked whether or not they decoded the idiom semantically word by word and the majority opted for “never” as an answer.

Bibliography:


