

Cracking the Code: Using L1 Skills to Unlock Non-Literal Language in the L2

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Abstract

Metalinguistic awareness, the ability to comprehend and consciously reflect on language, including its flexibility and its arbitrary nature, is critical for language learners, especially in the realm of literacy. To the second-language (L2) learner, *cross*-linguistic awareness, a type of metalinguistic awareness highlighting understanding of interactions between languages, is equally important.¹ Speakers with high metalinguistic abilities are best suited for learning additional languages: studies show that literacy in the first language (L1) scaffolds that in the L2,² and that L1 skills indicate future L2 aptitude as early as second grade.³ This paper explores the ways in which L1 literacy skills lend themselves to the acquisition of L2 and assesses how the abilities fostered by cross-linguistic awareness are applied to the L2 in decoding non-literal language; namely, idioms. The research is based on two studies, which address the following questions: how important is L1 literacy to the L2? What L1 habits make L2 students more receptive to non-literal language? Are some L2 expressions more accessible than others? Is experience in a particular language necessary in order to comprehend its constructions? The first study analyzes data from 88 high school French students to examine the connections between L1 habits and L2 abilities. Students completed a language background survey and were measured for English and French proficiency before being tested for comprehension of common French idioms. Findings suggest that while L1 habits do correlate with L2 skills, other factors such as confidence and additional language exposure are also involved in handling figurative language. The second study investigates the relative importance of general and specific language skills in L2 idiom comprehension by comparing data from original subjects with a new group, 12 college-age subjects lacking French experience, to examine strategies and patterns of guessing in idiom comprehension. Results from the latter study suggest that the most important skill behind L2 idiom comprehension is not experience in that L2, but rather a strong foundation in language in general.

Keywords: Idiom Comprehension, Cross-Linguistic Awareness, L2 French

1. Introduction

The Oxford English Dictionary defines *idiom* as “a group of words established by usage as having a meaning not deducible from those of the individual words.”⁴ They are fixed expressions whose semantic interpretations are not composed of the literal meanings of their constituents;⁵ that is, they are more than the sum of their parts. The average individual uses over 20 million such expressions in a lifetime – and yet, theories of language processing cannot treat them like common language.⁶ Scholars agree that fixed expressions function differently from ordinary lexical items; however there is some disagreement as to how they are stored in the mental lexicon. Some researchers maintain that idioms are stored as extended words,⁷ while others believe them to constitute a separate lexicon entirely.⁸ Idioms are, in any case, special, and a wide range of theories seek to explain how they are understood. The most dominant include the “literal first” hypothesis, which suggests that phrases are processed as idiomatic only

when a literal interpretation fails;⁹ the “simultaneous processing” hypothesis, which proposes that both literal *and* figurative meanings are retrieved and the most appropriate interpretation “wins out”;¹⁰ and the “direct access” model, which claims that figurative meaning dominates over literal.¹¹

In the first language (L1), the comprehension of non-literal expressions depends on the understanding that language is an arbitrary and abstract entity and the ability to use it as such. This skill, known as metalinguistic awareness (MLA), is comparable to *cross-linguistic awareness* (CLA) in second-language (L2) learning. CLA, which takes into account the interactions between languages inside a speaker’s mind, allows developing bilinguals to use L1 skills as a scaffold for the L2.¹² Metalinguistic and cross-linguistic abilities are not language-specific: speakers apply them to any and every language they speak as they speak it.

Many studies have investigated the role of CLA in bilingualism and bi-literacy, and the interdependence between L1 and L2 acquisition is strongly supported with empirical evidence. Existing work indicates that L1 abilities predict future L2 proficiency even before exposure to the L2,¹³ that students learn to read in an L2 more readily if already literate in the L1,¹⁴ and that learners struggling with an L2 tend to be less competent in the L1.¹⁵ Additional studies show that language learners make predictions about the L2 based on similarity to the L1 whenever possible,¹⁶ and that even fluent bilinguals use associations from the L1 when speaking the L2.¹⁷ Learners become less dependent on the L1 as familiarity with the L2 increases, but connections to the L1 continue to play a significant role in the use of an L2, and indeed aids in both, since strengthening the bonds between the languages can bolster proficiency in each.

Cross-linguistic skills alone do not a bilingual make, however. The Threshold Hypothesis, proposed by Jim Cummins in 1976, suggests that students learning an L2 are disadvantaged until they reach a certain “threshold” of linguistic competence in the L1, after which a second level of *bilingual* competence must be reached before any “cognitive advantages of bilingualism” are unlocked.¹⁸ Those advantages, including increased linguistic flexibility, may be a key to the problem of non-literal language, which creates confusion for language learners. Understanding non-literal expressions, already a demanding task in the L1, is even more complex in the L2, as non-native speakers are less able to ignore the literal meanings of constituent words when attempting to process the figurative meaning of an entire unit.¹⁹ Giora’s 1997 Graded Salience Hypothesis²⁰ indicates that learners react to the most familiar meanings of words, suggesting that straightforward translations interfere with figurative interpretations.²¹

The majority of existing idiom-related research deals primarily with the L1, and in fact with L1 English in particular, which has resulted in a common misconception of English as an “exceptionally idiomatic” language.²² Less work has been done in other languages, and very few studies indeed investigate idiom usage in a *second* language. The present study explores this phenomenon in L2 French by examining the comprehension of unfamiliar French idioms by adolescent learners, as well as the strategies used when approaching those expressions.

2. Study 1: Idioms and Literacy

2.1 Research Questions

Based on the understood connections between L1 proficiency and general L2 success, and with the knowledge that the latter cannot exist without the former, this study was guided by the following questions:

1. What factors, besides L2 input, might influence L2 ability? That is, given identical L2 input, what L1 variables influence how well or how quickly a person acquires a new language?
2. What effect does exposure to additional languages have on L2 learning? Since the L1 has been shown to directly impact the L2, does experience with further languages change the equation?
3. What L1 behaviors might contribute to the understanding of L2 idioms? If strong reading skills in the L1 are linked to higher achievement in the L2, are there other L1 habits that are useful to learners in the specific task of interpreting non-literal L2 expressions?

2.2 Study Design, Participants And Methodology

The data were gathered from 88 students enrolled in French classes under a single instructor at a suburban New York high school. 80% were monolingual native English speakers, 18% spoke another language natively, the remaining 2% were simultaneous bilinguals in English and another language. Four levels of French instruction were represented, corresponding to grade level and enabling a cross-sectional analysis of the data. All of the students had been taught the same material by the same instructor, with no variation in input.

All participants took part in a background survey asking for gender, age, and language experience, as well as reading and writing habits. In addition, subjects completed reading and writing proficiency tests in both English and French, which varied by grade level. For the reading tasks, students read a brief passage in each language and answered comprehension questions, which were graded for correctness. For the writing tasks, meanwhile, students were asked to produce a short paragraph on a topic of their own choosing, and these responses were graded for proficiency and mechanics. Finally, the main experimental task was a forced multiple-choice task, in which students chose one of four potential meanings for each item on a list of 28 French-language expressions. The expressions were given in French with literal English translations, and the options were provided in English. Each item was worth two points, for a highest possible total of 56 points.

2.3 Predictions

The study was designed to investigate which academic and linguistic habits correspond with competence in L2 French, particularly with non-literal expressions. Assuming that literacy in the L1 scaffolds abilities in the L2, it was expected that students with strong skills in L1 English would prove most receptive to L2 (or in some cases L3) French idioms. French proficiency was expected to be higher in students with greater English skills: students who excelled at and enjoyed reading and writing in English were expected to be more comfortable, and therefore more skillful, with reading and writing in French, and students with highest combined proficiency in both languages were expected to perform best on the idiom task. In short, a positive correlation was anticipated between proficiency in both languages, based on the assumed connection between L1 skills and L2 success. It was also expected that L2 abilities would improve with increased instruction in French. Furthermore, based on the notion of CLA as a set of skills applicable across languages, students with experience in additional languages were expected to show a higher level of linguistic flexibility. Those already bilingual in English and another language were expected to be more capable in French, and those who had studied additional L2s before or after French were predicted to have an advantage in handling French expressions.

2.4 Results

Once all of the data had been collected, it was assessed by grade level. Scores for all of the comprehension and production tests were converted into a 100-point scale, and average percentages were calculated for each level as well as for the entire group of students.

As expected, since English was the L1 and French the L2, proficiency scores were higher in English than in French on both the reading and writing tasks. With the reading and writing tasks assessed together, the average scores among the entire population were 88 in English and 61 in French. Also predictably, English scores were highest among upper-level students, most of whom scored in the eighties and nineties, whereas many students in the lower-level classes scored in the seventies. However, contrary to expectation, French comprehension actually decreased from lower to upper levels, and French production abilities underwent no change after the first level of instruction.

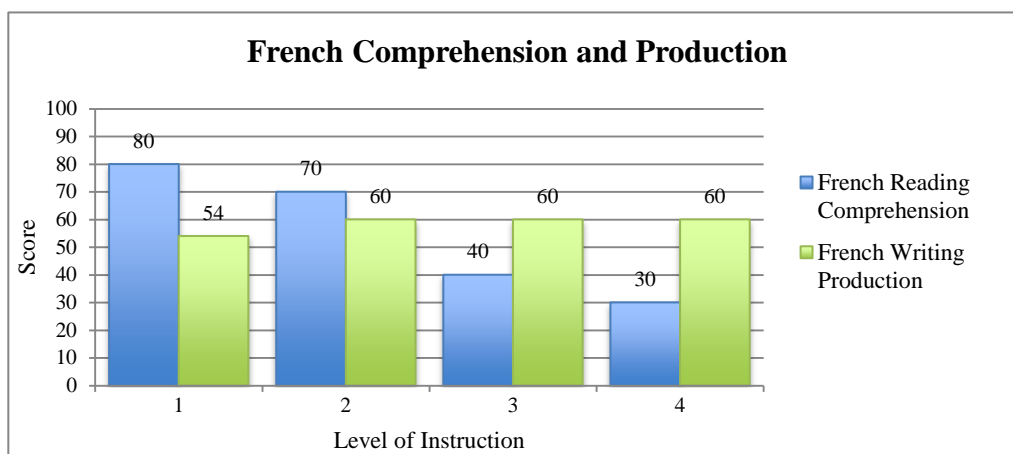


Figure 1. Average French reading (comprehension) and writing (production) scores

Figure 1 illustrates this unexpected discovery: a steady drop in French reading comprehension skills is evident, as is a lack of variation in production abilities, with the exception of a six-point rise from level one (i.e. the freshman class) to level two (the sophomore class).

The complete distribution of scores on the experimental idiom task ranged from 4 to 24 out of the possible 56 points for learners of all levels. The average score received was 14, equating to 25 out of 100 percent, with very little deviation among the entire population. No trends appeared to correlate success with level of instruction.

Information from three subsets of subjects were separated from the group and analyzed further in order to examine patterns emerging in the data. These groups were the students with the highest and lowest scores on the idiom task, and native speakers of other languages. The high-scoring group consisted of the 18 students with scores between 18 and 24 points on the idiom task, with an average score of 20. All reported high-frequency reading habits, and all received high scores on the reading and writing tasks in both English and French. The low scorers, meanwhile, were 15 students whose idiom scores were between 4 and 12 points, averaging at 9 points. These low scores were the only elements setting this group apart: they were not otherwise different from the population overall.

Average idiom scores among the students for whom English was the L2 (and French thus an L3) matched the general population, though there was some variation by language group. The seven speakers of Slavic languages (which included two speakers of Croatian, six of Russian, and one of Ukrainian) performed slightly above the curve, with an average score of 16. All of those students reported literacy in the L1. Meanwhile, the four Asian-language speakers (two speakers of Mandarin, one of Korean, and one of Vietnamese; two of these four were able to read in the L1) averaged slightly *below* the group, at 12 points, and the four speakers of Spanish (none of whom were able to read or write in the L1, which was the only Romance language represented and thus the one most similar to French) came in lower still, with an average of 10. (The remaining bilingual student spoke Urdu as an L1, was able to read and write in that L1, and scored 18 points on the experimental task.)

2.5 Discussion

High scorers with fewer years of French instruction than their classmates all had experience in another L2, but the same is true in the low-score group, suggesting that while high scorers were aided by previous language knowledge, low scorers were inhibited by it. However, there were students following the trends of each of these groups whose idiom scores were within the average range. This means that, for example, high scorers were all good readers, but not all of the good readers were high scorers. Many students with notably high or low ratings received unremarkable scores on the idiom task, which suggests that although L1 skills do bolster flexibility with the L2, they are not singlehandedly responsible for a student's success or failure in the comprehension of figurative language. Thus, the anticipated positive correlation between high L2 idiom comprehension and strong L1 literacy does exist, but operates in only one direction. This one-way relationship is perhaps the most definitive result of this study.

Also significant is the fact the students failed to improve their French reading and writing skills across years of instruction. They have hit a plateau – or indeed, a threshold, consistent with the hypotheses of James Cummins – and have been unable to graduate beyond a preliminary level of competence even with prolonged exposure to the language. Meanwhile, students with experience in languages beyond English and French (including those for whom English was the L2 and French the L3, as well as those who had studied additional L2s academically) were either helped or hindered by that experience, with little middle ground. Some were able to use their language experience as a scaffold in learning French, and thus scored highly, while others seemed to be held back by it. With the bilinguals, this dichotomy seemed related to L1 literacy: higher scores came from students who could read and write in their first language, and the lower scores came from students who could not. In fact, the highest score in the entire population came from a student who reported regular reading habits in her L1, Croatian, and the lowest came from one who was unable to read or write in his L1, which was Spanish. Literacy in the L1 and proficiency in the L2 should compensate one another, working in tandem “to achieve the highest possible level” of L2 ability,²³ but it seems this does not occur until after a certain level of L2 skill is established. Thus, reaching such a threshold seems prerequisite to the ability to handle L2 idioms: L1 strength can only be minimally helpful until that point is reached.

3. Study 2: Idioms and Transparency

Not all idioms are created equal: it is a “fuzzy category,” full of equally “fuzzy” distinctions.²⁴ The most substantial of these is *transparency*: expressions whose figurative meanings are perceived to be “clearer and closer [to]” their literal translations are said to be *transparent*, while the rest are considered *opaque*.²⁵ This is also called

decomposability: native speakers can connect form to meaning in *decomposable* idioms, but *non-decomposable* phrases have no evident connection.²⁶ It is widely agreed that transparent expressions are more easily learned and understood, both by native speakers and L2 learners.²⁷ However, those two groups make very different judgments of idiomatic expressions: native speakers are likely to accept L1 idioms without attempting to analyze them, but non-native speakers try to decompose L2 idioms whenever possible.²⁸

As discussed previously, L2 learners use the L1 to assist in all language domains, and idiom processing is no exception.²⁹ Naturally, linguistic transfer becomes an issue: prior knowledge affects the learning of new information, which can help or hinder each learner in different ways.³⁰ For many learners, literal meanings are more salient in L2 constructions, and more difficult to ignore than they are to native speakers.³¹ Perhaps as a result, L2 learners are most successful with idioms that are short, simple, transparent, and high-frequency, whereas those that are opaque and infrequent present the greatest difficulty.³² However, many language learners are not presented with this dilemma: classrooms too often overlook figurative expressions, leaving a dearth of data on the subject.³³

3.1 Questions

Having seen that L1 skills, though significant to L2 idiom comprehension, are not exclusively responsible for a speaker's success or failure in interpreting figurative L2 expressions, attention turned to the properties of the idioms themselves and to the responses of subjects to varying types of expressions. These areas became the focus of a secondary study, guided by a series of new questions:

1. Is similarity to L1 forms a help or a hindrance? Given that similarity to the L1 is used in making predictions about the L2, are English speakers better able to intuit L2 idioms with meanings similar to English forms?
2. Are some figurative expressions more accessible than others? Does the established distinction between 'transparent' and 'opaque' idioms make some forms easier for learners to comprehend?
3. Must a person be familiar with a language in order to understand its expressions? In the comprehension of idiomatic phrases, is it more useful to have specific experience in the target language, or strong metalinguistic skills in general, regardless of the precise language being spoken?

3.2 Participants, Study Design And Methodology

Twenty of the original 88 students returned to complete the new tasks. This time, they were the first of two subject sets, and their results were compared to a second set: ten college-age subjects with no experience in French. The twenty high school French students made up Group 1, while the new subjects became Group 2. All of the subjects in Group 2 had studied at least one L2, but none identified as bilingual. These new participants completed the idiom test from the initial study before joining Group 1 in completing two novel tasks, dubbed Task A and Task B. First, for Task A, the subjects were given ten French-language idioms with word-for-word English translations and were asked to produce an English equivalent. For example, for the French expression "*entre l'arbre et l'écorce*" (literally "between the tree and the bark"), subjects were expected to provide the corresponding English phrase "between a rock and a hard place," but if unable were instructed to provide a non-idiomatic definition for the French expression, allowing for a combination of idiomatic and literal responses. Task B was made up of 25 English-language expressions, which the subjects were instructed to explain in literal terms. If the expression was "to bury the hatchet," for instance, anticipated responses would resemble "to forgive one another" or "to stop fighting."

3.3 Predictions

It was expected that subjects would be better able to intuit the meanings of simpler and more transparent L2 idioms, whereas complex or opaque expressions would prove difficult. Subjects, particularly those in the elder Group 2, were expected to be familiar with L1 forms, but not with L2 expressions, and it was predicted that Group 1 would have greater success with the L2 expressions due to their experience with French. Additionally, it was anticipated that French expressions with close English equivalents would be most accessible, and that subjects in both pools would rely on their knowledge of English to make guesses about unfamiliar French phrases.

3.4 Results

In both tasks, Group 2 was more successful than the younger Group 1, producing correct answers almost 25% more often. Performances were close in the French-to-English task, but markedly different in the English-only task. The high schoolers were moderately successful at producing English equivalents to French expressions: 60% of their answers were correct, and 19.6% were somewhat correct. 16% of the remaining responses were incorrect, and 4.4% unanswered or null. Contrary to expectation, the English-monolingual Group 2 performed slightly better, despite lacking experience in French. 71% of their answers were correct, and another 20% were acceptable, leaving only 9% of responses incorrect or null. In addition, their collective average on the original idiom task was 14 out of 56 points, identical to the overall average from the first study.

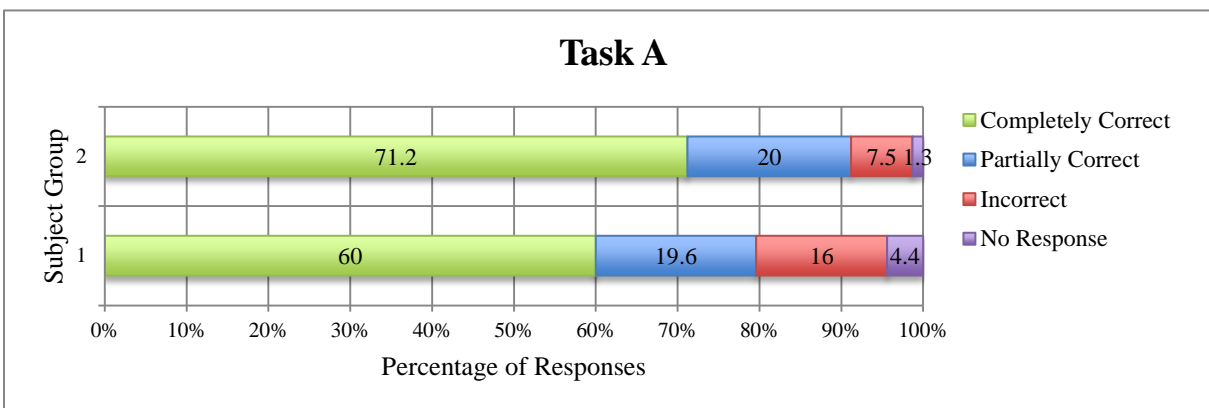


Figure 2. Task A: Correlating French idioms to English constructions

Figure 2 shows the breakdown of responses for Task A, in which subjects were prompted to produce English equivalents to French idioms. For both study groups, correct and semi-correct answers were more frequent than incorrect or null responses: between the Groups 1 and 2, a total of 85% of responses were at least somewhat correct, with Group 2 carrying slightly more weight than Group 1.

On Task B, Group 1 did well: less than 2% of their answers were wrong, though 20% were null, which marks the only incidence in which guessing was not preferred to skipping a question. The remaining 78% of responses were divided between completely and partially correct, with 39% of responses falling into each category. The subjects of Group 2 outperformed their younger counterparts once again, however: 76% of their responses were fully correct, and another 10% were somewhat correct, with the remaining 13% split between incorrect and null answers.

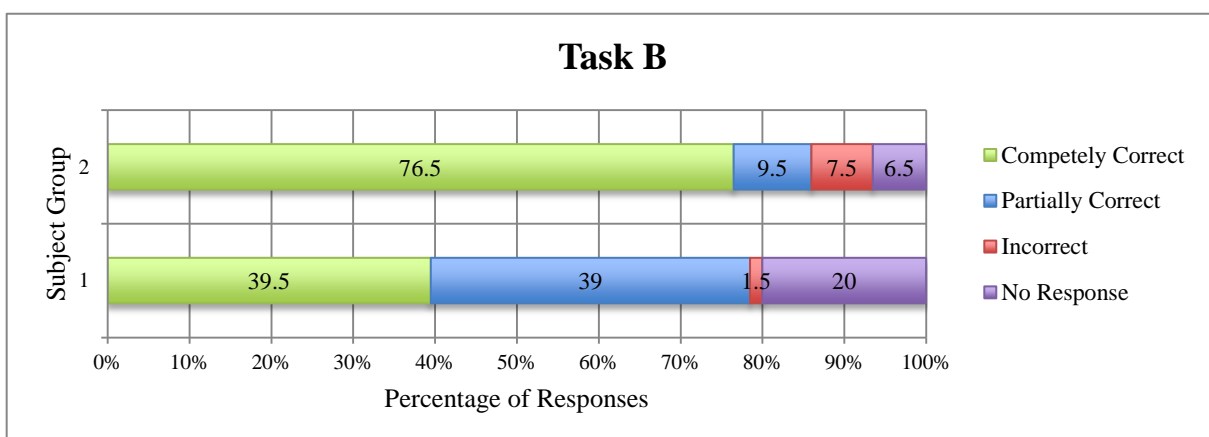


Figure 3. Task B: Defining English idioms in English

Figure 3 shows the array of responses to Task B, in which subjects provided explanations (in English) for English-language idioms. In this case, correct and semi-correct responses make up 82% of all answers, which is close to the corresponding value from Task A, but the difference between the performances of the two groups is more pronounced in this case. Group 2 provided twice as many fully-correct answers (two-thirds of the total) as did Group 1, whereas the results from the two groups were much closer in Task A.

3.5 Discussion

Patterns were expected to emerge in the expressions that were best understood, but no such trends were evident in either French or English. In fact, language hardly mattered at all, considering that experience in French was no indicator of success with French-language expressions. Rather, the older group's superior performance suggests that a sturdy foundation in general language skills (sometimes written *Language*, with the capital *L* indicating a universal capacity) is a more potent force than the specific study of any one language (with a lowercase *l* indicating a singular instance of universal capacity, such as the English language). What's more, the transparency of the expressions seemed irrelevant: instead, perhaps because idioms are learned through exposure (much like language itself), frequency alone seemed to determine which expressions were most recognized in English, and similarity to English seemed to be the only factor to influence the comprehension of expressions in French. This questions the findings of previous research, which has consistently reported that decomposability is closely tied to idiom understanding. However, because most prior studies involve only L1 processing, further research into L2 idiom usage is called for.

In L1 research, it has been suggested that intuitions regarding idiom transparency are not formed blindly, indicating that it is only after the meaning of an idiom has been learned that a speaker attempts to rationalize it, seeking elements that allow the correct meaning and increasing perceived transparency through familiarity.³³ Context is also an important factor: learners use it to find clues for developing intuitions regarding idiom decomposability.³⁴ This is, in part, what complicates L2 idiom understanding: without sufficient exposure, it is difficult to place such items in a useful context, and thus more difficult to understand their workings. Surprisingly, though, the present results suggest that fluency in an L2 does not necessarily correlate with idiom proficiency in that L2,³⁵ a finding consistent with the discrepancy between language ability and idiom scores seen in the first study.

4. Conclusions

This research sought to explore the phenomenon of L2 idiom comprehension from multiple angles: first, with regard to the influence and importance of first-language literacy, and second, in consideration of idiom types and overall language capacity. These questions were addressed in two complementary studies. The first found that L1 literacy skills are indeed a major factor in the understanding of L2 idioms, perhaps because, as the second study indicated, comfort and competency with non-literal expressions is highest in individuals possessing stronger language skills in general, regardless of the particular language(s) of experience. However, even given these findings, comprehension of L2 idioms remains largely unpredictable: subjects in both studies showed no preference for transparent idioms over those that were opaque, and preference for expressions similar to L1 constructions was inconsistent at best.

At all levels of fluency, linguistic transfer is expected to occur, but it is perhaps even more important to consider the overlooked possibility of *cultural* transfer: if the native language impacts a speaker's predictions about the L2, it seems reasonable that the native culture should also have an influence. For instance: in the experimental task of the first study, subjects were asked to choose from four possible meanings for the French expression "*jouer au chat*," literally translating to "to play cat." Only two of the hundred subjects selected the correct idiomatic meaning, which is "to play tag." All but four of the remaining subjects chose the same incorrect answer: "to play hard to get." This implies that there is a shared underlying notion about cats that led the subjects to accept one interpretation as probable, while dismissing the others as unlikely. In a sense, speakers are trying to create transparency for themselves by actively seeking literal and metaphorical connections between idiom and meaning, which is precisely what earlier research has suggested occurs with idiom processing in the L1.

Cross-linguistic skills involve far more than simply learning to read in a second language, and the L1 can only take a learner so far. Indeed, today's demand for, and availability of, so wide an array of language-learning materials is evidence enough that the door to bilingualism cannot be unlocked with a simple skeleton key. Some solution may lie in the domain of figurative language: though often neglected in the language classroom because of the difficulties that they present to learners,³⁷ and though typically avoided by L2ers for much the same reason, idioms can nonetheless be taught in a second language just as they can in a first.³⁸ There is much to be said for cross-linguistic

ability, after all, and although it is not currently a part of any standard curriculum, perhaps it should be: learning to comprehend figurative language may be a means of cultivating those valuable linguistic skills. Future research would do well to further this cause.

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