Interpreting Idioms in a Second Language

The Role of Context and Transfer in Interpreting English Idioms by Native Dutch Speakers

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How do people understand figurative speech in a foreign language? What strategies do they use? By means of an online questionnaire, this study investigated to what extent contextual information and transfer play a role in the interpretation of idioms in a second language, controlling for familiarity. Sixty-one native speakers of Dutch were asked to guess the correct interpretation of English idioms with and without a Dutch equivalent, presented with and without context, out of four answer options. The results showed that correctly interpreting an idiom depends on both the presence of context and the possibility of transfer. More correct interpretations were given when an idiom was presented in a context, but only for English idioms without an equivalent in the native language. English idioms with an equivalent in Dutch, often rated as familiar, were mostly understood correctly. We interpret this result as the involvement of transfer from the native language.

Keywords: idiom comprehension, second language, contextual information, transfer, familiarity

1. Introduction and background

Idioms are an important and frequently used part of language. They are often language-specific, and their meaning is partly or completely non-transparent. For second language learners, idioms are therefore essential but not easy to learn. Not much is currently known with certainty about learning processes and interpretation strategies of second language learners in this particular respect. It is quite likely, however, that both linguistic context and the possibility of transfer from the native language of a speaker play a role, and certainly in "natural" situations without explicit (teaching) instructions. For these reasons, we conduct an experiment to test the two factors context and transfer, and their interaction, thereby controlling for familiarity. We do this on the basis of an online survey among second language (L2) speakers of English that have Dutch as their native language (L1). Before we go into detail concerning the set-up of the test in section 2, we provide some more background about the study of idiom comprehension and learning in the remainder of this introduction.

An idiom can be defined as an expression whose meaning cannot be straightforwardly derived from the regular meanings of its constituents (Glucksberg 2001, Irujo, 1986). This property of idiomatic expressions implicates that idioms are at least partly non-compositional in the Fregean sense (cf. Velasco 2016). Not all idioms are equally non-compositional, however: Nunberg et al. (1994), among others, have stressed that there are idioms that simply combine figuratively interpreted component parts, and those that do not (semi)transparently distribute the meaning of the whole to its constituents. In addition, idioms are typically multiword expressions consisting of two or more words. As is also stressed by Liu (2008), single words – including compounds – are individual vocabulary items that can be used metaphorically, but do not have an inherent idiomatic meaning. Furthermore, it is worth mentioning that the internal syntactic structure of idioms can be fixed to varying degrees (cf. Schenk 1995).

Idiomatic expressions can be assigned both a literal interpretation and the intended figurative interpretation (cf. Liu 2008, Sprenger et al. 2006). This appears to be a specific instantiation of Grice's (1975) more general distinction between what is said (*sentence* meaning) and the content that is intended to be communicated (*speaker* meaning), which includes implicatures. Experimental results show that these different aspects of the interpretation of idioms can be related to a competition between two different processing strategies: incremental build-up vs. wholesale storage and retrieval from memory (for a recent discussion, see also La Roi 2021 and Hubers 2019). According to the *Dual*

Idiom Representation Model (Abel 2003, Titone and Connine 1994), both processing strategies can be active, depending in part on the degree of compositionality, as well as on the familiarity of an idiom, to which we will return shortly.

As mentioned above, idioms, like other forms of figurative speech, are rather prominent in language use. According to Cooper (1998), a speaker uses approximately 4 idioms per minute; Liu's (2008) study of instructional language also found a high frequency of idiom use: college instructors used on average 3 idioms per 100 words. The high frequency of idiom use in language shows the importance for second language learners to learn and understand idioms. But which conscious and unconscious strategies do L2 learners use to attain the correct interpretation of potentially unfamiliar L2 idioms? Liu (2008) lists the following five possibilities (see also Glucksberg 2001): using (1) contextual information, (2) the literal meaning of an idiom, (3) pragmatic knowledge or knowledge of the world, (4) L1 and L1 idioms, (5) interference of L1 cultural knowledge. Combining (1) with (3), and (4) with (5), we conclude that two of the most likely factors of interest are *context* and *transfer*, which we briefly discuss in turn.

Context involves the presence of additional visible or audible linguistic utterances in combination with situational information as well as knowledge about the world and relevant cultural aspects. According to Cooper (1999), using contextual information is the most important and effective strategy to guess the meaning of an idiom (see also Bulut & Celik-Yazici 2004). Liu (2008) also describes the importance of using contextual information in interpreting idioms in a second language and considers it an effective learning strategy. In a natural learning environment, that is, outside of an explicit classroom setting, idioms normally also occur in context (Boers & Demecheleer 2001), and several other studies have found that presenting idioms in a linguistic context in a test has a major positive effect on the interpretation of idioms by L2 learners (Liontas 2003, Karlsson 2013).

When cultural or linguistic knowledge from the native language influences the second language, this is referred to as *transfer* (Irujo, 1986). There are various possible scenarios. If idioms in a second language correspond in form but differ in meaning from idioms in the native language, the native language can be misleading (Boers & Demecheleer 2001). This is negative transfer: when an idiom in the native language is used to produce an equivalent idiom in the second language, inference errors can occur (Irujo 1986). In the case of positive transfer, however, both the form and the meaning of an idiom are similar in the native language and the second language (Irujo 1986). For example, the English idiom *not have a leg to stand on* corresponds to the Dutch idiom *geen been hebben om op te staan* (lit. 'no leg have for on to stand'). Positive transfer can hence facilitate the interpretation of idioms in the second language. Finally, transfer cannot occur at all in L2 idioms without an equivalent in the L1 because there can only be limited influence of the native language (Charteris-Black 2001).

An additional factor that is likely to be relevant in the processing and comprehension of idioms in a second language is *familiarity* (cf. Liu 2008). We define familiarity in general as the degree to which an individual language user is familiar with particular linguistic items, here idioms. It is essential to see that familiarity is different from frequency at the population level, which is irrelevant for our purposes. The relationship between the two is only indirect: a higher frequency enhances the chance that an individual is familiar with a particular item but does not guarantee it in any way. Research has shown that familiar idioms are processed faster and with higher accuracy than unfamiliar idioms (Forrester 1995, Schweigert 1986). According to the *Dual Idiom Representation Model*, highly familiar idioms are more likely to be stored in their entirety in the mental lexicon than unfamiliar idioms. The meaning of an idiom can then be retrieved directly from memory. In a speaker's second language, however, there are significantly fewer familiar idioms available than in his or her native lexicon, hence L2 speakers are more likely to encounter unfamiliar idioms, whose comprehension involves a more complex and slower process than in L1 (Cooper 1999, Bulut & Celik-Yazici 2004). As we hypothesize, such processes potentially involve the use of context and transfer, which we use as independent variables in our study. Since familiarity cannot be *directly* manipulated, we use it as a control variable in our analysis.

Our study can be compared to some previous work on the topic. In Karlsson (2013), Swedish L1 students with English as L2 were tested. Both L1 idioms and L2 idioms were offered in a context to investigate to what extent context is used when interpreting idioms. Karlsson asked participants to

translate the idioms by explaining the meaning in their own words or by giving a direct counterpart. Similarly, Liontas (2003) examined American-English L1 students with Spanish as L2, and asked participants to give their own interpretation of each idiom. A drawback to this method is that it lacks control over the type of interpretation that participants give. In the present study, participants therefore give their interpretation of both L1 and L2 idioms using four answer options, so that observations about the interpretations can be made in a structured and comparative way; see section 2 and Appendix I in the online materials. Furthermore, Liontas (2003) made a distinction between idioms that matched between L1 and L2, partially matching idioms, and non-matching idioms. First, the idioms were presented without contextual support and then the same idioms were presented again in a context. The results showed an effect of context for only matching and non-matching idioms. Therefore, the present study will focus on idioms either with or without an equivalent in the L1 and test the possibility of transfer as a possible "strategy" to interpret L2 idioms. Finally, it is worth stressing that we examine a different L1/L2 combination, namely Dutch/English.

In brief, we ask the following research question: *How well do L2 learners interpret idioms in their second language compared to idioms in their native L1 language, and to what degree is this influenced by the presence of context and the possibility of transfer from their native language?* We investigate this question using a web-based questionnaire in which we asked native Dutch participants to select the most likely interpretation of several L2 idioms in English, out of four answer options. On the basis of previous literature, we first expect to find a positive effect of the presence of context in the interpretation of English idioms. Second, we expect to find an effect of positive transfer: more correct interpretations will be given for those English idioms with an L1-equivalent compared to those without. However, there may also be a relevant interaction effect. If context is the strongest factor, it will override effects of transfer. Finally, we also control for an effect of familiarity on L2 idiom interpretation. In order to be able to do that in a post-hoc fashion, we ask participants to also indicate the degree of familiarity with the test items during the survey. Our actual results indicate that context is indeed an important factor in interpreting L2 idioms without an equivalent in the L1, but it does not have an added value for L2 idioms that can be comprehended by means of positive transfer from the L1, which suggests that context does not override effects of transfer.

2. Methods

2.1 Participants

An online questionnaire was distributed via social media platforms such as *Facebook* and *WhatsApp* to recruit participants. A total of 69 Dutch-speaking young adults filled out the questionnaire. Eight participants were excluded after data collection because they did not meet the selection criteria (see below). The remaining participants consisted of 48 women and 13 men, with a mean age of 22 years (SD = 2.8, range = 18-28). We selected sufficiently competent speakers of English as a foreign language, because a relatively high degree of knowledge and understanding of the L2 is required for the task at hand. Therefore, we required at least a B1 proficiency level of English of all participants, which is guaranteed by a secondary school diploma and a passing grade for their English classes. All participants participated voluntarily in the study and consented to anonymous processing of their results for scientific purposes.

2.2 Materials

The questionnaire consisted of 10 Dutch (L1) idioms and 20 English (L2) idioms; see Appendix I in the online materials for details. Two types of English idioms were distinguished: those with an L1-equivalent and those without an L1-equivalent. The English idioms with an L1-equivalent are idioms with a similar form and meaning in Dutch, e.g., *een handje helpen* (L1) – *give a hand* (L2). We only included L2 idioms that did not differ by more than one content word from the Dutch idioms. Well-known and transparent differences in word order, such as $V2_{fin}$+OV (Dutch) versus VO (English) can be considered irrelevant for our purposes. An example of all types of idioms is shown in Table 1.

Table 1. *Characterization of the idioms used.*

Type of idiom	Example	Number of idioms
Dutch (L1)	*Zijn handen jeuken* 'His hands itch' (literal) 'To be very excited to start something' (figurative)	10
English with L1-equivalent	*To break the ice* (L1 equivalent = 'Het ijs breken')	10
English without L1-equivalent	*Cook someone's goose*	10

The Dutch idioms served as a baseline condition and were selected from the online dictionary of *Van Dale*. For the selection of the English idioms, the *Oxford Dictionary of Idioms* (Siefring 2004) was used. In collecting the idioms, the properties of idioms as described before have been taken into account: Given that idioms are on a spectrum of compositionality, ranging from idioms with completely non-decomposable meanings to light, collocational idioms, the latter may be transparent enough for participants to guess their meaning based on the literal meaning of their constituents. Therefore, we decided to use idioms that are at or very near the non-compositional end of the scale according to our own intuitions. Furthermore, we only make use of idioms consisting of two or more words and had a fixed structure with no or limited variance. Other than that, the selection was a random sample.

To determine to what extent the presence of context plays a role in interpreting idioms, a fitting linguistic context was created for each idiom. According to Liu (2008), how context is provided can vary in terms of length, contextual cues, and vocabulary. In the current study, context was provided by placing non-idiomatic linguistic utterances around or before the idiom. These texts (short stories) consisted of two or three sentences. To find appropriate contexts, dictionaries and news items containing the selected idioms have been used. It was decided to use authentic materials rather than possibly contrived texts in order to mimic natural language use as closely as possible (again following Liu 2008).

The idioms were incorporated into two different versions of the questionnaire: version A and version B. In version A, half of the selected idioms were presented in a condition without context and the other half of the idioms in a condition with context, and vice versa in version B. About half of the participants filled out version A (N = 27) of the questionnaire and the other half filled out version B (N = 34).

Four answer options, based on the method used in Irujo's study (1986), were used to examine how a participant interprets an idiom. The answer options consisted of the correct interpretation of the idiom, the literal interpretation, an interpretation related to the correct interpretation (deceiver), and an unrelated interpretation (distractor). The correct interpretation was determined by the information in the cited dictionaries that served as our gold standard. An example of each option is presented in (1) below using the idiom *to break the ice*.

(1) *I was so nervous about meeting Samantha's parents for the first time. Her dad immediately* ***broke the ice*** *by asking about my job. Everything went great after that.*

a. *De spanning verlichten* (correct interpretation)
'to relieve tension'

b. *Het ijs kapotslaan* (literal interpretation)
'to break the ice'

c. *Het spannender maken* (deceiver)
'to make it more exciting'

d. *Een geïnteresseerde houding tonen* (distractor)
'to show interest'

The answer options were provided in the native language (Dutch) instead of the second language (English), because the study is concerned with how a person interprets an idiom and not about his or her productive vocabulary knowledge of English. The four answer options were presented in a random order for each idiom. However, the order of the answer options was the same in both the condition with context and the condition without context. No fillers were required.

2.3 Procedure

The online questionnaire was administered via *Qualtrics* (www.qualtrics.com) and took approximately 10 to 15 minutes. The questionnaire started with some general questions about the age, gender, native language, and English proficiency level of the participant. Then a short instruction about the test followed, explaining what was required of the participant. The fact that the study focused on the role of context and transfer was not shared in order not to influence the participants.

After the instructions, the Dutch idioms were presented, followed by the English idioms, both in a random order. For each idiom, the participant was asked to indicate to what extent the idiom and its meaning were familiar. To indicate this, the following options were given:

- I know what the idioms means.
- I recognize the idiom and I think I know what it means.
- I recognize the idiom, but I do not know what it means.
- I do not know the idiom.

On the next page, the following question was asked: "How would you interpret this idiom?". The participant indicated how he or she interpreted the idiom by choosing one of the four options described in section 2.2. After answering this question, the participant had to click a button to go to the next page. Then a new idiom was shown. During the entire questionnaire, the participants could not return to previous questions.

3. Analysis and results

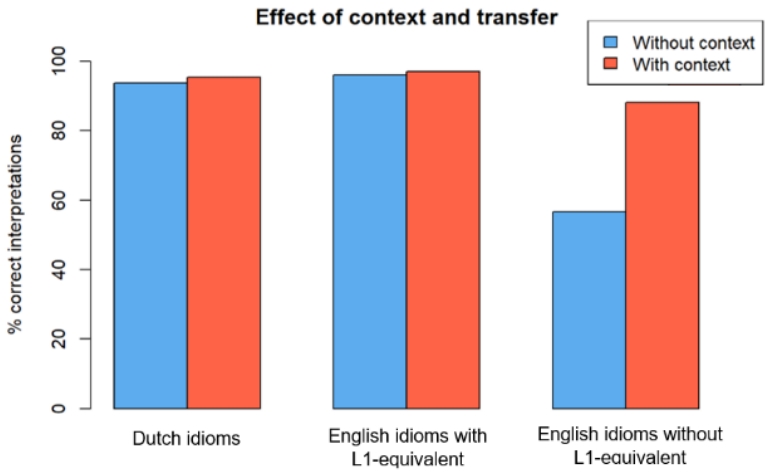
3.1 Exclusion of idioms

Prior to the analysis of the results, we excluded one Dutch idiom and two English idioms from the data because of apparent biases in the response options. For the Dutch idiom *iets in de ijskast zetten* ('to put something in the refrigerator'), over 50 percent of the participants chose for the deceiver (*ergens mee stoppen* 'to stop doing something') instead of the correct interpretation (*iets niet uitvoeren* 'not doing something'). Here, the deceiver may have been too similar to the answer option with the correct interpretation. For two English idioms without an L1-equivalent (*to sit on the fence* and *a bite at the cherry*), 65 and 96 percent of the participants, respectively, chose the deceiver in the condition with context. In these idioms, multiple interpretations seemed to fit in the condition with context. We will therefore focus on the remaining 27 idioms, which leaves 1647 responses for analysis.

3.2 The effect of context and transfer

As explained in section 2 above, we tested the effect on idiom interpretability on the basis of two variable factors: context (with two values: present or absent), and the "type" of the idiom (here, the language status with three values: Dutch, English with a Dutch equivalent, and English without a Dutch equivalent). Figure 1 shows the mean percentage of correct interpretations for each type of idiom in the condition with context and the condition without context.

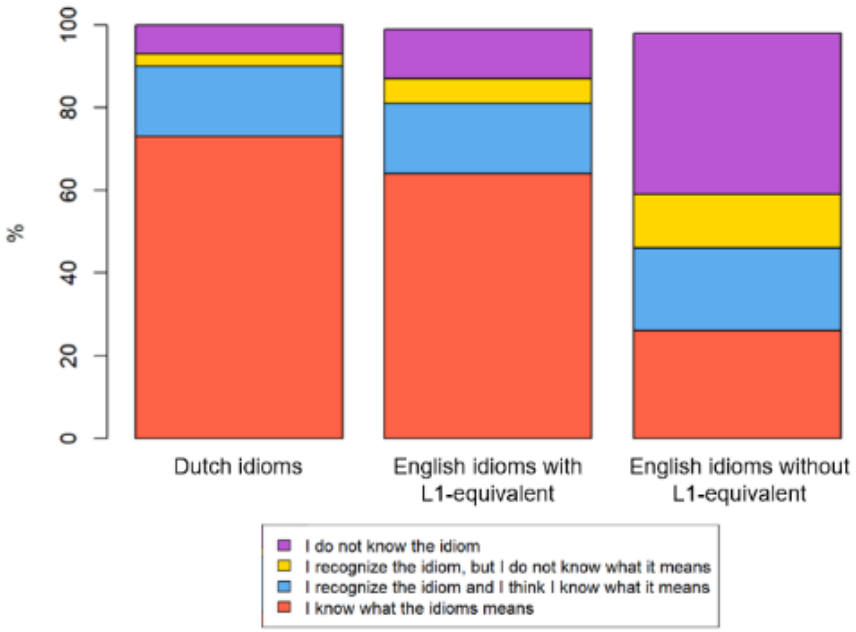
Figure 1. *Percentage of correct interpretations: without context and with context.*



What we immediately notice is that there is a relevant difference between the presence or absence of context for the interpretation of L2 idioms without an L1 equivalent. For those with an L1 equivalent or L1 idioms, there appears to be a ceiling effect (up to nearly 100% correctness), discussed further in section 4. Before we go into the details of a statistical analysis of the results, let us elaborate on the effect of familiarity.

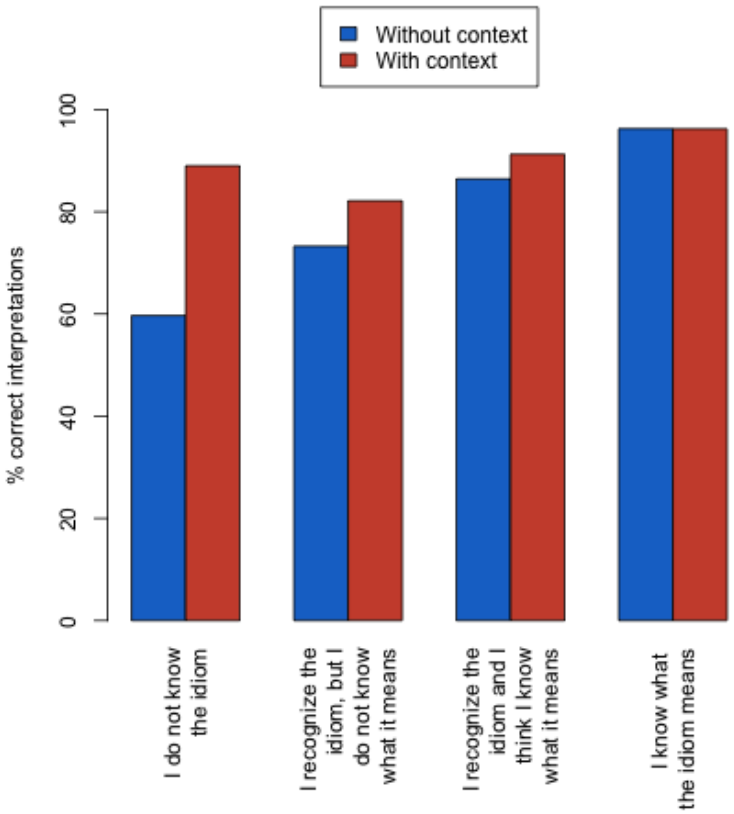
For each idiom, participants were asked to indicate how familiar they were with the idiom, using four options. In Figure 2, the distribution of the four response options for each type of idiom is shown; see Appendix II in the online materials for details. The distribution indicates that participants were, as one would expect, most familiar with the Dutch L1 idioms (only very few cases were not recognized by certain participants), followed by the English idioms with an L1-equivalent. The meaning of the English idioms without an L1-equivalent was least familiar to the participants. These results confirm that there is a relationship between the type of idiom and the familiarity of an idiom: L2 idioms that have an equivalent in the L1 are also the ones that are most familiar. Still, there are also a number of cases where an L2 idiom without an L1 equivalent is familiar, or at least recognized.

Figure 2. *The distribution of familiarity ratings for each type of idiom.*



A similar pattern can be observed in the interpretations of the idioms: Dutch idioms and English idioms with an L1-equivalent were more often interpreted correctly than English idioms without an L1-equivalent. Therefore, there also seems to be a relationship between the degree of familiarity and the ability to interpret an idiom: the more familiar an idiom, the more often a correct interpretation is given. Figure 3 shows the proportion of correct interpretations for the different options regarding the familiarity of an idiom, in both the condition with context and the condition without context.

Figure 3. *Familiarity: the proportion of correct interpretations for each familiarity category in both context conditions.*



A logistic regression analysis was conducted (using the glm function in R, cf. R Core Team, 2020) to compare the proportion of correct interpretations between both context conditions and between the different types of idioms, with familiarity as an additional predictor. All factors were treatment coded, with idioms without context, Dutch idioms, and the answer option "I do not know the idiom" serving as the reference levels, respectively. That is, each of the other categories of each predictor was compared to this level. The results in Table 2 below show a significant positive interaction between the English idioms without an L1-equivalent and the presence of context, indicating that for that type of idiom participants were significantly more likely to give a correct interpretation when an idiom was presented in a context in comparison with an idiom that was not provided in a context. However, we could not observe a significant difference between the context conditions in the English idioms with an L1-equivalent; see Appendix III in the online materials for an overview of the results per idiom.

We also see a significant main effect of English idioms without an L1-equivalent compared to the Dutch baseline, while English idioms with an L1-equivalent did not differ significantly from the Dutch idioms. The high score for L2 idioms with a Dutch equivalent suggests an effect of positive transfer: having an L1-equivalent makes L2 idioms interpretable to a high degree that can even be compared to L1 idioms. To investigate whether the effect of transfer on the proportion of correct interpretations may be due to the familiarity of the idioms, we included the interaction between familiarity and context to examine whether the interaction between context and transfer might be driven by familiarity. The results in Table 2 show a significant effect of familiarity: the more familiar an

idiom, the higher the chance of a correct interpretation. We also found a significant negative interaction between familiarity and the presence of context, indicating that in the idioms that were rated as unfamiliar, the presence of context increased the likelihood of a correct interpretation, but that this effect disappeared in the familiar idioms. Thus, although participants indicated that they were not familiar with an idiom, it was still possible for them to come up with a correct interpretation when context was provided. Crucially, however, the main effect of transfer and the interaction between English idioms without an L1-equivalent and context remain significant when controlling for familiarity. Thus, the effect of transfer cannot be completely explained by familiarity.

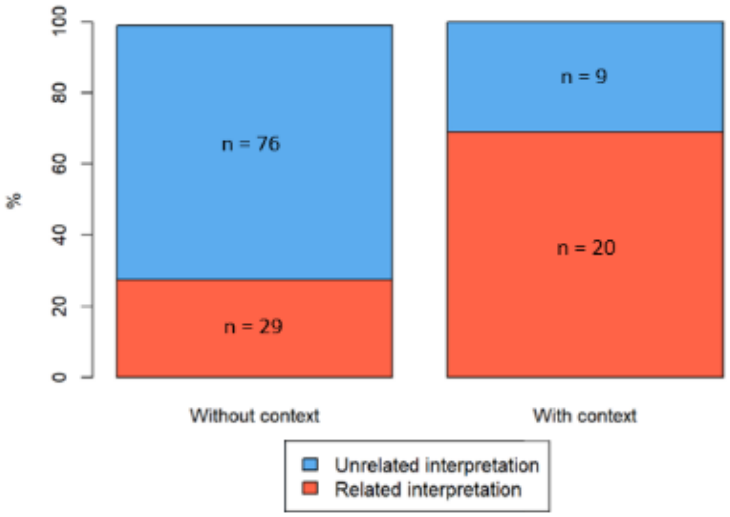
Table 2. *Logistic regression model output for the effects of context and transfer on the proportion of correct interpretations, including familiarity as a predictor.*

	β	SE	z-value	p-value
(Intercept)	1.315	0.32	4.13	<.001***
English with equivalent	0.859	0.40	2.14	0.03*
English without equivalent	-1.660	0.31	-5.36	<.001***
With context	1.196	0.58	2.15	0.03*
Recognize idiom	0.532	0.32	1.68	0.09
Recognize and know meaning	0.915	0.32	2.85	0.004**
Know meaning	2.178	0.33	6.65	<.001***
English with equivalent : With context	-0.319	0.60	-0.53	0.59
English without equivalent : With context	1.015	0.49	2.06	0.04*
Recognize idiom : With context	-1.122	0.67	-1.68	0.09
Recognize and know meaning : With context	-0.883	0.53	-1.66	0.10
Know meaning : With context	-1.497	0.54	-2.79	0.005**

3.3 Incorrect interpretations of English idioms without L1-equivalent

Next, we focused more closely on the incorrect interpretations of the English idioms without an L1-equivalent. Figure 4 shows the percentage of related and unrelated interpretations (i.e., incorrect responses where the deceiver or distractor was selected, respectively) in both context conditions. Literal interpretations were not included in the analysis of the incorrect interpretations, since only one participant chose this type of interpretation.

Figure 4. *Percentage of related and unrelated interpretations in the incorrect interpretations of English idioms without an L1-equivalent, by context condition. Numbers reflect the number of observations in each category.*



A logistic regression analysis was used to compare the proportion of related interpretations between the condition without context and the condition with context. The results in Table 3 show a significant

effect of context, indicating that participants were more likely to choose the related deceiver as compared to the unrelated distractor when idioms were presented in a context.

Table 3. *Logistic regression model output for the effect of context on the proportion of related interpretations out of all incorrect interpretations of English idioms without an L1-equivalent.*

	β	SE	z-value	p-value
(Intercept)	-0.963	0.22	-4.41	<.001***
With context	1.762	0.46	3.86	<.001***

4. Discussion and conclusion

The current study aimed to understand the role of context and transfer in interpreting idioms in a second language. To investigate this, we focused on L2-English idioms with and without an L1-Dutch equivalent, presented in the presence or absence of a linguistic context.

The results showed that both factors, context and transfer, do play a role, but in different situations. First, our results confirm the finding by Irujo (1986) that L2 idioms with an equivalent in the L1 were the easiest to understand because of positive transfer. The participants in our study were significantly more likely to give a correct interpretation for the English idioms with an L1-equivalent than those without an L1-equivalent. Second, also in accordance with our expectations, we found a significant difference between the two context conditions for the English idioms without an L1-equivalent. The presence of context resulted in a significantly higher likelihood of a correct interpretation when an idiom was presented in a linguistic context. These findings are consistent with previous research by Liontas (2003), who examined American students with Spanish as a second language, and by Karlsson (2013), who examined Swedish students with English as a second language.

In contrast to our initial expectations, we did not find a significant difference between the two context conditions for the English idioms with an L1-equivalent, probably due to a ceiling effect. Irrespective of context, participants gave a correct interpretation in almost 100 percent of the cases. Although Cooper (1999) argued that using contextual information is the most effective strategy to guess the meaning of an idiom, use of knowledge from the native language (that is, positive transfer) thus seems to make the influence of context inoperative. What we do not know with certainty is whether transfer would in fact override context if no ceiling was reached. In our task, it turned out to be easy to guess the correct interpretation if an L1-equivalent was available, which masked a potential additional or overriding effect of the presence of context in this condition. Further research is needed to investigate the interaction between (or relative importance of) context and transfer. For example, idioms that are so-called “false friends” (idioms from different languages that look the same but have a different meaning) could cause *negative* transfer from the L1 in L2 idioms. That is, relying on transfer would lead L2-listeners or L2-readers to a different interpretation than the context suggests. In this way, it could be investigated whether context or transfer is the most important factor in interpreting or acquiring idioms in the L2.

For the English idioms without an L1-equivalent, that is, the type of idioms for which we did find a clear effect of context, we also analysed the incorrect interpretations in more detail. Here, we found an effect of context on the choice for a related interpretation. When they selected an incorrect answer, participants primarily chose the (unrelated) distractor in the condition without context, while the (related) deceiver was mainly chosen in the condition with context. The choice for the distractor in the condition without context can be explained by some kind of negative transfer. In some cases, this answer option may have had a misleading effect on the interpretation of the idiom because the answer option and the idiom resembled each other, but did not have the same meaning. For example, the distractor *handeldrijven (to trade)* in the idiom *buy the farm* could be associated with the word *buy* in the idiom.

The choice for the deceiver in the condition with context shows that the participants were going in the right direction with their answers, since the deceiver is most closely related to the correct interpretation. However, we must make the proviso that we used a multiple-choice question instead

of an open-ended question (for the analytical reasons mentioned in section 1). By providing answer options, there is a chance that the interpretation of an idiom is affected by these answer options. Moreover, the participants hardly opted for the literal interpretation. An explanation could be that the participants (inevitably) knew prior to the test that the study would be about idioms. Hence, it was clear to the participants that they had to choose a figurative interpretation.

Finally, we also controlled for the familiarity of the idioms, as this might be a confounding factor. As we pointed out in the introduction, familiarity is not the same as frequency at the population level, but there is a correlation of chance. Another factor that clearly correlates with the chance of familiarity for L2 speakers is the level of L2 proficiency. Since these potentially contributing factors to familiarity are indirect, we did not take these into account, and we only set a bottom line for L2 proficiency without looking at potential differences between individual participants; but of course such issues could be investigated in more detail in further research (see also Kellerman 1987 for some relevant discussion). In any case, the current study showed that English idioms without an equivalent in the L1 were less familiar to the participants in comparison to the English idioms with an equivalent in the L1. Dutch idioms were rated as most familiar. In turn, familiar idioms were more likely to be interpreted correctly. Thus, the degree of familiarity of an idiom seems to affect whether an idiom can be interpreted correctly or not. These findings are in agreement with the results of previous studies by Forrester (1995) and Schweigert (1986), which showed that familiar idioms are comprehended more rapidly and more accurately than unfamiliar idioms.

Yet, the current study revealed that it is possible to come up with a correct interpretation for unfamiliar idioms when the idiom is provided in a context. Participants were significantly more likely to give a correct interpretation in the condition with context compared to the condition without context for the idioms that were rated as unfamiliar. This result shows that the presence of context also plays an important role in the ability to interpret unfamiliar idioms. Importantly, the effects of familiarity could not fully explain effects of transfer: L2 idioms without an L1 equivalent were still familiar to some, and sometimes an L1 idiom was unfamiliar. Both factors seemed to have played a role in idiom interpretation. In conclusion, the present study has shown that both context and transfer, on top of familiarity, are relevant factors in interpreting idioms in a second language. Further research is needed to establish in more detail how these three factors are related and which factor plays a dominant role in what circumstances. In this respect it is also worth reiterating that we focused our attention to semantically non-transparent types of idioms. It may be interesting to perform comparable tests with sentences containing phrases of varying degrees of non-compositionality in future research.

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Data availability

The raw data and the R script for the analyses, as well as the appendices, can be found here: https://doi.org/10.17605/osf.io/7auny

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