

Presenting figurative idioms with a touch of etymology: more than mere mnemonics?

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Instead of being completely arbitrary, the meaning of many idioms is ‘motivated’ by their original, literal usage. In an FLT context, this offers the possibility of presenting idioms in ways that promote insightful learning rather than ‘blind’ memorization. Associating an idiom with its etymology has been shown to enhance retention. This effect seems in accordance with Dual Coding theory, as the etymological association is likely to call up a mental image of a concrete scene which can be stored in memory alongside the verbal form. The present study explores the possibility of taking this technique beyond ‘mere’ mnemonics. We report a series of experiments that were set up with the participation of students of English in higher education. The results show that knowledge of the origin of idioms can effectively help learners comprehend their figurative meaning. Not only does the problem-solving task of inferring idiomatic meaning on the basis of etymological information appear feasible, it seems to facilitate recall, too, as predicted by Levels-of-processing theory in general. Finally, the results suggest that knowledge of the origin of certain idioms can help learners estimate whether they might be typical of informal discourse.

I Introduction: motivated idiomatic meaning

What is referred to in the literature as ‘idioms’ makes up a large and heterogeneous class of (semi-)fixed multiword expressions (Grant and Bauer, 2004). Traditionally, one of the principal criteria for classifying an expression as idiomatic has been its non-compositional nature (e.g. Fernando and Flavell, 1981). If an expression is said to be non-compositional, it is believed that its meaning cannot be inferred by simply adding up the semantics of its constituents. As a result, the meaning of idioms appears to be quite arbitrary. Because of this alleged arbitrary nature of the semantics of idioms, it has long been taken for granted in second or foreign language teaching that, because of the absence of reliable clues inside the expressions themselves, learners could only resort to contextual clues to try to interpret idioms (e.g. Cooper,

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1999), and the only way learners could memorize such expressions was believed to be rote-learning.

In recent years, however, cognitive semantic studies of figurative language (e.g. Gibbs, 1994; Kövecses, 1990; Lakoff, 1987) have shown that considerable numbers of idioms are not completely arbitrary. Instead, figurative idioms are now believed to be *motivated*. This means that, while it is true that their figurative, idiomatic meaning is not fully predictable on the basis of a literal reading, the derivation from that literal sense can nonetheless be 'explained'. Figurative idioms can be motivated along various lines. Many have been shown to instantiate general conceptual metaphors or conceptual metonymies. For example, the expression *Time flies* can be motivated by the conceptual metaphor TIME IS A MOVING OBJECT (also evidenced by statements such as *I'm falling behind schedule again*, *The holidays are approaching* and *Those days are over*). The expression *Lend a (helping)hand* can be motivated by a conceptual metonymy where the hand stands for the action (also evidenced by idioms such as *Get one's hand in*, *Turn one's hand to something* and *Hands-on experience*).

Of special interest to us in this article, however, is a class of figurative idioms that are derived from associations in rather specific experiential domains, and that can be motivated by reference to their literal usage in those original contexts. For example, the idiomatic meaning *Be waiting in the wings* can be motivated with reference to its original, literal counterpart in the theatre (i.e. actors waiting in the wings of the theatre before making their appearance on the stage). Such idioms also instantiate more general conceptual metaphors or metonymies, but their specific source domains add richer imagery to them. For example, *A race against time* reflects the TIME IS A MOVING OBJECT metaphor, but adds the imagery of a racing contest. *A safe pair of hands* illustrates the hand-for-the-action metonymy, but adds sporting imagery (at least for those who are aware that this expression is derived from ball games, especially cricket).

It now turns out that only a very small minority of the entries in idiom dictionaries are both non-compositional and non-figurative and thus especially hard for learners to process in any insightful way (Grant, 2004). It follows that, contrary to traditional beliefs in second and foreign language learning, the majority of idiomatic expressions could possibly be presented to learners in ways that go beyond 'blind' rote-learning after all.

The beneficial mnemonic effect of presenting idioms to students as semantically motivated has already been revealed by the results of a series of controlled experiments. For example, retention has been shown to be facilitated by raising learners' awareness of the conceptual metaphors or conceptual metonymies behind clusters of figurative expressions (e.g. Boers, 2000a; Kövecses and Szabó, 1996). Students have also been shown to be more likely to remember figurative idioms derived from specific source domains when they are associated with the original, literal usage (e.g. Boers, 2001). We have started calling this mnemonic technique *etymological elaboration* (Boers *et al.*,

2004a), as a subtype of *semantic elaboration*, i.e. the learner's active and rich processing of an item with regard to its meaning (Cohen *et al.*, 1986).

We cannot be sure about what exactly might be going on in the learner's brain for etymological elaboration to have this attested mnemonic effect. One plausible explanation lies in Dual Coding theory (Clark and Paivio, 1991; Paivio, 1986), as the etymological information is likely to call up a mental image of a concrete scene which can then be stored in memory alongside the verbal form, and which can subsequently provide an extra pathway for recall. The general research question of the present study, however, is whether the strategy can be taken beyond 'mere' mnemonics. More specifically, we will explore whether knowledge of the origin of unfamiliar idioms could offer learners (i) cues for comprehension and (ii) cues for usage restrictions with regard to register.

II Research question 1: etymology as a guide for comprehension?

There is ground for scepticism over the possibility of using etymological information as a guide for comprehension of idiomatic meaning. After all, although figurative meaning extensions are now believed to be motivated rather than arbitrary, this does not at all mean that they are fully predictable either. The scene described by the original, literal usage of an expression typically carries many potential associations, and the fact that a particular association rather than others has given rise to the conventionalized idiomatic meaning is the outcome of a fair degree of chance. For example, the scene of a boat whose keel is level may call up various associations, including that of a boat making steady progress but also that of a boat lying motionless. Awareness of the source domain of boats and sailing behind the expression *The economy is on an even keel* alone does not guarantee the (correct) interpretation along the former association (i.e. that of making steady progress). Likewise, correct interpretation of the expression *The economy needs a shot in the arm* depends on the type of injection (i.e. medicine rather than a tranquillizer) the shot is taken to refer to in the source domain. Despite being given information about the original, literal usage, a learner may therefore still find such idioms multi-interpretable. At first sight, it thus seems rather unrealistic to expect students to be able to independently infer the meaning of an unfamiliar idiom from knowledge of its origin. Sceptics may thus argue that the use of the technique of etymological elaboration that we have advocated must be confined to helping students remember the idioms after their meaning has been clarified to them.

We agree that a strategy of inferring the idiomatic meaning of an expression solely from knowledge of its original usage cannot fully guarantee a correct interpretation. Nonetheless, we feel it is worth estimating the chances of success of such a strategy, as it could provide an additional pathway for insightful learning, for example if it were used in combination with contextual cues (see below). Our optimism is fuelled by studies which have yielded encouraging results with regard to learners' ability to interpret figurative

senses of polysemous words on the basis of knowledge of the literal senses of these words (e.g. Boers, 2000b; Csábi, 2004; Verspoor and Lowie, 2003). In the experiments described below we shall try to measure whether similar encouraging results could also be obtained for idioms, i.e. for multiword expressions rather than single words. If the probability of correctly figuring out idiomatic meaning on the basis of the original, literal usage were high enough, then it would make sense in classroom contexts (and in materials design) to challenge students with this task prior to explaining (or confirming) the idiomatic meaning to them. This challenge would engage students in problem-solving and would thus require cognitive effort at a 'deeper' cognitive level, which is recommended by Levels-of-processing theory (Cermak and Craik, 1979; Craik and Lockhart, 1972) to enhance retention.

III Research question 2: etymology as a guide for usage restrictions?

Mastery of idioms goes beyond (receptive) comprehension. For example, in order for learners to successfully use (or avoid the use of) given idioms, they need to appreciate usage restrictions, such as appropriateness in certain registers. Such usage restrictions seem quite obvious with regard to expressions that explicitly refer to body parts or bodily functions that happen to belong to taboo zones in the target culture. For instance, we suspect that few learners will find it hard to appreciate that *A pain in the arse* tends to be considered rude in formal settings. In such cases, in fact, the clues to usage restrictions are clearly provided by the choice of lexis that happens to be considered as vulgar in the target culture. However, many figurative idioms do not contain such explicit lexical clues. Our second research question then is whether knowledge of the origin of idioms may help learners make an informed guess as to their level of (in)formality.

Again, sceptics may argue that awareness of the original, literal usage of an idiom is unlikely to offer the learner any guidance in that respect. After all, few native speakers are usually aware of the origin of the idioms they use (which is also why idioms are often referred to as 'dead' or 'frozen' metaphors), even though these native speakers tend to 'intuitively' know about usage restrictions.

The possibility that etymological elaboration might nevertheless help learners estimate the likelihood of certain idioms being typical of informal discourse came to us as a result of a separate study the aim of which was to compare the relative salience of certain source domains of figurative idioms across languages (reported in Boers and Stengers, forthcoming). In that study, we screened comparable idiom dictionaries for figurative expressions that were derived from the following source domains: agriculture & gardening (e.g. *Nip something in the bud*); buildings & construction (e.g. *Get in on the ground floor*); clothes & adornment (e.g. *Try something on for size*);

commerce & accounting (e.g. *Wipe the slate clean*); entertainment & public performance (e.g. *Play to the gallery*); fauna & flora (e.g. *Put out feelers*); food & cooking (e.g. *Know which side your bread is buttered*); games & sports (e.g. *Come up trumps*; *Keep your eye on the ball*); handicraft & manufacturing (e.g. *Break the mould*); health & medicine (e.g. *Keep one's finger on the pulse*); jurisdiction & punishment (e.g. *Read the riot act*); mechanisms & machinery (e.g. *Fire on all cylinders*); religion & superstition (e.g. *Fall from grace*); science & research (e.g. *The acid test*); vehicles & transport (e.g. *Miss the boat*); war & aggression (e.g. *Break ranks*; *Be up in arms*); and weather & natural phenomena (e.g. *Be under a cloud*). As a source of information for English we used the *Oxford Dictionary of Idioms* (Speake, 1999), which actually gives explanations as to the origins of the expressions. Flavell and Flavell (2000) served as an additional source of etymological information. The exercise generated a bank of 1286 English expressions derived from the above-mentioned set of source domains.

The contrastive results are outside the scope of the present article, but of interest to us here is the proportion of English idioms per source domain that were characterized in the *Oxford Dictionary* as 'informal'. (As a word of caution, it must be mentioned that it is not clear what evidence was used by the dictionary makers in support of such characterization.) Figure 1 gives an overview of the relative contribution of informal expressions per source domain for which our collection contained at least 50 idioms. It appears that informal idioms in English are not evenly distributed over the different source

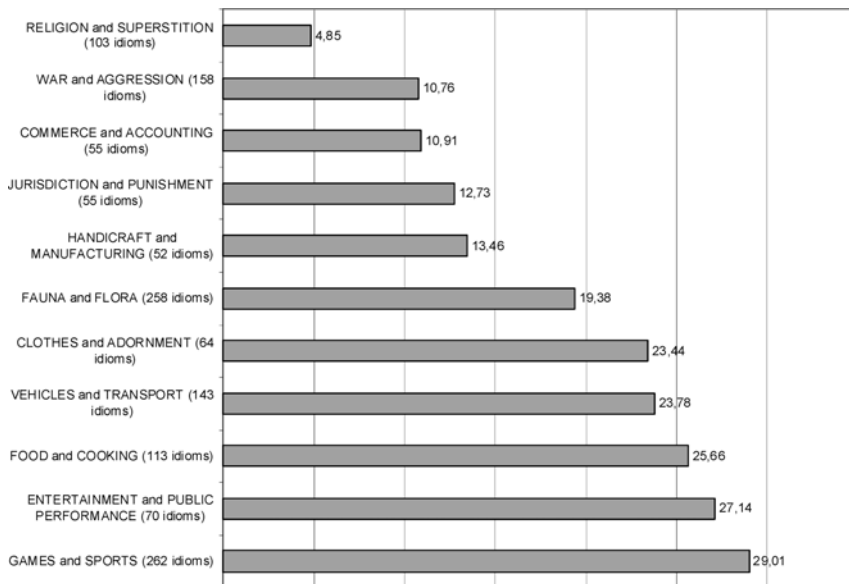


Figure 1 Proportion of 'informal' idioms per source domain (in percentages)

domains. Our data suggest, for example, that the source domains of games and entertainment have generated a significantly higher proportion of informal figurative idioms than some other source domains, such as war and religion (chi square yields $p < .001$). These findings lead us to speculate that experiential domains with predominantly 'serious' connotations (such as war and religion) may have been less likely to generate idioms that are commonly associated with 'light-hearted' conversation. Instead, idioms derived from less 'anxiety-provoking' experiential domains (such as games) may generally have been felt more appropriate in informal contexts. To a degree, such usage restrictions may have been passed down from one generation to the next. If there is any truth to this speculation, then re-establishing the link between idioms and their origins might occasionally contain a cue for register awareness, after all. For example, associating *Sticking one's nose into something* with the scene of a dog curiously poking its nose into things may hint at the informal nature of this expression. Likewise, associating *Hook, line and sinker* with the scene of a greedy fish gulping down much more than just the bait on the hook may be a cue to the informal nature of this idiom. One of the experiments described below was set up to explore this possibility.

IV The pedagogical context: a computer-aided tool for learning idioms

The experimental data we shall be discussing result from the implementation of an online tool that was developed by the authors for their students of modern languages in a college for higher education. The aim of the tool is for students to acquire knowledge of English figurative idioms (all derived from the experiential domains listed in section III above) over a four-year curriculum. The experiments reported below were carried out with the participation of second-year and third-year students. The idioms are presented to the students in series of 20 to 30 expressions at a time, but the same series of idioms are targeted in different types of exercises. Examples of the types of exercises are given in Appendix A.

One exercise (called 'identify the meaning') is a multiple-choice task where the learner is asked to identify the correct definition of the figurative meaning of the expression. If the response is wrong, the meaning is explained on the screen as feedback.

A second exercise (called 'identify the source') is a multiple-choice task where the learner is asked to identify the most likely source domain (e.g. 'war') of the idiom. As feedback, a brief explanation of the origin of the expression appears on the screen. The identify-the-source exercise is meant to establish dual coding, as the 'etymological' feedback is likely to call up a mental image of a concrete scene which could possibly be stored in memory alongside the verbal form. Crucially, the etymological explanation does NOT explicitly connect the described origin of the expression with its present

idiomatic meaning. It is hoped this connection will be made by the learners themselves, who will thus engage in ‘deep’-level processing.

A third exercise is a gap-fill task where the learner is presented with a meaningful context from which the keyword of the idiom is missing. This is when the learner’s recollection of the expression is tested. If the learner fails to fill in the right word, the solution appears on the screen as feedback.

When the exercises were first implemented in the above order, they yielded an average recall rate of 68.5% for idioms that were previously unknown to our students. The initial aim of one of the experiments below was to find out if the mnemonic effect of etymological elaboration could be pushed by reversing the order of the two multiple-choice tasks (i.e. the identify-the-meaning exercise and the identify-the-source exercise). We hypothesized that presenting the identify-the-source exercise and its subsequent etymological explanation first would be an incentive for students to use this knowledge as a basis for deciding on the most likely figurative meaning of the idioms in the subsequent task. This was believed to stimulate ‘deep’ processing (as compared to blind guessing) and hence retention (see below).

In order to raise our students’ awareness of some usage restrictions, we added a fourth type of exercise (called ‘identify the informal idiom’). The learner is shown a list of four idioms and is told that one of them is most typically used in informal contexts (at least according to the *Oxford Dictionary of Idioms*). The learner’s task then is to ‘guess’ which one it is. We shall return to this fourth type of exercise further below, in section VI, where we report the final part of our experimental data.

V Experimental data, part 1: etymology as a guide for comprehension

Participants in the online experiment were Dutch-speaking students (aged 19 to 21) of modern languages (majoring in English) at a college for higher education. The experiment was carried out twice, first with the participation of second-year students and secondly with the participation of third-year students (as the experiment consisted of different trials on different days, student numbers varied, see below). In both grades, the experiment consisted of three trials, each time targeting a different series of idioms which was tackled along the different types of exercises in one teaching period (under supervision). Different idioms were targeted by second-year students and third-year students. Because of extraneous circumstances (to do with students’ overall workload), second-year students were presented with three series of 25 idioms while third-year students were presented with three series of 30 idioms. A list of the 165 idioms is added in Appendix B.

In both grades, all the English courses were taught to two parallel groups, one of which would serve as experimental group and the other as control group in the online experiment. Although we had no reason to suspect any

major differences in prior vocabulary knowledge between the experimental group and the control group in either grade (considering their shared history of English tuition at the college), we administered the Nation and Laufer 3000–5000 word-level test, adapted by Tom Cobb for his online *Lexical Tutor* (<http://www.lextutor.ca>), as a pre-test. This confirmed that the experimental group and the control group had similar prior knowledge of general vocabulary both times the experiment was run (i.e. in both the second and the third grade). Mean scores on the vocabulary levels test for second-year students in the experimental group and those in the control group were 39.06% (SD 16.95) and 39.25% (SD 15.23), respectively. For the two groups of third-year students the respective mean scores were 59.56% (SD 14.24) and 56.78% (SD 15).

As mentioned, the experimental and control students tackled the different types of exercises for three series of idioms. The variable we introduced was the order in which the types of exercises were presented: in all trials the control students did the identify-the-meaning exercise before they tackled the identify-the-source exercise, while this order was reversed for the experimental students. In addition, a couple of ‘identify-the-informal-idiom’ exercises were inserted, but these have no bearing on the present research question and they will become relevant only in section VI below. Of main interest to us here is the question whether knowledge of the origins of the expressions gave the experimental students an advantage over the control students when it came to identifying the idiomatic, figurative meaning. If the figurative meaning of idioms were completely arbitrary, then knowledge of the literal, original usage of the expressions would be of no assistance to learners to figure it out. In that case, etymological elaboration could at best serve as a mnemonic technique, but not as a channel for comprehension.

Schematically, the sequence of tasks under both conditions looked as follows:

- Control condition: (1) identify the informal idiom; (2) *identify the meaning*; (3) identify the informal idiom; (4) *identify the source*; (5) gap fill.
- Experimental condition: (1) identify the informal idiom; (2) *identify the source*; (3) identify the informal idiom; (4) *identify the meaning*; (5) gap fill.

The results of both experiments reveal that students’ performance on the identify-the-meaning task was likely to be better after etymological elaboration, i.e. after having tackled the identify-the-source task. Application of a Mann-Whitney *U*-test to the participants’ performance per trial (i.e. per series of 25–30 idioms) shows that the experimental groups’ superior scores on the identify-the-meaning task were significant at $p < .001$ for four of the series of idioms. Table 1 compares the scores under both conditions in both experiments (i.e. both conditions in the second and the third grade). We acknowledge that the experiment in the third grade involved too few participants to allow us to draw any conclusions from its results alone. Nevertheless, we do

Table 1 Scores on the identify-the-meaning task (i.e. idiom comprehension)

	Experimental (= after etymology)			Control (= before etymology)			P-value
	N	Score (%)	SD	N	Score (%)	SD	
2nd year, set A (25 idioms)	20	82.80	10.55	7	65.14	8.86	<.001
2nd year, set B (25 idioms)	20	80.80	10.51	16	64.75	13.32	<.001
2nd year, set C (25 idioms)	19	78.95	9.69	14	72.29	8.66	>.100
3rd year, set A (30 idioms)	10	85.70	9.07	8	63.38	13.92	<.001
3rd year, set B (30 idioms)	6	86.17	8.23	8	75.00	9.07	<.001
3rd year, set C (30 idioms)	8	82.50	13.23	5	71.40	3.78	<.030

feel that the repetitive nature of the findings over the six separate trials (i.e. third-year data in combination with the second-year data) lends extra support to our hypothesis that awareness of the origin of idioms facilitates comprehension.

Sceptics may argue, of course, that a conclusion in favour of etymologically inspired idiom comprehension would be premature for at least three reasons. First, our task design may have facilitated the comprehension process in non-authentic ways. After all, discriminating between a correct definition and a couple of distracters in our identify-the-meaning exercise is a different task altogether from interpreting an unfamiliar idiom independently during authentic exposure. Second, in our identify-the-meaning exercise, the idioms are presented in isolation, whereas during authentic exposure to English a learner will meet idioms in context and may thus be guided first and foremost by contextual clues. If such contextual clues were sufficient to help learners infer the meaning of an idiom, then giving them information about the etymology of the expression would be a redundant activity. Finally, it may be speculated that etymological elaboration can be a guide to comprehension only if the idiomatic meaning of an expression is derived from its original usage in a fairly straightforward way. Perhaps the encouraging results of the experiment were beefed up by the presence of a large number of rather ‘etymologically transparent’ idioms in the online exercises. Etymological transparency is inevitably a subjective experience and should be conceived as a gradable concept with idioms occupying a position on a continuum between extremely transparent (e.g. *Rock the boat*) and extremely opaque (e.g. *Give someone the cold shoulder*). Learners may fail to identify the source domain of an idiom due to several factors, including the presence of unknown or ambiguous keywords, L1 interference, etc. In a previous study, however, the mnemonic effect of adding a touch of etymology to explanations of idiomatic meaning was shown to be equally profound for opaque idioms as for transparent ones (Boers *et al.*, 2004a), with the exception, of idioms that are

derived from 'culture-specific' source domains, which learners may not be familiar with (e.g. cricket) (Boers *et al.*, 2004b).

With a view to evaluating the above points of scepticism about idiom comprehension, we set up another, supplementary experiment with the participation of 22 third-year students. This was a pen-and-paper experiment meant to assess the potential contribution of etymological explanations to learners' interpreting idioms when these are encountered in verbal contexts. We selected 16 English idioms that could have been part of the online exercises, but that had not been included simply because we were ignorant of their etymology at the time we developed the pedagogical tool (and thus we felt the expressions to be etymologically opaque).

The idioms were presented on paper to the students three times, and each time the students were asked to explain their figurative meaning if they could. The first handout presented the idioms in isolation. The second handout presented the idioms in verbal contexts that were borrowed from the *Collins Cobuild Dictionary of Idioms* (Sinclair and Moon, 1995), under the assumption that the dictionary makers had chosen those contexts from the *Bank of English* with the intention of providing the dictionary user with a 'good' illustration of the use and meaning of the expressions. The third handout reiterated the same contexts, but added the etymological information mentioned in the *Oxford Dictionary of Idioms* (Speake, 1999). As in the online exercises, the connection between the original usage of the expressions and their present idiomatic meaning was *not* made explicit in the explanations, since we wanted to measure our participants' ability to make that connection themselves. The 16 idioms in their verbal contexts and accompanied by their etymological explanations are listed in Appendix C.

The students' responses at each stage were rated as 'correct' or 'wrong' by a blind judge. This was an experienced EFL teacher who was unaware of the purpose of the experiment. While the rich context obviously facilitated comprehension, it appears that adding information about the origins of the idioms can also make a pronounced contribution. In 29.5% of the cases where a student failed to understand an idiom despite the contextual clues, the etymological information provided the key to solve the comprehension problem. At the same time, we need to acknowledge the fact that the *average* size of the contribution made by the etymological explanation varies considerably across the set of idioms (from 72% in the case of *Hand over fist* to 9% in the case of *Touch base*), as shown by Figure 2. Altogether, though, the results of our supplementary pen-and-paper experiment do suggest that etymological elaboration can effectively be used as additional input for the problem-solving task of figuring out the meaning of idioms encountered in context.

We mentioned in the introduction that retention would not be the main concern of the present study. However, it would perhaps be a pity if we did not briefly return to the online experiment to compare the gap-fill scores obtained under both conditions. These gap-fill exercises were meant to measure students' recollection of (the keywords of) the idioms that they had been

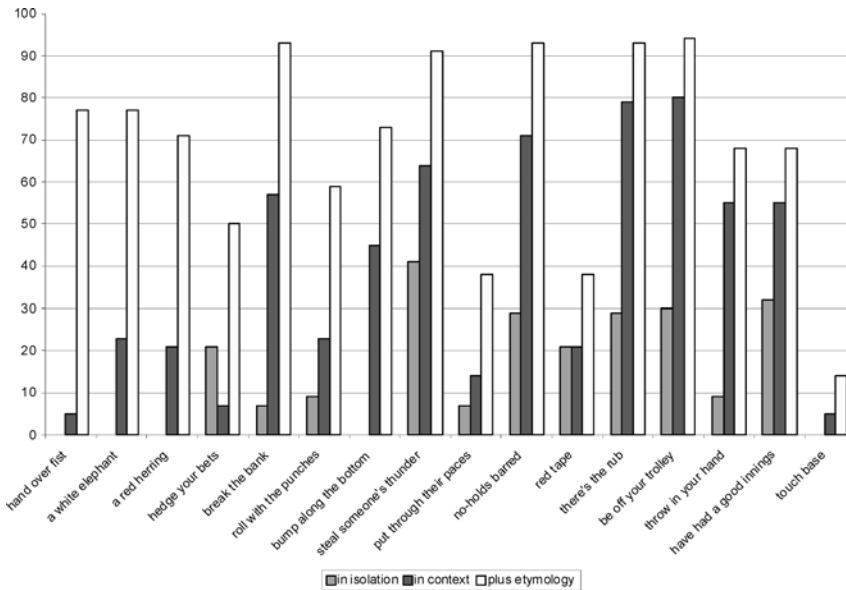


Figure 2 Average % scores on idiom comprehension (from strongest to weakest contribution by etymological explanations)

confronted with in both multiple-choice exercises. Table 2 suggests that tackling the identify-the-source task prior to the identify-the-meanings task generally leads to better recall (although statistical significance – using a Mann-Whitney *U*-test again – was obtained for only two series of idioms). With the exception of one trial (2nd year, series B), students who had been given the opportunity to use etymological information to try and figure out the idiomatic meaning of the expressions seemed more likely to remember the expressions than students who had perhaps resorted to blind guessing when doing the identify-the-meanings exercises. In the latter case, etymological elaboration may have been used ‘merely’ as a mnemonic technique encouraging dual coding after the idiomatic meaning had been explained, while in the former case it was also used as a problem-solving technique encouraging ‘deep’ processing. The data therefore lend support to the Levels-of-processing theory in general as well as the Dual Coding theory, and show how combining both can enhance learning effects.

VI Experimental data, part 2: etymology as a guide for usage restrictions

The second research question is whether awareness of the original, literal usage (or source domain) of idioms can occasionally help learners estimate

Table 2 Scores on gap-fill test (i.e. idiom recollection)

	Experimental			Control			P-value
	N	Score (%)	SD	N	Score (%)	SD	
2nd year, set A (25 idioms)	20	83.00	11.74	7	78.26	14.21	>.100
2nd year, set B (25 idioms)	20	77.60	15.43	16	81.75	10.73	>.100
2nd year, set C (25 idioms)	19	78.11	12.88	14	68.29	14.84	<.050
3rd year, set A (30 idioms)	10	81.90	9.92	8	71.63	11.98	<.050
3rd year, set B (30 idioms)	6	82.17	15.34	8	73.00	15.59	>.100
3rd year, set C (30 idioms)	8	81.63	16.05	5	65.20	12.66	>.100

whether a given figurative expression is likely to be typical of informal contexts. In order to assess this speculative possibility, we incorporated the ‘identify-the-informal-idiom’ exercise in the online experiment (see paragraph four of section V). As this part of the experiment was carried out at the same time, the same students participated as either experimental or control groups.

As a first step in each sequence of exercises (per series of 25 or 30 idioms), participants under both conditions were presented with two lists of four idioms and were told that one expression in each list was most typically used in informal contexts. Their task then was to tick the informal idiom. Feedback was confined to telling students whether or not their choice was correct. Exactly the same exercise (with the same idioms) was presented again as a third step, i.e. it was presented to the experimental groups after they had encountered the expressions in the identify-the-source exercise, and to the control groups after they had met them in the identify-the-meaning exercise. In other words, experimental students were invited to confirm or reconsider their decision about ‘register’ after etymological elaboration, while control students had not yet had access to etymological information when they were invited to do so. The data-analysis then involved measuring whether both groups were equally capable of rectifying their initial choices.

Average scores by the experimental and the control groups on their first attempts at identifying the informal idioms show comparable baseline abilities to recognize the informal idioms: 39.52% and 42.52%, respectively. In the second trial, however, the mean score by the experimental groups displays a greater improvement than that by the control groups: average scores were 60.20% and 54.29%, respectively. Overall, 83 identify-the-informal-idiom items had been tackled twice by an experimental student. The second score was better in 38.56% of these cases. By contrast, only 27.59% of the 58 identify-the-informal-idiom items that had been tackled twice by a control student showed an improved score. The *overall* scores by students over their three series of idioms (i.e. six identify-the-informal-idiom items in either grade) also hint at an effect of etymological elaboration. Chi-square reveals

the greater likelihood of experimental students improving their overall scores to be significant at $p < .01$ ($\chi^2 = 6.84$).

We need to acknowledge, though, that the average participant's ability to rectify their initial choices was in fact rather poor, even after etymological elaboration. After all, only four idioms were given as options per multiple-choice item, and the participants were told after their first attempt whether or not their choice was correct. Consequently, a blind guess among the three remaining options would already hold a 33.33% chance of success in the second attempt, and so the average 38.56% gain by the experimental groups can hardly be called impressive. In reality, however, it turned out that our students did not always remember their initial choice and/or whether it was correct. This explains the rather surprising finding that they occasionally scored worse in the second attempt. In that light, it seems that etymological elaboration does have an effect on learners' ability to appreciate the probability of certain idioms being typical of informal contexts. The observation that worse scores in the second trial were more often recorded under the control condition (8.62%) than under the experimental condition (2.41%) lends further support to the general trend. In fact, application of the McNemar Test for the significance of changes reveals that, despite the mathematical probability of lucky guesses, the likelihood of control students improving their *overall* scores on identify-the-informal-idiom exercises was significant only at $p < .01$ ($\chi^2 = 7.69$), as compared to a 'comfortable' significance level of $p < .001$ ($\chi^2 = 25.04$) for their experimental peers.

It is also worth mentioning that the reported results were obtained from students who had *not* been informed about our finding (see section III above) that idioms derived from certain source domains, such as games and entertainment, are more likely to be used in informal contexts than idioms from some other source domains, such as war and religion.

VII Conclusion, implications and perspectives

In this article, we have looked at some of the possibilities provided by a pedagogical technique we have called 'etymological elaboration', i.e. making students aware of the origin or literal usage of the figurative idioms they are learning. While previous studies had already provided ample evidence of the mnemonic benefits of this technique (explainable by Dual Coding theory), the present study was intended to explore potential benefits beyond vocabulary retention. We have investigated two such possibilities: (i) using etymology as a channel for learners' comprehension of idioms; and (ii) using etymology as a channel for learners' appreciation of the informal nature of certain idioms.

The experimental data reported in the study are quite encouraging with regard to the first possibility. Despite the not altogether predictable nature of idiomatic meaning, the participants in our experiments appeared able to make

good use of etymological information in their attempts to interpret unfamiliar idioms. It therefore seems feasible in classroom contexts (and in materials design) to stimulate learners to 'figure out' the meaning of newly encountered idioms by drawing from such etymological information. Our data suggest that this problem-solving activity also enhances the mnemonic effect (which is in accordance with Levels-of-processing theory, in general). We therefore recommend the following sequence of steps on the part of the teacher when a figurative idiom is encountered in class: (i) ask the students to hypothesize about the origin of the expression; (ii) refine or rectify their hypothesis; (iii) ask the students to interpret the figurative meaning of the idiom by combining etymology and context; and (iv) refine or rectify their interpretation.

With regard to the second possibility (i.e. 'register awareness'), the experimental data are somewhat less convincing, but they nevertheless suggest that etymological explanations can occasionally contain indications for learners to estimate the likelihood of a given idiom being typically used in informal discourse. In classroom contexts (and in materials design) students could be advised, for example, to check their use of 'games' and 'entertainment' idioms in formal registers, but this type of advice would obviously need to be presented to them only as a very rough guide to usage restrictions.

This study was confined to only two additional possibilities of presenting figurative expressions with a touch of etymology. Various other exploitations may merit investigation in future, including learners' appreciation of connotations and value-judgements conveyed by the choice of metaphor in rhetoric, the use of strings of figurative expressions derived from the same source domain for the purpose of text cohesion, and even puns that resuscitate the literal meaning of so-called 'dead' metaphors.

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VIII References

- Boers, F.** 2000a: Metaphor awareness and vocabulary retention. *Applied Linguistics* 21: 553–71.
 — 2000b: Enhancing metaphoric awareness in specialised reading. *English for Specific Purposes* 19: 137–47.
 — 2001: Remembering figurative idioms by hypothesising about their origins. *Prospect* 16: 35–43.

- Boers, F., Demecheleer, M. and Eyckmans, J.** 2004a: Etymological elaboration as a strategy for learning idioms. In Bogaards, P. and Laufer, B., editors, *Vocabulary in a second language: selection, acquisition and testing*, Amsterdam and Philadelphia: John Benjamins, 53–78.
- 2004b: Cross-cultural variation as a variable in comprehending and remembering figurative idioms. *European Journal of English Studies* 8(3): 375–88.
- Boers, F. and Stengers, H.** forthcoming: Adding sound to the picture: an exercise in motivating the lexical composition of figurative idioms. In Cameron, L., Zanotto, M. and Cavalcanti, M., editors, *Confronting metaphor in use: an applied linguistic approach*, Amsterdam and Philadelphia: John Benjamins.
- Cermak, L. and Craik, F.** 1979: *Levels of processing in human memory*. Hillsdale, NJ: Lawrence Erlbaum.
- Clark, J.M. and Paivio, A.** 1991: Dual coding theory and education. *Educational Psychology Review* 3: 233–62.
- Cooper, T.** 1999: Processing of idioms by L2 learners of English. *TESOL Quarterly* 33: 233–62.
- Cohen, G., Eysenck, M.W. and LeVoi, M.E.** 1986: *Memory: a cognitive approach*. Milton Keynes: Open University Press.
- Craik, F.I.M. and Lockhart, R.S.** 1972: Levels of processing: a framework for memory research. *Journal of Verbal Learning and Verbal Behavior* 11: 671–84.
- Csábi, S.** 2004: A cognitive linguistic view of polysemy in English and its implications for teaching. In Achard, M. and Niemeier, S., editors, *Cognitive linguistics, second language acquisition, and foreign language teaching*, Berlin and New York: Mouton de Gruyter, 233–56.
- Fernando, C. and Flavell, R.** 1981: *On idiom: critical views and perspectives*. Exeter Linguistic Studies, Volume 5. Exeter: University of Exeter.
- Flavell, L. and Flavell, R.** 2000: *Dictionary of idioms and their origins*. London: Kyle Cathie.
- Gibbs, R.W.** 1994: *The poetics of mind: figurative thought, language, and understanding*. Cambridge: Cambridge University Press.
- Grant, L.** 2004: A corpus-based investigation of idiomatic multiword units. PhD dissertation, Victoria University of Wellington.
- Grant, L. and Bauer, L.** 2004: Criteria for re-defining idioms: are we barking up the wrong tree? *Applied Linguistics* 25: 38–61.
- Kövecses, Z.** 1990: *Emotion concepts*. New York: Springer.
- Kövecses, Z. and Szabó, P.** 1996: Idioms: a view from Cognitive Semantics. *Applied Linguistics* 17: 326–55.
- Lakoff, G.** 1987: *Women, fire and dangerous things: what categories reveal about the mind*. Chicago and London: University of Chicago Press.
- Makkai, A.** 1972: *Idiom structure in English*. The Hague: Mouton.
- Paivio, A.** 1986: *Mental representations*. Oxford and New York: Oxford University Press.
- Sinclair, J. and Moon, R., editors,** 1995: *Collins cobuild dictionary of idioms*. London: Collins.

Speake, J., editor, 1999: *Oxford dictionary of idioms*. Oxford: Oxford University Press.

Verspoor, M. and **Lowie, W.** 2003: Making sense of polysemous words. *Language Learning* 53: 547–86.

Appendix A: examples of the four types of online exercises used in the experiment

Identify the meaning

- 1) What is the figurative meaning of ‘jump the gun’?
 - a) Defend someone at your own peril
 - b) Do something before the appropriate time
 - c) Be startled by an unexpected event
- 2) What is the figurative meaning of ‘run the gauntlet’?
 - a) Run away from your hometown
 - b) Be in a position of power
 - c) Go through an unpleasant treatment

Identify the source

- 1) What domain of experience do you think the following idiom comes from? ‘jump the gun’
 - a) Jurisdiction/punishment
 - b) Games/sports
 - c) War/aggression

Feedback: In athletics a contender who *jumps the gun* sets off before the starting pistol has been fired.

- 2) What domain of experience do you think the following idiom comes from? ‘to run the gauntlet’
 - a) food/cooking
 - b) games/sports
 - c) jurisdiction/punishment

Feedback: *running the gauntlet* used to be a form of punishment in the military in which the wrongdoer was forced to run between two lines of men armed with sticks, who beat him as he passed.

Gap fill

- 1) Although we had agreed not to tell anyone about my pregnancy until we were absolutely certain about it, my husband jumped the _____ and told his parents straightaway.

- 2) When her fellow-students found out she has started a relationship with one of their lecturers, she had to put up with a lot of verbal abuse. Her fellow-students really made her run the _____.

Identify the informal idiom

In the following list of expressions, one is most typically used in informal contexts. Which one do you think it is?

- a) Keep a finger on the pulse
- b) Run the gauntlet
- c) Jump the gun
- d) Mend fences

Appendix B: idioms used in the on-line experiment

2nd year, set A: Show your true colours; Clear the decks; Be past your sell-by date; A carrot-and-stick method; Be off base; Sign someone's death warrant; Take it on the chin; Burn your bridges; Not my cup of tea; The buck stops here; A one-man band; The chips are down; Be on cloud nine; Ring the changes; Go belly-up; Chop and change; The ball is in your court; Bring someone to book; A loose cannon; Put a damper on something; Above board; Carry the can; Draw a blank; A false dawn; A baptism of fire.

2nd year, set B: Be left high and dry; Pull something out of the hat; Have your finger on the pulse; Go with the flow; Bite the hand that feeds you; Have had your fill of something; Jump in at the deep end; Bite the dust; Play second fiddle to someone; Go for the jugular; Mend fences with someone; Lose your edge; Ruffle someone's feathers; At the drop of a hat; Meet someone halfway; Live from hand to mouth; Turn up the heat on someone; In fits and starts; A flash in the pan; Jump the gun; Get egg on your face; Lower your guard; Go the distance; A feeding frenzy; Run the gauntlet.

2nd year, set C: Rest on your laurels; Take pot luck; Be worth your salt; Show someone the ropes; Be in the front line; Be on an even keel; Be quick off the mark; Keep a tight rein on someone; It's open season on someone; Rub salt into the wound; In the nick of time; Pass muster; Take something with a pinch of salt; Rule the roost; Come on line; Swallow a bitter pill; Be on the ropes; Ride roughshod over someone; Hand something on a plate; The penny has dropped; Grasp the nettle; Rattle your sabre; The knives are out for you; Come home to roost; Rap someone on the knuckles.

3rd year, set A: A chip off the old block; Be way off beam; Haul someone over the coals; Someone's bag of tricks; Below the belt; Be in the clear; Right off the bat; Take the bait; Be in the saddle; Have someone over a barrel; A red letter day; Get an even break; Pass the baton; Off the blocks; Hit rock bottom; Put your neck on the block; Twist someone's arm; Don't rub it in; Get

someone's back up; Go in to bat for someone; Have a chink in one's armour; Keep your cards close to the chest; A ball and chain; Beat about the bush; Cut and run; Strike it rich; Let the cat out of the bag; Champ at the bit; Give someone both barrels; Make a beeline for something.

3rd year, set B: Sweep the board; Lose your shirt; Come out of the doldrums; Kill the goose that lays the golden egg; Move the goalposts; Plough a lonely furrow; Play to the gallery; A sitting duck; Set off on the wrong foot; When your ship comes in; Put someone out to grass; The gloves are off; Blow smoke; The dice are loaded against someone; Have a finger in the pie; The die is cast; Hit the spot; A shelf life; Under the counter; Take up the gauntlet; Separate the wheat from the chaff; A rough diamond; Get someone's goat; Without missing a beat; A feather in your cap; Put out feelers; Play it by ear; Cover all the bases; For donkey's years; The fly in the ointment.

3rd year, set C: Go off half-cocked; Be in the hole; From the horse's mouth; Fly off the handle; Swallow something hook, line and sinker; Make people jump through hoops; Off the mark; Bury the hatchet; Pass the hat around; Batten down the hatches; It's in the lap of the gods; Ride herd on someone; Ring true; Cry for the moon; Be in the home stretch; Have a lot of irons in the fire; Cut the Gordian knot; A steady hand on the tiller; In broad strokes; Gird your loins; Play your cards close to the vest; Work in harness; Be kept on a short leash; Overplay your hand; Down the line; Shoot from the hip; Draw the short straw; Do a hatchet job; Make tracks.

Appendix C: idioms used in the pen-and-paper experiment

- 1) 'All the fuss about high pay for former nationalized industry chairmen is a bit of a red herring. The really serious money is to be found in private companies, where huge salaries and dividends can be awarded without a murmur from the City and Westminster.'

Because of the strong smell of a smoked, and thus red, herring it was used to teach hounds to follow a certain trail despite the smelly red herring having been drawn across that trail.

- 2) 'We are in a state of war. It is a war with no holds barred and we must prepare to resist.'

Originally used in wrestling, when there are no restrictions on the kinds of holds that are allowed.

- 3) 'At St Barbara barracks dozens of tanks are being put through their paces to check that they're running correctly before they're subjected to the rigours of the Saudi Arabian desert.'

Originally the different paces a horse is trained to perform.

- 4) ‘Two lawyers have written a book in a bid to help people cut through the red tape when dealing with immigration and nationality laws.’

Official documents used to be sealed by means of a red stamp and red ribbons.

- 5) ‘Self-catering holidays are a good option because you can enjoy a refreshing change without breaking the bank.’

In gambling this means winning more money than is held by the gambling table’s ‘bank’.

- 6) ‘Political forecasters are hedging their bets about the likely outcome of this Saturday’s Louisiana governor’s race.’

In gambling this means putting money on more than one runner in a race.

- 7) ‘I don’t see any train line turning into a white elephant unless we made some stupid decision to build a train line in some remote rural location where it wasn’t needed in the first place.’

The rare albino elephant was much prized by the kings of Siam. Keeping it was very costly, and so it was likely to ruin any courtier to whom the king gave it as a gift.

- 8) ‘They want to know what the law says is or is not pornography, and there’s the rub. Porn, like beauty, is in the eye of the beholder.’

In the game of bowls, a ‘rub’ is an impediment that prevents the bowl from running smoothly.

- 9) ‘Forstmann touched base with his partners and found that they, too, harbored a vague distaste for the tobacco business.’

Literally, ‘base’ refers to each of the four points which a baseball player has to reach to score a run.

- 10) ‘New car sales are continuing to bump along the bottom of recession as the motor industry shows little sign that it is going to revive this year.’

When a boat is too low in shallow water, its keel may bump along the bottom of the river or sea bed.

- 11) ‘Almost all the oil companies were making money hand over fist.’

‘Hand over fist’ was originally used in nautical contexts with reference to the movement of a sailor’s hands when rapidly climbing a rope or hauling it in.

- 12) ‘He has begun to make a habit of stealing the thunder from some of his colleagues.’

The unsuccessful playwright Dennis invented a method of simulating the sound of thunder in the theatre; afterwards this method was used by more successful playwrights.

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- 13) 'Did you see the princess going on about how she likes fast food? Is she off her trolley or what?'

The 'trolley' is the pulley running on an overhead track or tramway that transmits power from the track to the vehicle or tram.

- 14) 'Defeat on this embarrassing issue might just tip the PM into throwing in his hand.'

'Hand' refers to the set of cards you are holding in a card game or poker game.

- 15) 'His mental attitude towards his Aids was stoical: he himself had had a good innings, he said.'

In cricket, an 'innings' is the period that a player spends batting, and a 'good innings' is one during which a lot of runs are scored.

- 16) 'As a diplomat he has impressed all sides by his ability to negotiate and his willingness to roll with the punches.'

In boxing, a boxer rolls with the punch by moving his body away from an opponent's blow so as to lessen the impact.

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