Cross-cultural Variation as a Variable in Comprehending and Remembering Figurative Idioms

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A modern approach to figurative idioms in EFL

Before the 1990s, very little attention was devoted to figurative idioms in EFL literature. Idioms were largely neglected because of three (meanwhile outdated) assumptions. Firstly, language was generally conceived as a dichotomy of grammar ‘rules’ on the one hand and ‘lists’ of individual words on the other, and multiword expressions such as idioms did not fit into this dichotomy. Secondly, figurative expressions were thought to be merely ornamental, a way of dressing up messages in a colourful way. Consequently, they were considered to be relevant only to very advanced students, who could use idioms as the icing on their linguistic cake. Thirdly, it was generally assumed that the meaning of idioms was absolutely unpredictable. Because of this alleged arbitrary nature of idioms, it was believed they could not be taught in any systematic or insightful way. The only available option for students to master idioms was to ‘blindly’ memorise them, and as a result idiomatic expressions had limited appeal in educational linguistics.

Meanwhile, insights from cognitive linguistics and corpus linguistics have fortunately trickled down to the field of applied linguistics, and these new insights have inspired more pedagogically sound approaches to L2 idioms. Firstly, the grammar-lexis dichotomy has been discarded...
and replaced with a more realistic conception of language as a continuum from simple units to more complex ones.¹ In this conception, it becomes easier to view multi-word expressions as occupying a central zone in the linguistic system. Educational linguists now acknowledge the importance of learners’ mastering multi-word lexical chunks, such as idioms.²

Secondly, studies of metaphor have revealed that—far from being an optional ornament—figurative expressions are omnipresent in everyday language.³ Whenever discourse revolves around non-concrete subjects, figurative expressions are bound to be used. Corpus data have shown that metaphorical expressions do indeed constitute a very rich lexical resource.⁴ If metaphor is so pervasive in everyday language, then language learners will inevitably be bombarded with figurative expressions throughout their learning process, and they will need to build a large repertoire of figurative expressions for active usage. Thirdly, the quest for a pedagogical method to tackle figurative idioms has become much more appealing with the recognition that a large proportion of figurative language is not arbitrary at all. Studies in cognitive semantics have revealed that many figurative expressions (including idioms) are in fact ‘motivated’ rather than arbitrary. While it is true that the figurative meaning of many idioms may not be fully predictable from their constituent parts, it is nonetheless often possible to explain how and why a given figurative meaning has arisen. This can be done by referring to the general conceptual metaphors behind them.⁵ For example, I was boiling with anger can be motivated by the metaphor ANGER IS HEAT. Idioms can also be motivated by referring to their origins, i.e. the ‘source domains’ in which they were originally used in a literal sense. For example, To come up trumps can easily be traced back to the source domain of card games. If the meaning of figurative idioms is ‘motivated’ by their origins, then it may be possible to teach and learn them in an insightful way after all.

Idioms and culture

Particular source domains of metaphorical expressions may not be equally salient across cultures. If a certain source domain has been especially salient in a given community, then it is likely to have generated a wide range of figurative idioms in that community’s language, and these expressions are likely to occur comparatively frequently in its discourse. Whether two linguistic communities differ with respect to the relative salience of a source domain can be estimated along two complementary methods.

One method is to screen comparable dictionaries to find out what percentage of the languages’ idiom repertoires can be retraced to the source domain under investigation. A comparison of English and Dutch idiom dictionaries reveals, for example, that English has a much wider variety of expressions derived from card games and gambling (To overplay one’s hand; To play with a stacked deck; The dice are loaded against someone; The chips are down, etc.). Another straightforward example is the source domain of sport, since the popularity of certain sports may differ widely across cultures. Baseball, for instance, is evidently more popular in the United States than in Europe, and consequently American English is likely to produce more baseball-based figurative expressions (e.g. I had a date with Alice last night, but I couldn’t even get to first base with her; Three strikes and you’re out). In British English, similar observations hold for the source domains of cricket (e.g. Bat on a sticky wicket; Hit someone for six) and horse racing (e.g. A dark horse; Hear it from the horse’s mouth).

The other method to detect cross-cultural variation with regard to the relative salience of source domains is to use language corpora to count the frequency of occurrence of metaphorical expressions that are derived from these particular source domains. This exercise shows, for example, that the source domain of sailing is reflected more often in English than in French discourse by idioms such as Being on an even keel; A steady hand on the tiller; Running a tight ship; Taking the wind out of someone’s sails; When your ship comes in; Clear the decks, etc. By contrast – and perhaps not surprisingly – French figurative discourse is more often flavoured by the source domain of food and cooking.

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We acknowledge that the link between figurative idioms and culture is but an indirect one in the sense that many idioms reflect the culture of the past rather than the present. After all, even native speakers are usually no longer aware of the origins of the idioms they use (although such awareness can easily be triggered, for example by ‘puns’ that resuscitate the literal meaning of so-called ‘dead’ idioms). Nevertheless, insight into a community’s repertoire of idioms may help learners recognise the experiential domains which have left their marks on the language, and which must therefore (at one time or another) have been salient parts of the community’s culture.

The pedagogical advantages of etymological elaboration

As mentioned above, one way of ‘motivating’ the figurative meaning of an idiom is to trace it back to its origin or source domain, i.e. the context in which it was originally used in a literal sense. We shall call this operation ‘etymological elaboration’ (as a particular instance of semantic elaboration, i.e. a learner’s active processing of an item with regard to its meaning).

Controlled experiments conducted by Kövecses & Szabo and by Boers have shown that etymological elaboration can be beneficial to learners aspiring to master L2 idioms in at least two respects: (i) it provides potential pathways for comprehension and (ii) it enhances the probability of retention.

(i) Because of the motivated nature of idioms, learners can be encouraged to use their knowledge of the source domains as a clue (among others) to try and figure out idiomatic meaning autonomously. This is a problem-solving task that requires ‘deep’ processing, which fosters learning. For example, knowledge of what happens at the end

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of a theatre performance may help learners correctly interpret the idiom *The curtain comes down on someone/something.* In addition, explanations about the origins of idioms can sometimes help learners appreciate the connotations and usage restrictions of idioms they already ‘know’. For example, knowledge of the etymological origin of *To kick the bucket* (the spasms of a slaughtered pig) may help learners realise that this expression may not always be appropriate.

(ii) By associating idioms with their source domains, learners are likely to encode the items in their memory in a dual fashion, both as a verbal form and as a mental image of a concrete scene. This enhances retention as it creates a dual pathway for recall.\(^\text{12}\)

**The limitations of etymological elaboration**

It may be worth emphasising here that ‘motivated’ is not synonymous with ‘fully predictable’, and consequently that recognition of the source domain of an idiom does not guarantee full comprehension of its figurative meaning. For example, a learner may be capable of retracing *The gloves are off* to the source domain of boxing, but taking off one’s boxing gloves could take on different meanings in the source domain. It could signify stopping the fight just as well as getting ready to inflict extra harm by using one’s bare knuckles. It is the latter possibility which happens to motivate the idiom’s figurative meaning. It follows that, when it is applied in a context of learner autonomy (where learners independently hypothesise about the origins of idioms with a view to inferring their figurative meaning), etymological elaboration may be effective only with regard to ‘transparent idioms’, i.e. idioms whose source domains are easy to identify and are sufficiently informative to figure out the metaphorical sense. With regard to more ‘opaque idioms’, by contrast, the strategy will require explicit instruction or guidance (e.g. by the teacher in the language classroom).\(^\text{13}\)

The chances of a learner being able to identify the source domain of a given idiom independently may be reduced by the interplay of several variables, related to gaps in the learner’s cultural knowledge as well as lexical knowledge. Roughly three categories of obstacles to identifying the source domain can be distinguished:


(i) The idiom may contain a keyword whose literal meaning is unknown to the learner. For example, the keyword may belong to a relatively low frequency band (e.g. ‘mould’, ‘loggerheads’ and ‘tether’ in *To break the mould, To be at loggerheads and To be at the end of one’s tether*). The idiom may also contain a keyword whose literal usage has become obsolete. For example, to our knowledge, the keywords ‘doldrums’ and ‘shrift’ in *To be in the doldrums and To get short shrift* are not commonly used outside these idioms anymore. Consequently, learners are not likely to know that ‘sailors used the word *doldrums* to refer to a region around the equator where there was often no wind to make any progress’, and ‘a *shrift* was a confession made to a priest after which absolution was given’.

(ii) The idiom may contain a keyword that looks familiar to the learner but is likely to be misinterpreted and consequently associated with the ‘wrong’ source domain. This may happen when the keyword of the idiom is mistaken for a homograph (e.g. ‘chips’ in *To have had one’s chips* may be mistaken for French fries while they refer to chips in gambling) or for a cognate (e.g. ‘content’ instead of ‘contend’ in *A bone of contention*). A given keyword may also be misinterpreted if it has found its way into the expression through peculiar metonymic associations that even native speakers find hard to relate to without ‘anecdotal’ historical knowledge. For example, *To be on the wagon* is believed to go back to the era when water was delivered to people’s homes by wagons. Someone who was trying to give up alcohol was jokingly referred to as being dependent on the water wagon.

(iii) The idiom may be derived from a source domain that is less salient in the learner’s own culture. For example, learners who know little about cricket will probably find the idiom *To hit someone for six* rather obscure. Similarly, learners whose culture is less marked by a history of sailing may not immediately recognise this source domain behind many English expressions (*To batten down the hatches; To be left high and dry; To give someone a wide berth*, etc.).

As the examples show, the variables of cultural and lexical knowledge overlap, as salient source domains invite the creation of a rich lexical field. In this article, we shall give special attention to the third variable.

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15 Ibid.
that can make source domains opaque to learners, i.e. cross-cultural differences. We hypothesise that idioms derived from less familiar source domains will tend not only to be comparatively opaque to learners, but also to be less susceptible to dual coding and thus less easily remembered. We shall examine the plausibility of this hypothesis by analysing experimental data generated by a battery of on-line exercises that we have called **Idiomteacher**.

**Idiomteacher**

*Idiomteacher*, which we developed along cognitive semantic principles to promote insightful learning of idioms, is a self-study battery consisting of 1200 on-line exercises on 400 idioms. These were selected from the *Collins Cobuild Dictionary of Idioms* along the following lines:

(i) With a view to accommodating learners of varying levels of proficiency, we included roughly equal numbers of expressions from the four frequency bands that are indicated in the dictionary (based on the frequency of occurrence in *The Bank of English*).

(ii) Idioms were chosen that could be traced back to source domains such as fighting/warfare, health/fitness, food/cooking, games/sports, agriculture/gardening, handicraft/manufacturing, boats/sailing, entertainment/public performance, religion/superstition, jurisdiction/prison, animals/wildlife and commerce/accounting. These source domains were felt to be sufficiently specific to call up rich images, susceptible to dual coding.

The programme consists of three types of exercises. One exercise is a multiple-choice task in which learners are invited to hypothesise about the idiom’s origin. For example:

What domain of experience do you think the following idiom comes from?
‘to show someone the ropes’
  a) Prison/torture  
  b) Boats/sailing  
  c) Games/sports

As feedback, a short explanation about the origin or literal use of the expression appears on the screen. In the case of *To show someone the ropes*, learners are told that experienced sailors need to teach novice sailors which ropes they should handle, etc. Tracing back the idiom to its original
source domain is a task that supposedly involves ‘deep’ processing. At the same time, the exercise stimulates mental visualisation, first via the identify-the-source task and subsequently via the etymological feedback. In our example, the learners are expected to associate the idiom *To show someone the ropes* with sailing imagery and thus to process the verbal information through a visual channel (dual coding). The feedback given in this exercise is confined to explanations about the origin of the idioms. No explicit information is given at this stage about the idiom’s present-day figurative meaning.

The second type of multiple-choice exercise consists of a ‘conventional’ comprehension task, where learners need to identify the correct figurative meaning of the idiom. For example:

What is the figurative meaning of the following idiom?
‘*to show someone the ropes*’
a) to disclose the truth to someone
b) to give someone a severe penalty
c) to teach someone how to do a task

Both multiple-choice tasks are meant to complement one another. By making a connection between the figurative sense of an idiom and its origin, the learner may realise that the idiom is ‘motivated’ (its present figurative meaning ‘makes sense’, given its etymological origin).

The identify-the-source task and the comprehension task clearly focus on receptive knowledge. More active knowledge is aimed at in the third type of exercise: a gap-fill task where the learners read a meaningful paragraph and need to recognise it as an appropriate context to (re)produce (the keyword of) the idiom. For example:

When I started working here as a novice, nobody bothered to teach me how things were done around here. I had to find out all by myself how to do my new work properly. You could say that nobody showed me the ____________.

When the response is wrong, the targeted word within its context appears on the screen as feedback.

*Idiomteacher* provided the material for two learning experiments, one in 2002 and the other in 2003. Both times, participants were students at a Flemish tertiary education college that offers four years of training in modern languages and translation. At the time of our study, about 200 students of English (between 19 and 22 years of age) were invited to do
the *Idiomteacher* exercises. On-line exercises were distributed over the student population by matching the idioms' frequency bands (as indicated in the *Collins Cobuild Dictionary of Idioms*) with the students’ proficiency levels: first-year students were given access to exercises on idioms drawn from the highest frequency band, second-year students were given access to exercises on idioms drawn from the second highest frequency band, and so on.

The 2002 experiment

In our first experiment, participants were randomly split up into experimental and control groups. Under the experimental condition, students did the identify-the-source task (i.e. ‘What domain of experience do you think this idiom may come from?’), followed one week later by the gap-fill task. Under the control condition, students did the comprehension task (i.e., ‘What is the figurative meaning of this idiom?’), followed one week later by the gap-fill task. In this first version of *Idiomteacher*, there were five options in the identify-the-source multiple-choice task, and learners clicked as many options as necessary for them to find the correct source domain. Only on (finally) clicking the right option did learners receive feedback about the origin of the expression. The comprehension task (matching the idiom with the correct definition) offered three options per idiom, and again learners clicked options until they found the correct one. The gap-fill task was meant to measure recall of the idioms in a meaningful figurative context.

Per grade, the idioms were divided over four series (each containing between 20 and 30 idioms). At this time, *Idiomteacher* was introduced to students as an optional self-study package. As a result, many exercises generated insufficient data for analysis. Of the 400 idioms that were included in the package, only 175 were retained for the study. These were idioms for which at least seven students in the experimental condition and at least seven students in the control condition had covered both the input stage and the gap-fill test.

For 70% of the idioms, identifying the source domain required on average between one and two clicks (among the five multiple-choice options). This is a measure of the ease with which students carried out this task, and thus of the degree of etymological transparency of many idioms. A minority of idioms, however, turned out to be quite opaque to most students. These idioms may thus have become susceptible to dual coding only after etymological feedback was given.
One of the aims of this study was to verify the results of older pen-and-paper experiments suggesting that it might be possible for learners to infer the figurative meaning of idioms solely on the basis of their original, literal meaning. If figuring out the meaning of idioms on the basis of their origins had not been feasible, then the experimental group would have experienced difficulty matching the idioms with the meaningful figurative contexts presented in the gap-fill exercise. If so, their gap-fill scores would have been lower than those of the control group, who had been asked about, and informed of, the figurative meaning of the idioms. Such a negative scenario is not at all borne out by the results. Instead, the gap-fill tests that were administered one week after each input stage, reveal an average score of 39% under the experimental condition as compared to 28% under the control condition. In other words, the data suggest that despite the ‘handicap’ of lacking explicit instruction about the idiomatic meaning, experimental students outperformed the control students when it came to (re)producing the expressions in meaningful figurative contexts. This lends support to the hypothesis that insight into the origins of idioms can often help learners correctly interpret their figurative meaning.

With a view to estimating the potential impact of cross-cultural variation on the retention of idioms, we separated the recall rates for idioms derived from source domains that were deemed (as a result of corpus research and/or the screening of idiom dictionaries) more salient in English than in Flemish Dutch (our participants’ mother tongue). These were idioms derived from the domains of sailing, baseball, cricket, horse-racing, gambling and card games. There were 34 such idioms in our databank. Table one shows that, compared with the overall average results, recall rates for these ‘culture-typical’ expressions were lower.

One could argue that the reduced memorability of these idioms (e.g. To be in the doldrums, To be on a sticky wicket) could partly be due to gaps in students’ lexical knowledge. However, such a reduced memorability was not attested for non ‘cultural-typical’ idioms containing uncommon key words (e.g. To break the mould, To be at loggerheads, To be at the end of one’s tether).

These preliminary findings lend some plausibility to the hypothesis that idioms whose source domains are more salient in L2 than in the learner’s mother tongue may tend to be less susceptible to the mnemonic technique of dual coding than most other idioms.
Table 1. Average recall rates for culture-typical idioms as compared to the overall averages

<table>
<thead>
<tr>
<th>Control condition (after the comprehension task)</th>
<th>Experimental condition (after the identify-the-source task)</th>
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<tbody>
<tr>
<td>Overall average recall rate (175 idioms)</td>
<td></td>
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<tr>
<td>28%</td>
<td>39%</td>
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<tr>
<td>Average recall rate of 34 culture-typical idioms</td>
<td></td>
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<tr>
<td>23%</td>
<td>33%</td>
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The 2003 experiment

In the follow-up experiment, a number of changes were made to the way *Idiomteacher* was implemented. This was done in order to make the exercises more student-friendly and to collect more data. The students were now asked to do the on-line exercises during teaching hours, i.e. under teacher supervision. This meant that more students participated and more data were collected than in 2002 when the exercises were made available as an optional self-study package.

The main aim of the 2003 experiment was to estimate whether etymological elaboration might ‘work better’ for some categories of idioms than for others. All students were now asked to do the three exercise types: the comprehension task, followed by the identify-the-source task, and ending with the gap-fill task. The comprehension task now served the purpose of a pre-test (to distinguish unknown idioms from the ones the students already appeared to understand). In both multiple-choice exercises, students were now given only one chance per item to click the right option before proceeding to the next idiom. After each series of comprehension exercises, students were told which items they had answered incorrectly, but the correct answer was not given as feedback. The number of options in the identify-the-source multiple-choice task was reduced to three (one correct response and two distracters). Idioms whose source domain was correctly identified were marked as etymologically transparent to that student. After each series, concise feedback on the etymological origin of each idiom (but again without explicit reference to its present-day figurative meaning) was presented on the screen. Per series of idioms, all three exercise types were tackled in the same teach-
ing period (fifty minutes). This was done to avoid some of the problems with data collection we had experienced in 2002.

The 2003 version of Idiomteacher generated data on 274 idioms (a total of 6,006 responses, by between 11 and 43 participants per idiom). Of the responses to the comprehension task, 70% were correct. Interestingly, a student’s correct interpretation of an idiom often coincided with that student’s ability to identify its source domain. In 66% of the cases where a student clicked the correct figurative meaning of an idiom, s/he would also click the correct source domain of that idiom in the subsequent exercise. This is significantly more than would be predicted by chance (i.e. 33.33%), and it suggests yet again that the meaning of many idioms is motivated, not only for native speakers but also for language learners.

Although learners appear highly likely to recognise the source domain of idioms whose figurative meaning they understand, this does by no means deny the probability that most people acquire idiomatic language with only occasional etymological awareness. The apparent correlation between comprehension of idioms and recognition of their source domains merely points to the potential merits of etymological elaboration as an additional channel for L2 idiom interpretation, to be used in combination with contextual clues, etc.

In order to assess recall rates in the 2003 experiment, we shall take into account only gap-fill responses by students who had failed to correctly interpret the figurative meaning of the given idioms in the comprehension task, and who had therefore shown that they did not have prior knowledge of these expressions. One might expect that successful recognition of the source domain of the idiom would enhance the possibility of recall, because transparent source domains lend themselves more readily to dual coding. This expectation, however, is not borne out by the results. In general, idioms whose source domains students failed to identify, were about as likely to be remembered in the gap-fill task as idioms whose source domains turned out to be transparent: 68% and 68.5%, respectively. This suggests that the brief etymological explanation that was given as feedback on the identify-the-source task was a sufficient trigger to obtain dual coding, irrespective of whether or not the learner had already recognised the source domain independently. In general, then, it looks as if etymological elaboration — as a mnemonic technique — can also successfully be applied to opaque idioms, but it then clearly requires explicit instruction or guidance.

As hypothesised above, opacity may be due to a learner’s lack of familiarity with the idiom’s source domain, i.e. when the source domain happens to have been more salient in L2 than in L1. Our 2003 databank contained
52 idioms derived from such source domains (cricket, horse racing, etc.) that appear less salient in our participants’ L1. Table two shows that the scores for these culture-typical items proved to be lower than the overall averages in all three exercise types.

Table 2. Average scores for culture-typical idioms compared to overall average scores

<table>
<thead>
<tr>
<th>Correct responses in the comprehension task</th>
<th>Correct responses in the identify-the-source task</th>
<th>Correct recall of previously unknown idioms in gap-fill task</th>
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</thead>
<tbody>
<tr>
<td>Overall averages (274 idioms)</td>
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<td></td>
</tr>
<tr>
<td>70%</td>
<td>63%</td>
<td>68.5%</td>
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<tr>
<td>Averages for 52 culture-typical idioms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65%</td>
<td>57.5%</td>
<td>60%</td>
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</table>

If a strong correlation exists between comprehension of an idiom and recognition of its source domain (as was shown above), then it should come as no surprise that learners find it harder to interpret idioms whose source domains they fail to recognise due to cross-cultural variation. In the identify-the-source exercises our students were given an explanation about the origin of the idioms as feedback. In general, reading this explanation proved sufficient to obtain the same mnemonic effect as independent recognition of the source domain. However, with regard to the category of ‘culture-typical’ idioms, this mnemonic effect appears to have been dampened. Students seem to have found it harder to visualise the etymological explanations regarding source domains they were less familiar with (such as cricket in *To hit someone for six*, *To bat on a sticky wicket*, etc.).

More research (for example, think-aloud procedures) would have to confirm whether such speculations are plausible. Nevertheless, our findings again corroborate the hypothesis that cross-cultural variation with regard to the relative salience of given source domains can reduce a learner’s chances of comprehending and remembering unfamiliar idioms.
Conclusions

In this article, we have investigated the effect of only one dimension of cross-cultural variation\(^\text{16}\) (i.e. variation in the relative salience of source domains) on L2 learners’ acquisition of only one class of metaphorical expressions (i.e. idioms). We have shown that the strategy we have called ‘etymological elaboration’ can effectively help learners comprehend and remember figurative idioms in L2. In a context of learner autonomy the applicability of the proposed strategy seems to be confined to relatively transparent idioms, but in contexts of explicit instruction or guidance (e.g. by the language teacher or by on-line tools such as Idiomteacher), even opaque idioms appear to lend themselves well to the mnemonic technique. The effectiveness of the mnemonic technique can be explained with reference to dual coding theory.

Several variables affect the degree of etymological transparency of idioms (e.g. the presence of homographic keywords), but we have identified one variable among them that – in addition to turning idioms opaque – also seems to limit these idioms’ susceptibility to dual coding, reducing learners’ chances of recall. This special variable is cross-cultural variation in the relative salience of source domains.

One could try to make students more familiar with culture-typical experiential domains by adding cultural awareness objectives to the foreign language curriculum. This could possibly help students recognise these domains more readily as the sources behind unfamiliar figurative language. At the same time, however, one should carefully avoid instilling any simplistic ‘idioms-as-a-mirror-of-culture’ views in students’ minds. Otherwise, etymological elaboration risks consolidating shallow national stereotypes that may bear little resemblance to present-day reality.

\(^{16}\) Zoltán Kövecses, ‘Cultural Variation in Metaphor’, EJES (this issue).