

Intuitions of the Transparency of Idioms: Can One Keep a Secret by Spilling the Beans?

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The meanings of many idioms are perceived as relatively transparent, that is, we see a connection between the expressions and their meanings. We propose that an important source of these intuitions is language users' attempts to make sense of conventional expressions. In two experiments, subjects learned either the original meaning of an unfamiliar idiom or its conceptual opposite, e.g., for the idiom *The goose hangs high*, either "things look good" or "things look bad." The learned meaning was perceived as more transparent and the nonlearned less transparent, regardless of whether subjects learned the original meaning or its opposite. In addition, the nonlearned meaning became less transparent with increased use of the idiom. Theories of idioms must be able to distinguish between transparency that results from conventional use and transparency which is more conceptually motivated. © 1995 Academic Press, Inc.

When we say that John spilled the beans, but we mean that he revealed secrets, the meaning our expression conveys cannot be composed from the meanings of the individual words. In this sense, *Spill the beans* is an idiom. Though idioms are not strictly compositional, native speakers' intuitions suggest that the link between the expression *Spill the beans* and its meaning, to reveal a secret, is nonarbitrary and relatively

transparent.¹ This intuition of transparency of many idioms has become central to theories of idioms in linguistics and psycholinguistics. Given the role of intuitions in the development of such theories, it is important to specify the determinants of native speakers' feeling of idiom transparency. The goal of our paper is to demonstrate that an important reason for this intuition is the knowledge of the stipulated meaning of the idiom and its use over time. We suggest that many idioms make sense to us because we tend to make sense of conventional expressions by creating links between the expressions and their conventional meanings. As a result, the conventional meaning becomes more transparent and alternative, hypothetical meanings become less transparent.

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¹ We use a functional notion of transparency throughout the paper: A relatively transparent idiom is an idiom for which the connection between the expression and its idiomatic meaning makes sense to native speakers.

WHY IS IDIOM TRANSPARENCY IMPORTANT?

The Traditional Treatment of Idioms

An old tradition conceptualizes idioms as arbitrary expressions—expressions that are not motivated and for which the link between the component words and the meaning of the expression is arbitrary (e.g., Cruse, 1986). A metaphorical origin might have been lost over time and left idioms as frozen expressions. The paradigmatic example in this tradition is the idiom *To kick the bucket*. Most native speakers consider the relationship between this idiom and its meaning opaque (i.e., nontransparent). Along these lines, traditional modern accounts of syntax and semantics assume that idioms are noncompositional expressions (e.g., Aitchison, 1987; Chomsky, 1965; Fraser, 1970; Katz, 1973, Strassler, 1982; Weinreich, 1969; see a review in Cacciari, 1993). Fraser (1970) expresses this notion clearly:

I shall regard an idiom as a constituent or series of constituents for which the semantic interpretation is not a compositional function of the formatives of which it is composed. [...] Thus, in the example *To pass the buck*, there is no independently motivated interpretation of the verb *To pass* and of the noun phrase *the buck* such that when taken together the string *Pass the buck* can receive the interpretation of *To avoid work by giving the job to someone else*. (p. 22)

The underlying assumption of the traditional approach, then, is that the meanings of idioms are not composed of meanings of the constituents of the idioms. This assumption in the linguistic literature is also reflected in theories of idiom representation in the psycholinguistics literature: Idioms are said to be represented as a lexical entry. They are either listed in a separate idiom lexicon (Bobrow & Bell, 1973) or as part of the normal lexicon (Swinney & Cutler, 1979). Because they are not compositional, they are treated as a unitary lexical entry, e.g., *To kick the bucket* is an entry with the meaning “to die.”

The Revival of Idioms and the Notions of Transparency

Other scholars argue that the relationship between idiomatic expressions and their meaning is not arbitrary. They suggest that many idioms are highly motivated and as such they make sense to native speakers. Different from traditional treatments, this approach does not focus on idioms that are opaque such as *To kick the bucket*, but considers the large class of idioms that are relatively transparent, like *To skate on thin ice*. People’s intuition that many idioms make sense is central to the reaction against the traditional theory.

We briefly review two approaches that provide two different explanations for the source of transparency of idioms. Then we suggest and test a third contribution to the transparency of idioms—the knowledge and use of the stipulated meaning of the idiom. We propose that the contribution of conventionality to intuition of idiom transparency should be accounted for by any theory of idioms.

The Contribution of Conceptual Metaphors

Conceptual metaphor theories assume that the human conceptual system is based on a small set of experience-grounded concepts, such as the concepts UP and DOWN, with less basic concepts being understood via mapping onto the basic set, as in MORE IS UP (e.g., Johnson, 1987; Kovecses, 1986; Lakoff & Johnson, 1980a,b; Lakoff, 1987; Lakoff & Turner, 1989; but see, Ortony, 1988; Jackendoff & Aaron, 1991; Glucksberg & Keysar, 1993; Glucksberg, Brown & McGlone, 1993; Keysar & Glucksberg, 1993; Quinn, 1991). This approach suggests that idioms make sense to the extent that they are motivated by such conceptual mappings: “What it means for an idiom to ‘be natural’ or to ‘make sense’ is that there are independently existing elements of the conceptual system that link the idiom to its meaning.”

(Lakoff, 1987, p. 449). The idiom *Spill the beans* makes sense because of the independent existence of two conceptual mappings: IDEAS ARE ENTITIES and THE MIND IS A CONTAINER. Along these lines, Gibbs and O'Brien (1990) demonstrated that images accompanying idioms are constructed along dimensions that are similar to the basic dimensions of the motivating conceptual metaphors. Gibbs (1992b) demonstrated that when the same dimensions are violated by context, the idiom is perceived as less appropriate than a corresponding literal paraphrase. This suggests that conceptual mapping provides partial motivation for idiom meaning (see also Nayak & Gibbs, 1990; but consider the controversies in Kreuz & Graesser, 1991 and Gibbs & Nayak, 1991; Gibbs, 1992a and Glucksberg, Keysar, & McGlone, 1992).

The Contribution of the Semantics of the Idiom's Elements: The Semantics Constraints Approach

Different from the conceptual metaphor approach, the semantic constraints approach does not assume an underlying metaphorical mapping but suggests that the meanings of idioms are partially composed of the meanings of their elements (e.g., Cacciari & Glucksberg, 1991; Glucksberg, 1991; Wasow, Sag, & Nunberg, 1983). Wasow et al. suggest that "the pieces of an idiom typically have identifiable meanings which combine to produce the meaning of the whole" (p. 109). For example, in *Spill the beans*, *spill* is similar at a certain level of abstraction to its corresponding element of the meaning of the idiom "reveal." This element of the expression contributes to the meaning in a semi-compositional way. In line with this notion, Cacciari, Glucksberg, and Rumiati (1992) demonstrated that idioms conjure images that are related to the literal meanings of the elements, suggesting that the words of an idiom play some role in constructing the meaning of the idiom (see also Cacciari & Tabossi, 1988.) Cacciari

and Glucksberg (1991) argued that idiom productivity "will be governed by the functional relations between an idiom's elements and the idiom meaning" (p. 231; see also McGlone, Glucksberg, & Cacciari, 1994). These studies provide evidence that semantic elements of transparent idioms contribute to the sense of transparency.

A MODEST PROPOSAL: INTUITIONS OF IDIOM TRANSPARENCY AS A FUNCTION OF USE

The two central approaches to the study of idioms suggest two different sources for native speakers' intuition concerning idiom transparency. Consider a third important source of such intuition. We propose that some idioms seem relatively transparent because we use them with the stipulated meaning in mind. Our proposal is twofold: First, use strengthens the links we establish between the idiomatic expression and its meaning. Second, the more we strengthen such links with the stipulated meaning, the less able we are to access alternative, potentially transparent, meanings that are incompatible with the stipulated meaning. In other words, incompatible alternative meanings becomes less transparent. This consequence suggests that the knowledge of the stipulated meaning affects our intuitions regarding what the idiom *could* mean and still be transparent.

What kind of mechanism could induce such an intuition? Our proposal is that once the idiom is used with its stipulated meaning, and links are established between that meaning and the expression, then alternative hypothetical meanings will be perceived as transparent only to the extent that they correspond to the already established links. For example, in *Spill the beans*, the verb of the idiom *spill* corresponds to the action that the meaning includes "to reveal." This mapping, then, will constrain our intuition regarding alternative meanings. Consequently, a hypothetical meaning "to loose one's prisoners" is perceived as

relatively transparent because its action corresponds well with the structure of *spill*. For the same reason, "keep a secret" does not make sense because "keep" does not map well on *spill*.

This also suggests that it should be most difficult to see a link between an idiomatic expression and a hypothetical meaning that is incompatible with its stipulated meaning. The most extreme case of a conceptually incompatible meaning is an opposite meaning, as in "keep a secret" for *Spill the beans*. If we are correct, native speakers should consistently perceive the opposite meanings of transparent idioms as relatively nontransparent. Indeed, an informal survey of relatively transparent idioms suggests that such an intuition holds. *Call the shots* would have not made sense had it meant "to follow someone else's decisions," *Put one's cards on the table* could not have transparently conveyed the meaning "to hide everything," and *Turn a deaf ear* could hardly make sense as meaning "to heed someone's cry for help." In general, it is difficult to see how transparent idioms could have the opposite meaning and still make sense.

Our suggestion is that the lack of transparency of the opposite meaning is caused in part by the links that the stipulated meaning established with the expression. Our proposal makes a counterintuitive prediction here. We suggest that had a transparent idiom had the opposite meaning as its stipulated meaning, then *that* meaning would have made sense to us. Moreover, this would affect our intuitions regarding the transparency of the original meaning: It would become less sensible. For example, we suggest that had *Spill the beans* had "to keep a secret" as its stipulated meaning, then this meaning would have made more sense to us than we currently believe. In addition, the meaning "to reveal a secret" would seem intuitively less transparent. The following experiments provide evidence for our proposal.

The Strategy of the Investigation: Intuition with Unfamiliar Idioms

Our proposal makes predictions that are impossible to test directly. A direct test of our hypothesis would be to ask native English speakers to disregard their knowledge of the meaning of idioms such as *Spill the beans* and to use them as meaning the opposite, e.g., "keep a secret." Instead, we applied an indirect method, using *unfamiliar* English idioms to demonstrate the effect of knowledge of an idiomatic meaning on its perceived transparency as well as the perceived transparency of hypothetical meanings. Subjects learned and used the idioms either with their original meaning or with their conceptual opposite and then reported the perceived transparency of those meanings. Our prediction was that each meaning would be perceived as more transparent when it was stipulated than when the other meaning was stipulated as the meaning of the idiom. This should occur regardless of whether the original meaning of the idiom was stipulated or its opposite meaning. It is as if undoing people's knowledge of the meaning of *Spill the beans* makes "to keep a secret" become more sensible and makes "reveal a secret" become less transparent than it is. This would demonstrate the contribution of knowledge of the meaning to the intuition of transparency.

EXPERIMENT 1

We selected a set of unfamiliar English idioms and led native speakers of American English to believe that the idioms either meant what they had originally meant or that they meant the opposite. For example, we used the idiom *The goose hangs high* to mean either "things look good" or "things look bad." We were interested in demonstrating that the acquired meaning becomes more transparent than the alternative regardless of the original meaning of the idiom. Therefore, subjects were asked to predict which meaning an *uninformed* person

who overhears the expression would attribute to the idiom. To the extent that they predicted someone else would interpret the idiom to mean what they themselves understood it to mean, it suggests that the meaning they believed to be the stipulated meaning of the idiom became more transparent than its opposite meaning.

Method

Subjects

Fifty-nine native English speakers participated in this experiment for course credit. None had participated in a similar experiment before. The session lasted about 1 h.

Materials

We selected 20 relatively unfamiliar idioms from idiom dictionaries (e.g., *The Oxford Dictionary of Current Idiomatic English* and *NTC's American Idioms Dictionary*) as well as from nineteenth-century writings. For instance, the idiom *get the deadwood on someone* appeared in Louise Clapp's (1949/1851–1852) *The Shirley Letters from California*: "If they ask a man an embarrassing question, or in any way have placed him in an equivocal position, they will triumphantly declare that they have got the deadwood on him" (pp. 52–53). We pretested each idiom with its original meaning and an opposite, false alternative (i.e., the "reversed" alternative) in order to identify and eliminate idioms that were known to our subject population.

Items pretest. One hundred and nine native English speakers participated in the pretest for course credit. All 20 idioms were listed on one page with a 7-point familiarity scale to the right of each idiom. The end points of the scale were labeled "completely unfamiliar" (1) and "completely familiar" (7). Subjects rated their familiarity with each idiom by circling the corresponding number on the scale. After rating familiarity, subjects turned the page where each idiom was listed with two opposite mean-

ings. For example, *In the balance* (1) in an undecided state, (2) in a stable, balanced state. Subjects' task was to decide which of the two alternatives was the original meaning of the idiom. The idioms appeared in one of two orders and the meanings of each idiom appeared in one of two orders.

The mean familiarity score was 2.3 on the 1 to 7 scale (range = 1.4 to 4.3; median = 2). Overall, subjects recognized the original meaning of the idioms in 51% of the cases (chance = 50%), ranging from .15 (*To lay out in lavender*) to .82 (*To have someone dead to rights*). A high rate indicates that subjects had a strong preference for the original meaning of the idiom when they chose between the two alternatives and a low rate indicates a preference for the reversed meaning. Idiom familiarity rating did not predict recognition of the original meaning, $r = .19$, n.s. We compared idioms that differed in their mean familiarity score: A median split on the familiarity score revealed a slight recognition advantage for the idioms that were rated more familiar over idioms that were rated less familiar (means = .59 and .44, respectively). This difference was not significant, $F(1,18) = 2.4$, $p = .14$, $MS_e = 428$. In general, then, there was no indication that subjects were more likely to recognize an idiom's meaning when they felt familiar with it than when they felt no familiarity.

Experimental materials. We selected 15 idioms of the 20 pretest idioms on the bases of both familiarity and recognition information. The selected idioms had a mean familiarity score of 2 and were equally biased toward the original and reversed meanings. The overall recognition rate was close to .5 (i.e., mean = .48, median = .52) and ranged from .15 to .82 for individual items. The idioms were symmetrically distributed around a chance recognition rate. In addition because people know that some idioms are opaque, we constructed a relatively nontransparent, third meaning alternative. For example, the third meaning for *Eat*

someone's salt was "to plant new trees on someone's property." For a complete list of the idiom set and corresponding meanings see Table 1.

We constructed scenarios for each meaning of all 15 idioms. The idiom appeared in italics toward the end of each scenario, and the scenario strongly suggested that the id-

iom has a particular meaning. See Table 2 for an example of the scenario for the three meanings of *To have someone dead to rights* (for examples of scenarios for other idioms see Appendix.) Following each scenario subjects indicated their interpretation of the idiom by choosing among the original, reversed, and unrelated meaning.

TABLE 1
IDIOMS USED IN EXPERIMENT 1 WITH THEIR CORRESPONDING ORIGINAL AND REVERSED MEANINGS

Idiom	Original meaning	Reversed meaning
<i>Warm one's britches</i>	Punish, from the pain of being beaten	Praise, from to embarrass (like blushes warm ones face)
<i>Set one's cap at</i>	Intend to marry	Intend to break off a relationship
<i>Lay one's nuts aside</i>	To give up boyish extravagances; to become mature	To be prodigal; to give away or spend ones stored wealth
<i>Applaud to the echo</i>	To applaud so energetically as to produce echoes; to demonstrate high acclaim	To criticize or ridicule, as applauding in an empty theater when everyone has left early
<i>Have someone dead to rights</i>	To catch them in the act, unquestionably guilty	To convict someone in spite of unquestionable innocence
<i>Get the deadwood on</i>	To get someone in one's power	To find yourself in someone else's power
<i>Come the uncle over someone</i>	To criticize someone too severely; to exceed your right to censure someone	To come down easily upon someone; to be lenient
<i>To play the bird with the long neck</i>	To be out looking for someone or something	To hide with ones head in the sand; to avoid encounters
<i>To find an elephant in the moon</i>	To make a spurious discovery; an illusion	To point out something that should have been obvious to all
<i>To eat someone's salt</i>	To share someone's food and drink	To be refused food and drink, be given barely crumbs and salt
<i>To go by the board</i>	To get ruined, lost	To thrive, experience flourishing progress
<i>The goose hangs high</i>	Things are looking good, everything is rosy	Failure, the end has come
<i>To lay out in lavender</i>	To chastise harshly and in no uncertain terms	To sweet talk; to flatter
<i>To row crosshanded</i>	To be self-reliant, independent	To be in need of help; unable to do something right alone

TABLE 2
THREE BIASING SCENARIOS FOR THE IDIOM *To Have Someone Dead to Rights* THAT APPEARED IN THE LEARNING PHASE: THE UNBIASED SCENARIO APPEARED IN THE TEST PHASE

Original meaning: "To catch someone in the act, unquestionably guilty"

Ladies and Gentlemen of the jury, on the seventeenth of October at approximately 5:22 p.m., three eyewitnesses saw this man walk into the bookstore, without any concealing head piece, hold up a gun to the cashier, and threaten to shoot her if she were to make any attempts at calling security. He then proceeded to take money from the cash register and ran out of the store. We see here a definite case of armed robbery and attempted murder. Clearly, the justice system *has this man dead to rights*.

Reversed meaning: "To convict someone in spite of unquestionable innocence"

Ladies and Gentlemen of the jury, we just heard the testimony of a priest that swore that on the seventeenth of October at approximately 5:22 PM. This man was with him on the third floor of the Joseph P. Regenstein Library. At the same time, three blocks away, someone robbed the bookstore and demanded that all the copies of a certain book be burned. Given this evidence, it is quite obvious that this man is innocent. Ladies and Gentlemen, I am appealing to you that you reconsider your guilty verdict of our last session. Clearly, the justice system *has this man dead to rights*.

Unrelated meaning: "To give someone an award"

Last night there was a huge fire over on 62nd street. Nobody knows how it got started. A resident of the apartment building across the street said he saw a young woman with a container of something, possibly gasoline, walk into the building 20 minutes before the fire was reported. There were some children playing in the building at the time. When the fire started they could do nothing but scream. By the time the fireman reached the building, the flames were shooting out the windows of the first three floors. Bill, the new fireman, heard the children's screams. He went in. Fifteen minutes later he came out with two frightened boys on his arm. He was a hero. The town hall held a ceremony the next day. They had him *dead to rights* for his bravery.

Unbiased scenario from the Test Phase

One morning Larry opens the newspaper and the opening headline reads, "The City Council has the Mayor Dead to Rights." Larry is not interested in politics and is detached from societal affairs. What would he most likely think was meant by the phrase "dead to rights," before reading the article?

Procedure and Design

The experiment had two phases: a learning phase and a test phase. In the learning phase, each subject received a booklet with all 15 idioms plus four warm-up fillers that had a similar format. Each idiom appeared in a scenario that biased the reader to one of the three meaning types; one-third of the idioms appearing with each meaning type. Subjects received an explanation about idioms and were told that the experiment concerned idioms that are not familiar to most people. Here is the relevant section from the instructions:

We have collected different idiomatic expressions that range from somewhat familiar to totally unfamiliar to the native speaker. Please do not be alarmed if you do not recognize these expressions. We will present you with short scenarios that include idiomatic expressions. The

idioms can be identified because we italicized them. Your task will be to try and guess what these idioms mean. To help you, we will provide you with three different alternative definitions.

For each item, subjects first read the scenario and guessed the meaning of the italicized idiom by choosing one of the three alternative meanings. Then they rated their confidence in their choice on a 15-point scale, with 1 labeled "not confident at all" and 15 "very confident." After the "learning" phase, subjects returned their learning booklets and received test booklets.

The hypothesis is that once people learn a meaning of an idiom, and the meaning makes sense to them, its relative transparency increases. At the same time, a meaning that is conceptually reversed seems less transparent. Our assumption is that the more transparent a meaning becomes the

more subjects will be likely to believe that uninformed others will recognize it. To evaluate this hypothesis we asked subjects in the test phase to take the perspective of uninformed individuals and estimate the way these uninformed others might interpret the idioms. Subjects received the same idioms as in the test phase, but this time the idioms were embedded in a scenario that did not bias the interpretation of the idiom toward either of the meanings (see Table 2). Each scenario described an overhearer or reader, who is unfamiliar with the idiom, who encounters the idiom. The task was to predict the way this stranger would interpret the idiom. Subjects indicated their choice among three alternatives and then rated their confidence on a 15-point scale.

All learning-phase booklets included all 15 idioms: One-third of the items appeared with a scenario biasing toward the original meaning, one third with a bias toward the reversed meaning and the remainder with a bias toward the unrelated meaning. This yielded three types of booklets counterbalanced for scenario. The three meanings of the idioms appeared in one of two orders: the original first and reversed last or vice versa. Together, the type of scenario and order of meanings required six different booklets for the learning phase. In the test phase, all subjects read all idioms, always embedded in the same unbiasing scenario, with a meaning order that was the mirror image of the order they received during learning.

Results and Discussion

Three observations (.5% of the data) were not included in the analysis because of incomplete responses. Additionally, because our prediction concerned the original meanings of the idioms and their reversed meanings, we only used the items for which subjects learned that the idiom had either its original meaning or its opposite. The data were coded to test a potential preference to predict that the overhearer would

interpret the idiom in line with or in contrast to the meaning that the subject learned. The response was coded as 1 when subjects predicted that the overhearer would assign the original meaning to the idiom, as 0 when they predicted the unrelated meaning, and as -1 when they predicted that the overhearer would perceive the conceptually opposite meaning to the original meaning. A mean of zero suggests that learning the meaning had no effect on the predicted interpretation, a positive mean suggests a tendency to attribute the perception of the original meaning and a negative mean suggests a tendency to attribute the perception of the reversed meaning. In both experiments, the data were averaged for every item and for each subject, and statistical tests are reported with subjects ($F1$) and items ($F2$) as random effects.

The prediction is that after learning the original meaning of the idiom, subjects will be more likely to attribute its perception to the overhearer, and that they will be more likely to attribute the perception of the opposite meaning after they learn that meaning. Thirteen out of the 15 items (87%) yielded this pattern. The overall pattern of means was also as predicted. When subjects learned the original meaning of the idiom, they were more likely to attribute its perception to the overhearer (mean = .07). Similarly, when they learned the opposite meaning they were more likely to believe that the overhearer will perceive that meaning, as the negative mean indicates (mean = -.16). The difference between the means was significant by a one-way ANOVA with items and marginally significant with subjects, $F1(1,58) = 3.63$, $p < .062$, $MS_e = .4$, $F2(1,14) = 7.24$, $p < .02$, $MS_e = .04$. This suggests that subjects indeed tended to attribute to the overhearer the perception of the meaning they learned over a conceptually opposite meaning. It is interesting that the original meaning was not preferred overall. If the original meaning had an advantage, then the grand mean

should have been positive, but it was negative, though not statistically different from zero.

People were fairly confident in their choices. After learning the meaning of the idiom, confidence averaged 12.3 out of 15. A similar confidence level was revealed in the responses of the first, learning phase, regardless of whether they later changed their choice in the second, test phase (mean = 12.2) or not (mean = 12.4). A similar pattern occurred with confidence rating in the second phase. After making their prediction regarding the overhearer's interpretations, subjects' average confidence was 11.2. However, confidence during the test phase differed depending on whether subjects attributed to the overhearer the same meaning as the meaning they had learned. They were more confident when they attributed the same meaning to the overhearer than when they attributed an alternative meaning (means = 11.6 and 10.7, respectively.) This difference is small but significant, $F(1,58) = 4.65, p < .04, MS_e = 1.16, F(2,14) = 6.58, p < .03$.

The results of this experiment support our hypothesis. Subjects are more likely to attribute to an uninformed person the interpretation of the meaning they themselves learned than its conceptually opposite meaning. The preference pattern is also associated with differential confidence levels. When subjects believed that the other would perceive the meaning they believed to be false (i.e., a meaning they did not learn), they were less confident about their prediction than when they thought that the meaning they learned would be perceived.

Experiment 1 demonstrates a preference for the learned over the nonlearned meaning. Recall that the force of our argument is that the reversed meaning of well-known transparent idioms such as *Spill the beans* seems nontransparent because we already know the actual meaning of the idiom, it makes sense to us, and induces a mapping that is incompatible with the opposite

meaning. Therefore, we must demonstrate that not only does the learned meaning of an idiom gain transparency but its opposite meaning *loses* transparency. Furthermore, we should demonstrate that if the opposite meaning is learned, then the original meaning is perceived as less transparent. Experiment 1 demonstrates that the learned meaning tends to be *preferred* over its opposite, but it does not show that the opposite meaning itself becomes less transparent. It may be the case that *both* the learned and the reversed meanings became more transparent after the learning phase, but that the relative gain was larger for the learned meaning. Though the two meanings were conceptually opposite, they can still be highly related, just like adjectival antonyms are highly related conceptually (e.g., Murphy & Andrew, 1993). This is reasonable given that the original meanings and their reversals were defined along similar dimensions. For instance, the idiom *Get the deadwood on* means, "to get someone in one's power." The reversed meaning we constructed for it was "to find yourself in someone else's power." Though the meanings are reversed, they both revolve around the notion of one person having power over another. It is reasonable to assume that once one learns one of these meanings, the notion of "X has power over Y" becomes associated with the idiom. As a result, even the opposite meaning may seem more transparent after learning. In terms of our ongoing *Spill the beans* analogy, one would expect "to keep a secret" to become relatively more transparent as a result of *Spill the beans* meaning "to reveal a secret." If this is the case, if both meanings gained in transparency, then our hypothesis is not supported.

On the other hand, we believe that the difference exhibited in Experiment 1 *underestimates* the extent of the effect of learning the meaning of an idiom on the perceived transparency of the opposite meaning. The reason is that the procedure used a second-

order inference to estimate the perceived transparency, a procedure that may encourage pragmatic considerations about an uninformed other and dilute the expected effect. For example, given that subjects believe that they know what the idiom means, and they know that the idiom is unfamiliar to the overhearer, they may assume that in a certain percentage of the items the overhearer is bound to misunderstand the idiom, regardless of its transparency. As a result they might choose in the test phase the meaning opposite to the one they learned in the first phase. Any effect that is revealed in spite of such potential dilution adds strong support to the hypothesis. Experiment 2 was designed to address the possibility that the effect may have been undermined by the procedure of Experiment 1, to address the methodological criticisms of the forced-choice paradigm, and to provide a more detailed support for our hypothesis.

EXPERIMENT 2

This experiment had two goals. One goal was to directly measure the perceived transparency of *both* learned and reversed meanings of each idiom. The second goal of Experiment 2 was to demonstrate the effect of use on the perceived transparency of meaning. Recall our suggestion that common idioms could have transparently meant the opposite of what they actually mean and that part of the reason for the perceived opacity of the opposite meaning is a function of the way the idiom's elements are construed to fit the meaning. The more we use *Spill the beans* as meaning "to reveal a secret," the harder it is for us to see that "to keep a secret" could be a meaning that makes sense. To demonstrate this, we varied the number of times subjects practiced the use of each idiom and tested the effect of such use on the perceived transparency of the meaning that is conceptually *opposite* to the meaning they learned. We expected the nonlearned, opposite meaning to

become less transparent the more subjects used the idiom. Given that this experimental manipulation of use is much weaker than the normal course of language use, any effect that our use manipulation reveals is strong evidence for our hypothesis.

Method

Subjects

Sixty college students participated in the experiment for course credit. All were native English speakers except one subject whose booklet was discarded. The data from seven subjects who did not follow instructions were discarded. Subjects were tested in groups in sessions lasting approximately 1 h.

Materials

Pretest. The pretest of Experiment 1 only provided data for subjects' preferences of one meaning over the other. In the pretest for Experiment 2 we collected ratings of the transparency of both the original and reversed meanings of the idioms. More importantly, the goal of the pretest was to validate the procedure of this experiment and rule out certain potential methodological problems. In the main experiment, subjects rated the transparency of both meanings after they learned one of the meanings. It is possible that when asked to rate two opposite meanings subjects tend to contrast them. This means that the very task suggests that if one meaning makes sense then the other meaning should make less sense. If this is the case, then they should contrast them even when they do not learn that one of them is the meaning of the idiom. The pretest rules this out by showing that the ratings are not negatively correlated.

Fifty-seven native English speakers contributed data for the pretest which lasted about 15 min. The main part of Experiment 2 involved practicing the use of the learned idioms, and was expected to be a relatively long procedure. Therefore, we used only 12

of the 15 idioms from Experiment 1. We eliminated the three items that were the most familiar to subjects and used the same original and reversed meanings as in the first experiment, with minor editing. Idioms were presented in booklets, each containing all 12 idioms. Every idiom appeared at the top of a page, followed by its two potential meanings. Each meaning had two measures associated with it. The first measure was a categorical question "Does this meaning make sense?" with a YES/NO option; the second was a scale reflecting the extent to which the meaning makes sense. Subjects were introduced to the notion of idioms and were told that the experiment involved unfamiliar idioms. The instructions stressed that the goal was not to guess the original meaning of the idiom, but instead to evaluate what the idiom *could* sensibly mean. Subjects were asked to evaluate "the extent to which a meaning makes sense."² For each item, subjects read an idiom, read one meaning, answered YES or NO to the question "does it make sense?" and then indicated the extent to which it makes sense on a 15-point scale. The scale was marked "Not at all" for 1, "Somewhat" for 6, "Mostly" for 11, and "Very

² To clarify the task, the instructions contrasted "kick the bucket" with "spill the beans" and explained that the second is typically judged as more sensible—that it is easier to see the connection between the idiom and its meaning. One potential complication with the task is that people are aware of the fact that idioms have a unique meaning. Therefore, we elaborated on the notion that alternative, hypothetical meanings may still be sensible. Given that this is a crucial element in the procedure, we cite the relevant part from the instructions:

"... it makes sense that *Spill the beans* means to reveal a secret. Some people think of the beans as the secrets that are revealed and about the action of spilling as revealing. But we can see that other meanings could also make sense. The idiom *Spill the beans* does not have to be about secrets to make sense. We also feel that other meanings for *Spill the beans* could be sensible. For example, it would make sense for this idiom to mean to release from captivity. This is, of course, not the real meaning of the idiom, but it makes sense."

Much" for 15. Subjects practiced with a sample idiom by evaluating two opposite meanings of that idiom and then proceeded to complete the booklet.

Whenever a subject did not complete the set of four questions for a particular idiom, the data for that idiom token were excluded from the analysis. This amounted to 1.5% of the pretest data. In addition, after the experiment was completed, we noticed an error in one of the meanings of the idiom *To row cross-handed*. Instead of two opposite meanings, the booklets included the original meaning twice (i.e., "To be very independent.") Given that the two meanings were the same, we cannot test our hypothesis with the data from this idiom. Therefore, this idiom is not included in the analysis. The responses were collapsed across subjects and computed for each idiom, separately for original and reversed meanings. The rate of YESs to the categorical question was .58 for the original meanings and .51 for the reversed meanings. The difference of .08 between the original and reversed meanings was not significant by a *t* test $t(10) = .9, p > .39$. The sensibility ratings were around the midpoint of the 15-point scale; the mean ratings for the original and reversed meanings were 7.6 and 6.9 respectively. The differences between mean ratings for original and reversed meanings differed among the items: They ranged from the original meaning rated 2.6 higher than the reversed meaning to the reversed meaning rated 3.4 higher than the original meaning. The .7 average advantage of the original meaning was not significant, $t(10) = 1.3, p > .2$. For our purposes, it is important that the ratings are not negatively correlated. In fact, the ratings of the original and reversed meanings were positively correlated: $r = .33, p < .05$. This demonstrates that the results of Experiment 2 do not represent a task demand: When presented with two opposite meanings of an idiom, subjects did not tend to contrast their ratings.

In Experiment 2, we used the 11 idioms from the pretest, along with their respective original and reversed meanings. As in Experiment 1, we used biasing scenarios to convey one meaning or another. Because Experiment 1 had been relatively lengthy, and the task in Experiment 2 was harder, we shortened the scenarios while keeping the main biasing information. (See Appendix for a complete set of idioms and biasing scenarios).

Procedure and Design

The experiment had two phases: (1) *Learning and Use Phase* in which subjects received all idioms embedded in biasing scenarios and were asked to identify the idiom's meaning and then use it in a sentence of their own. (2) *Test phase* in which subjects rated the transparency of both meanings of the idioms, as in the pretest.

Phase 1: Learning and use. Subjects first read the instructions and then completed a sample item. For each item, they read a scenario that was biasing toward either the original or the reversed meaning of the idiom. For example, the idiom *To have someone dead to rights* appeared italicized with one of the biasing scenarios. After reading the scenario, they decided the idiom's meaning by choosing between (1) the meaning that was consistent with the scenario, and (2) a meaning that was unrelated to the scenario. For instance, after reading the scenario of the reversed meaning of *To have someone dead to rights* subjects decided whether the idiom either means "to convict someone in spite of unquestionable innocence," which is its conceptually reversed meaning, or "to honor or give tribute to someone," which was unrelated to either scenario. The instructions stated that the goal is to identify "the meaning of the idiom" by choosing the more likely meaning among the two alternatives. Half the idioms appeared with their original meaning and the other half with the reversed meaning. Meaning type was counterbalanced so that half the subjects learned one half of the

idioms with one meaning and the other half with the alternative meaning. Though the order of idioms was constant, whether each idiom appeared with the original or reversed meaning was randomly determined, with the provision that no more than two same-value meanings (Original/Reversed) appear consecutively. In addition, for half the idioms the scenario-relevant meaning (original or reversed) appeared first and in the other half the unrelated meaning appeared first.

After they finished "identifying" the meanings of all the idioms, subjects used the idioms in short sentences. We gave them an example by constructing two sentences for the sample item, *As courteous as a dog in the kitchen*. Here is an example of use that we provided for this idiom, assuming that it means to be submissive: "At school she was the queen of the class and she ruled it with an iron fist, but at home she was as courteous as a dog in the kitchen." For one third of the idioms, subjects constructed two different context sentences for each idiom: they constructed only one context sentence for a third; and they did not compose any sentence for one third of the idioms. To ensure that subjects remembered the meaning that they learned, they first copied it and then used the idiom in a sentence. With idioms that they did not have to use, they only copied the meaning and continued to the next item. Use was counterbalanced across items so that of the six idioms where subjects learned the original meaning, two were not used, two were used once and two were used twice. The six idioms that they learned with the opposite meaning had the same use conditions. This resulted in six different booklets for the *learning and use phase*.

Phase 2: Test. After subjects finished the first phase they returned their learning and use booklets and then completed the test phase. The booklets for the second phase were identical to the pretest booklets, except for adjustments in the instructions. As in the pretest, subjects received all idioms,

each with its original and reversed meanings. For each meaning, they answered whether the meaning made sense by marking YES or NO and then rated the extent to which it made sense on a 15-point scale. The order of meaning and the measures were identical to the pretest. After finishing the experiment, subjects described their perception of the goal of the experiment. None guessed the real purpose of the study.

DESIGN. Subjects learned one meaning for each idiom: For half the items they learned the original meaning and for the other half they learned the reversed meaning. They used the idiom either once, twice or zero times. They then evaluated the transparency of both meanings of each idiom, the meaning that they learned and the meaning that they did not learn. This yielded a 2 (Meaning Learned: original or reversed) \times 3 (Use: 0, 1 or 2) \times 2 (Test meaning: learned or nonlearned), within-subjects design.

Results and Discussion

When a subject did not complete both measures for the two meanings of an idiom or when a subject did not use the idiom in a sentence as instructed, the data for that idiom for that subject were not included. This constituted 1.9% of the data. We present the data for the effect of learning the meaning first and then the data pertaining to the effect of use.

The Effect of Learning a Meaning

Regardless of the type of the learned meaning (Original or Reversed), it was rated as more sensible than the nonlearned meaning (means = 9.5 and 6.2, respectively). Figure 1 presents the effect of learning a meaning for the original and reversed meaning. The mean ratings for the original and reversed meaning after learning were almost identical (means = 9.5 and 9.4 respectively), and both were rated lower when not learned (mean = 6.2 for both). A 2 (Learned meaning: original or reversed) \times 2 (Test meaning: learned or nonlearned)

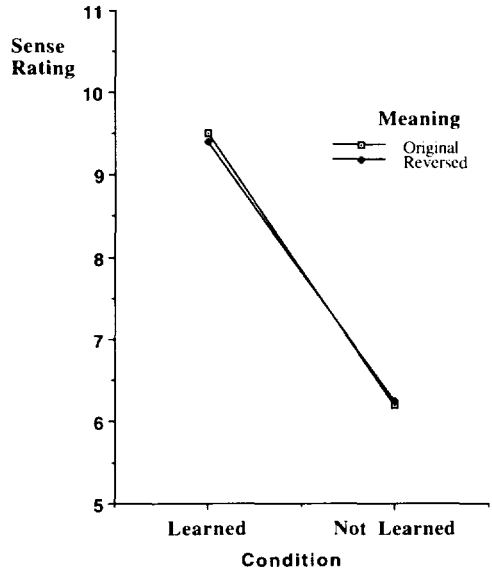


FIG. 1. Mean sensibility ratings of the original and reversed meanings as a function of learning.

analysis of variance with repeated measures revealed that the learned meaning's "sensibility" ratings were significantly higher than the nonlearned meaning's ratings, $F(1,51) = 48.5, p < 0.001, MS_e = 11.76, F(2,10) = 93.74, p < .001, MS_e = 1.25$. The type of learned meaning (original or reversed) had no effect and did not interact with Test meaning, all $F_s < 1$. The lack of an interaction demonstrates that the effect of learning a meaning is symmetrical for both the original and reversed meanings of an idiom.

The Effect of Use

We hypothesized that if an idiom made sense, the more people used it with one meaning in mind, the less sense the *opposite* meaning would appear to have. To evaluate the effect of use, we only considered those cases in which subjects indicated that the meaning they had learned made sense (i.e., a YES answer to the first question of the learned meaning in the test phase). When subjects could not make sense of the learned meaning (i.e., a NO

answer), we did not expect an effect of use on the transparency of the opposite meaning.

To evaluate the effect of use, we compared the mean for each idiom in each use condition to the baseline sensibility measure from the pretest. The crucial question is whether the nonlearned meaning became less transparent with use not only compared to the learned meaning but also compared with the pretest baseline. We subtracted the mean baseline rating for each idiom from the mean of each of the following six cells: 2 (Test meaning: learned or nonlearned) \times 3 (Use). These difference scores were analyzed in a 2×3 ANOVA with repeated measures. Overall, use had a marginal effect, $F(2,20) = 3.09$, $p = .07$, $MS_e = .50$. The important point to notice is that use had *differential* effects for the learned and nonlearned meanings. As Fig. 2 demonstrates, the more subjects used the learned meaning, the less sense the non-

learned meaning made as compared to the baseline; means = -1.5 , -1.6 , and -2.5 , for zero, one and two cases of usage, respectively (The larger the negative number, the larger the decrease from baseline). In contrast, while the learned meaning was rated as more sensible than the baseline, it was not affected by use (means = 3.9 , 4.0 , and 4.0 , respectively). This difference between the effect of use for the learned and nonlearned meaning was reflected in an interaction between test meaning and use, $F(2,20) = 3.35$, $p < .055$, $MS_e = .52$. Simple effect tests revealed that use had a significant effect for the nonlearned meaning, $F(2,20) = 5.08$, $p < .02$, $MS_e = .63$, but not for the learned meaning ($F < 1$). For the nonlearned meaning, the mean difference scores of two usages was significantly smaller than either one or zero usage, (Newman-Keuls, $p < .05$), but one and zero did not differ from each other. For the actual rating, all three use conditions for

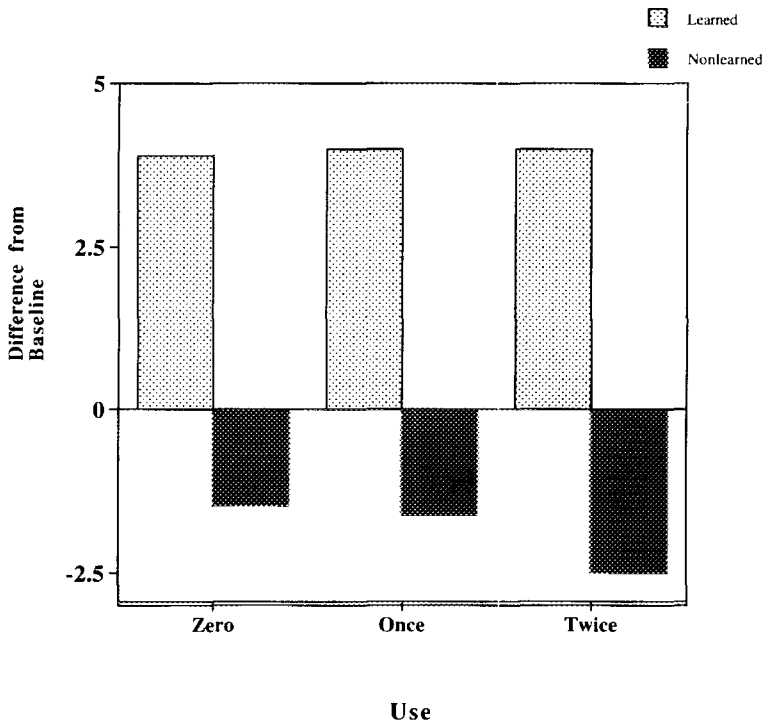


FIG. 2. Mean difference from baseline of sensibility ratings of the learned and nonlearned meanings of the idioms, given that the learned meaning made sense, as a function of use.

the nonlearned meaning were significantly smaller than the baseline measure (Newman-Keuls, $p < .01$).

Experiment 2 yielded two main results: When a meaning was learned as the meaning of the idiom it was perceived as more transparent than when it was not learned, regardless of whether it was the originally stipulated meaning or its conceptual opposite. In addition, using the idiom with the learned meaning in mind affected the perceived transparency of the nonlearned meaning. As we suggested above, the more subjects used an idiom with a transparent meaning in mind, the less sense the opposite meaning made—the less transparent inconsistent meanings became.

GENERAL DISCUSSION

Together, Experiments 1 and 2 provide evidence for the notion that native speakers' intuitions about the transparency of idiom meaning systematically depends on their knowledge of the stipulated meaning of the idiom. The first experiment addressed this notion with unfamiliar idioms by demonstrating that when people learn either the original meaning of an idiom or its conceptually opposite meaning, they are likely to perceive the particular meaning they learned as more transparent than the other. Experiment 2 demonstrated that while the perceived transparency of the learned meaning of the idiom increased after learning, the perceived transparency of the nonlearned meaning decreased. Moreover, with increased use of the idiom, the nonlearned meaning became less transparent.

We submit that these demonstrations with unfamiliar idioms are approximations of the effect of the actual meaning of common idioms on the intuitions of native speakers regarding hypothetical meanings. Native speakers' intuitions about what idioms cannot transparently mean may be shaped by what the idiom actually does mean. So, even though we have strong and persistent intuitions about the nontranspar-

ency of hypothetical meanings, these intuitions should be suspect. Our results suggest that had we been able to undo the knowledge of native English speakers of the meaning of *Spill the beans*, it might well have made sense as meaning "to keep a secret." This should be the case for the same reason that the opposite meaning of *The goose hangs high*, "things look bad" did not make much sense to subjects who learned the original meaning, "things look good," even though it was quite transparent when it was originally learned as the actual meaning of the idiom.

The Danger in Underestimating the Power of Convention

Intuitions of idiom transparency are central to theories of idioms because they imply nonarbitrariness. It is therefore important to distinguish between the different sources of such intuitions. We propose that our studies demonstrate an important source of such intuitions. If one ignores the contribution of knowing the stipulated meaning of the idiom, one runs the risk of overestimating the extent to which an idiom's meaning is retrievable by native speakers who do not know its meaning. When idioms are highly transparent, we sometimes have the feeling that even people who are not familiar with the expression would be able to construct the meaning of the idiom. For example, Wasow, Sag and Nunberg (1983) express this intuition when they say that the idiom *To saw logs* is transparent because the "sound of sawing logs is similar to that of snoring." They suggest that "this idiom is probably interpretable to those unfamiliar with it" (p. 111). We claim that such intuitions vastly underestimate the range of possible meanings that even the most transparent idioms can have for uninformed individuals. For people who are not familiar with the meaning of *To saw logs*, the expression could transparently mean a large variety of things, even "to stay up all night"—with the activity of sawing logs standing for having an active night.

Such examples may suggest a general problem for theories of idioms that rely exclusively on native speakers' intuitions.

Sources of Transparency and Their Interplay

The conceptual metaphor view postulates that the source for native speakers' intuitions regarding idiom transparency is the existence of independent conceptual structures that motivate the meanings of idioms. To argue that we are documenting an additional source, we need to demonstrate that it is not already subsumed by the contribution of conceptual metaphors. Consider the idiom *The goose hangs high*. Our experiments demonstrated that both the real meaning of the idiom "things look good" and its opposite "things look bad" can be highly transparent. The conceptual metaphor theory can explain this by postulating different motivating conceptual metaphors in each case.³ "Things look good" makes sense because it is motivated by the mapping GOOD IS UP. "Things look bad" makes sense because of a metonymic relation. The act of hanging something up may stand for a negative event. While such underlying mapping could account for the cases where the idioms seemed transparent, they do not explain why the same meanings did *not* make sense when they were not used as the stipulated meanings of the idioms. Given that the conceptual mappings exist independently of the idioms, if the motivating mappings were the reason for our findings, then these mappings should have motivated the meaning regardless of whether they were stipulated or not. This is not to say that conceptual metaphors do not contribute to the intuition of transparency, only to say that their contribution cannot account for the variations in our experiments (for further discussion see Keysar & Bly, in press.)

Once one distinguishes different sources of contribution to the intuition of transpar-

ency, a reasonable next step will be to ask whether they have an independent or interactive contribution. In order to address this question, we need a theory of the mechanisms that underlie the contribution of each. We know very little of the underlying mechanisms of any of the postulated sources, so we will attempt to speculate about the mechanisms that underlie the effect we documented in our experiments. One possibility is that our effect is a special case of a general tendency to anchor in any given information: Perhaps native speakers commit themselves to the meaning they learned just like people tend to anchor their uncertain estimates even with randomly generated numbers (Tversky & Kahneman, 1974). We believe that such notion of general committal is not specific enough to capture the mechanisms that give rise to the effect we demonstrated. If people are simply committed to a specific meaning, then any meaning that is different from the postulated meaning will be perceived as nontransparent. But this is not the case. It seems that some hypothetical meanings feel more transparent than others. For example, "loose one's prisoners" seems more transparent than "to keep a secret" for *Spill the beans*. In general, *opposite* meanings seem to be systematically perceived as nontransparent. This leads us to suspect that the reason is not a general sense of committal but instead that it is rooted in the way people construe ambiguous stimuli (e.g., Ross, 1990). People attempt to make sense of a stipulated meaning by looking for elements of the idiom that will allow such meaning. This construal is what we referred to as the mapping between the idiom and its stipulated meaning. This mapping, in turn, constrains the intuitions of transparency of the stipulated meaning as well as alternative meanings which will be transparent only to the extent that they are consistent with that mapping.

Native English speakers with persistent intuitions may still doubt our conclusion and argue that when the goose hangs high

³ We thank a reviewer for this analysis.

things may look either good or bad, but that one could never sensibly *keep* a secret by spilling the beans. We suggest that this hypothetical meaning seems so nonsensical precisely because the mapping that the actual meaning of the idiom induces cannot accommodate such a meaning. When the idiom means “to reveal a secret” the beans stand for the secret and spill refers to the action of revealing. With this mapping, “to keep a secret” is indeed difficult to understand as the idiom’s meaning. But consider a different mapping in which beans do not stand for the secrets but for unimportant information that distracts others from the real secret that one keeps, rather like red herrings. By spilling the beans, then, one *can* keep a secret. With this mapping, “to keep a secret” makes sense as the idiom’s meaning. The reason we strongly feel that it could not is rooted in our difficulty to generate an alternative construal that is inconsistent with the current mapping.

This conceptualization raises an interesting possibility regarding an interplay between the contribution of knowing the meaning of an idiom and semantic constraints that are imposed by elements of the idiom. One can think about the words as providing *potential* constraints from which the meaning of the idiom selects the ones that are appropriate. For example, when *Spill the beans* means “to reveal a secret,” then the structure of the verb “spill” directly constrains the action that the idiom describes. In contrast, if it means “to keep a secret” then the verb does not constrain the action of keeping but instead another action (e.g., to provide a distraction) whose *result* is the action that the idiom describes. We select those aspects of the meaning of the elements that are consistent with the stipulated meaning. For instance, when one spills something, the action is typically accidental. This aspect of the action is involved in the real meaning of the idiom “to reveal a secret.” But, though spilling is typically accidental, this aspect is no longer highlighted with the opposite meaning, “to

keep a secret.” Such flexible selection of constraints can also be illustrated with one of our unfamiliar idioms, *Applaud to the echo*. The original meaning and its opposite may highlight a different part of the idiom and consequently induces a seemingly independent set of constraints. When the idiom is said to mean “to demonstrate high acclaim,” *applaud* may be in focus because of its positive connotations and its metonymic relationship to the action of demonstrating high acclaim. Note that echo is probably not given much weight because of its negative connotations, unless one imagines that the echo is the outcome of very enthusiastic applauding. In contrast, if the idiom is said to mean “to criticize or ridicule” then *applaud* would no longer constrain the action as one of positive expression. Instead, *echo* would come into focus and provide negative constraints.

This account can be extended to the productive use of idioms as well. Cacciari and Glucksberg (1991) argue that variations on idioms make sense to the extent that they are motivated, as in “he didn’t spill a single bean.” The specific mapping that different meanings provide, then, should constrain different ways of motivating an idiom variant. Consider, for example, Glucksberg, McGlone, and Cacciari’s (in press) example, *spill the dirt*. By changing beans to dirt, the idiom still makes sense with an additional connotation that the secrets may be “unsavory.” Now consider the hypothetical meaning “keep a secret” and recall the way it can become transparent—by mapping beans onto distractors. This meaning would still make sense with the variant idiom, but the secrets would no longer have the negative connotation. Instead, dirt contributes to the function of the spilled element—distraction and concealment.

Implications for Theories of Idioms

Our intuitions about the transparency of meanings appear to be independent of our knowledge of the stipulated meaning of the idiom. They are not. When an idiom was

coined, its meaning may have been nonarbitrary. At the same time, the meaning is used conventionally and as with any other convention, we attempt to make sense of it. When we do this, we create connections between the expression and its meaning which make the meaning seem even more transparent than it is. Regardless of which theory of idioms we adopt, researchers in this area should resist the seductiveness of their intuitions as native speakers, strong and persistent as they may be. The reason is, that these intuitions are partly a product of the links created as a result of the conventional use of the idiom. Theories of idioms must take into account this effect of the conventional use of idioms. They need a principled way to distinguish between cases of transparent idioms that are genuinely motivated and cases that only appear to be so motivated. Though we may throw away the arbitrary bath water, we must not dispose of the conventional baby.

APPENDIX: TWELVE IDIOMS AND LEARNING SCENARIOS USED IN EXPERIMENT 2

For presentation purposes, the scenario of the original meaning (A) appears first followed by the scenario for the opposite meaning (B). The idiom was italicized in the booklets as well. The scenarios used in Experiment 1 were very similar, some were longer and thus were edited.

1. *To Lay One's Nuts Aside*

(A) James had always been a hard worker and a saver. This summer he worked full time, and by fall he had saved a sizable sum of money. He thought about all the wonderful things he could do: he could buy a car to go racing around the streets, or give a big party for all the friends he hadn't had a chance to see over the summer. Finally he decided that he should save the money for college. He explained to his father what he would do. His father said, "I'm proud of you, son, but don't be so quick to *lay your nuts aside*. Why don't you spend half of the money on something you would enjoy now?"

(B) James had always been a hard worker and saver. This summer he worked full time. By fall, he had saved a sizable sum of money. He thought about all the wonderful things he could do: he could buy a car to go racing around the streets, or give a big party for all the friends he hadn't had a chance to see over the

summer. Finally he decided that he would buy a car. A red sports car, perhaps. He explained to his father what he would do. His father said, "I'm proud of you for working so hard. But don't be so quick to *lay your nuts aside*. Why don't you take half of the money and save it for the future?"

2. *To Applaud to the Echo*

(A) A movie review of the 1988 Richman film, "When Edie killed Fred." If one could define a masterpiece, this production would do it just fine. Richman, once again, succeeds in illustrating the value of film with a brilliant attempt at narrating the bizarre, yet enchanting relationship between two young-minded, freedom-seeking individuals who come upon their greatest obstacle, each other. So wonderful and uplifting was this film, I laughed, I cried, I even brought my mother to see it. My mother loved it. Everyone in the theater loved it. *We applauded to the echo* when it was over.

(B) A movie review of the 1988 Richman film, "When Edie killed Fred." If one could define disaster, this production would do it just fine. Richman, once again, succeeds in completely destroying the value of film with a horrific attempt at narrating the confusing and mundane relationship between two silly, irrational individuals who come upon their greatest obstacle, each other. So ludicrous and upsetting was the film, I laughed, I cried, and I wouldn't bring my worst enemy to see it. In fact, I was the only one still in the theater when it ended. *I applauded to the echo* when the torture was over.

3. *To Have Someone Dead to Rights*

(A) Ladies and Gentlemen of the jury, on the seventeenth of October at approximately 5:22 p.m., three eyewitnesses saw this man walk into the bookstore, without any concealing head piece, hold up a gun to the cashier and threaten to shoot her if she were to make any attempts at calling security. He then proceeded to take money from the cash register and ran out of the store. We see here a definite case of armed robbery and attempted murder. Clearly, the justice system *has this man dead to rights*.

(B) Ladies and Gentlemen of the jury, we just heard the testimony of two priests who swore that on the seventeenth of October at approximately 5:22 p.m. this man was with them on the third floor of the Joseph P. Regenstein Library. At the same time, 3 blocks away, someone robbed the bookstore and demanded that all the copies of a certain book be burned. Given this evidence, it is quite obvious that this man did not commit the crime. He is innocent. Ladies and Gentlemen, I am appealing to you that you reconsider your guilty verdict of our last session. Clearly, the justice system *had this man dead to rights*.

4. To Come the Uncle Over Someone

(A) Everyone remembers Professor Gary Schlenk. He gave students, in almost all instances, only 3 days to complete a 7–9 page paper. And he never gave extensions. It was good for them, he thought, to be held to tough standards. It would teach them to respect authority. If anyone had misunderstood the reading material, he would berate them in front of the whole class. He sure would *come the uncle over them*. He also did this on papers, writing harsh comments if they didn't meet his expectations. Professor Schlenk had no qualms about giving a hard-working student an "F."

(B) Everyone remembers Professor Gary Schlenk. He never had firm due dates for papers, relying on his students to do their best to get them in. If anyone could not get it in on time, he would listen compassionately. It was good for them, he thought, to have someone to talk to about problems. It would teach them not to fear authority. If students had any kind of an excuse or problem at all, he would *come the uncle over them and accept their papers whenever* they could get them in. He had no qualms about spending entire afternoons helping and reassuring troubled students.

5. To Play the Bird with the Long Neck

(A) It was no surprise to me that Henry was running for mayor. Henry was always a little too social for such a young boy. If he wasn't running around the neighborhood talking to everyone, he was sitting in the front window of his house, calling out from his window and chatting with passersby. He would go out of his way to find anyone who would keep him company. In this way, Henry was always *playing the bird with the long neck*. It's easy to see why he would want to be mayor. I only wonder what took him so long to decide to run.

(B) It was quite a shock to me that Henry was running for mayor, considering that he was always such a shy boy. For instance I can remember a time when a whole bunch of us were in my backyard and we saw Henry walking our way. He always had to pass by my yard to get home. We were about to call to him when he crossed to the other side and took the long way home. He was always avoiding people—*playing the bird with the long neck*. It is hard to see why he would want to be mayor. I only wonder what convinced him to run.

6. To Find an Elephant in the Moon

(A) The aged scientist sat in his office in the astrophysics center. He thought to himself, "My life's work has truly culminated—I'm certain that I will win a Nobel for my latest discovery." But when his colleagues read his article, they found that he had overlooked some important facts. The scientist's discovery turned

out to be merely an illusion. Disappointed, one of them said, "I'm afraid Hamilton has *found an elephant in the moon*."

(B) Dr. Hamilton, the aged scientist, sat in his office in the astrophysics center. He thought to himself, "My life's work has truly culminated—I'm certain that I will win a Nobel for my latest discovery." When his colleagues read his article they agreed that he had made an important discovery. They were amazed that no one noticed it before because it was so obvious. Excited, one of them said, "Hamilton has *found an elephant in the moon*."

7. To Eat Someone's Salt

(A) Hans was a traveler skilled in the magical arts. He came upon a kingdom and asked for food in exchange for telling the king's fortune. He slept in the castle's most luxurious bedroom, and ate all of the bountiful food set before him. Then he stood up and said, "Having *eaten your salt*, I give you the following gift: that you shall from this day forward be a happy man. You shall be content with your wealth, and you will treat your people with generosity and mercy. Such is your reward." And indeed, it came to pass exactly as Hans had said.

(B) Hans was a traveler skilled in the magical arts. He came upon a kingdom and asked for food in exchange for telling the king's fortune. "Food for free?" said the king. "You must be mad!" His guards tossed Hans out, throwing after him a piece of dried bread and an insult. After eating the crust of dried bread (for he was very hungry nonetheless), he stood up and said, "Having *eaten your salt*, I give you the following gift: that your crops shall wither, your animals die, and your children starve. Such is your reward." And indeed, it came to pass exactly as Hans had said.

8. To Get the Deadwood on Someone

(A) The criminal had evaded the authorities for the last ten years. Now police cars sped after him for the last time. They cornered the "masked bandit" into a finally made trap. The police had finally *gotten the deadwood* on the masked bandit—his choice was either to ride over the edge of the cliff and be killed, or to stop his vehicle, and be encompassed by the seven squad cars immediately following him.

(B) The criminal had evaded the authorities for the last ten years. Now as police cars sped after him, they finally thought they had him trapped. They were wrong. The "masked bandit" had spun around at the last minute. All seven police cars crashed because the first car was blinded by dust. The police had *gotten the deadwood* on the masked bandit once again.

9. To Go by the Board

(A) The select committee was meeting to discuss the progress of certain projects. They had complete con-

trol over which projects got funding and which did not. "And what about the new biomedical technology for human genes?" asked the chair. One of the committee members stood up. "In the initial phase of the projects, the prognosis looked good, but now, I am afraid, this project is out of control. This project is hopeless—completely gone by the board."

(B) The select committee was meeting to discuss the progress of certain projects. They had complete control over which projects got funding and which did not. "And what about the new biomedical technology for human genes?" asked the chair. One of the committee members stood up. "In the initial phase of the project, the prognosis looked bad, but now, I am delighted to announce, this project shows an enormous amount of promise. There are enormous implications for work of this kind. We should allow this project to continue to go by the board."

10. The Goose Hangs High

(A) The two farmers walked side by side. It had been a good summer: clear skies for planting, abundant rain for the young plants, but not too much. They would each begin taking in their crops in a few days and it looked like the harvest would be the best on record. There was not a storm cloud in sight that would delay the harvest, and there were plenty of men and machines to do the work. They walked silently but contentedly—not great talkers, but good friends. At the place where their paths diverged, John turned to Olaf and said, simply, "Looks good this year, eh?" And Olaf simply replied, "Aye, John, *the goose hangs high*." "Well, goodnight." "Goodnight." And they parted.

(B) The two farmers walked side by side. It had been a disastrous summer: first heavy rains so the crops couldn't be planted on time, and then a fierce heat that had withered the seedlings and stunted the corn. They would each begin taking in what remained of their crops in a few days and it looked as if the harvest would be the worst one on record. There was not a thing now that could be done, that much was clear: the weather had already all but ruined them. They were not great talkers, even in the best of times. At the place where their paths diverged, John turned to Olaf and said, simply, "Well, not much we can do now, eh?" And Olaf simply replied, "Aye, John, *the goose hangs high*." "Well, goodnight." "Goodnight." And they parted.

11. To Lay Out in Lavender

(A) My mother always had a way of getting us to do what we had to do. When I was 5 years old I hated needles and I would always start screaming to keep away from them. Once, as my mother and I walked into the doctor's office I could feel a cold sweat forming on my back. As soon as the doctor stepped in I started panicking and grabbed the arms of the chair. My mother just looked me straight in the eye and with a stern and scolding voice, she commanded me to co-

operate. I gave in and had the shot. I think at that moment my fear of mother's scolding was greater than my fear of the doctor. She certainly knew how to *lay out in lavender*. I will always remember her for that quality of harshness.

(B) My mother always had a way of getting us to do what we had to do. When I was 5 years old I hated needles and I would always start screaming and running just to keep away from them. Once, as my mother and I walked into the doctor's office I could feel a cold sweat forming on my back. As soon as the doctor stepped in I started panicking and grabbed the arms of the chair. My mother just stroked my hair and in a soothing voice, told me it wouldn't hurt too badly and said that afterwards, we could stop for doughnuts. I gave in and had the shot. My mother certainly knew how to *lay out in lavender*. I will always remember her for that quality of gentleness.

12. To Row Cross-Handed

(A) Jack was the person who astonished me the most in my first year at college. I regarded him with high respect. He seemed to really be his own person. He was very independent. He always understood what was going on in class. Jack worked two jobs during the term while managing to take four classes. He maintained a good social life and was involved in many activities. All the scholarships and loans he received enabled him, not his parents, to pay his way through college. In light of his independence, I think he *rowed cross-handed* through college.

(B) Jack was the person who astonished me the most in my first year at college. I don't now how he managed to get through his first year. He was totally dependent on us, his friends, to walk him through every assignment. When left alone to write a paper he nearly always failed. He always needed our homework or our notes. In my book, he *rowed cross-handed* through college.

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