

Combining Large and Small Corpora to Investigate Tuning Devices Around Metaphor in Spoken Discourse

Lynne Cameron and Alice Deignan
School of Education
University of Leeds, UK

We studied metaphorical language in spoken discourse from a number of settings to explore the words and expressions that regularly appear in the context of both conventional and innovative metaphors. We found that expressions that we call “tuning devices” are frequent in all the data consulted. Tuning devices have a number of different functions, clustered around the central notion of suggesting to the hearer how to interpret a metaphor. Our data was drawn from 2 computerized corpora, 1 small enough to be handsearched as well as concordanced, the other very large. Both small and large corpora present research problems, and we argue that combining the 2, by using a small corpus as a starting point for searches in a large corpus, may reduce the disadvantages of each.

This article investigates the nature and role of a set of words and phrases that consistently co-occur with linguistic metaphors in spoken discourse, and that, for reasons that will be explained, we call “tuning devices.” These are exemplified in the following extracts from our data by *just*, *like*, and *sort of*:¹

1. ... *just* “*make a mental note*”
2. This is where my family grew up and there’s a lot of history here and erm so you s it’s *like sort of* “*putting down roots*” here

Expressions such as these have been described as “hedges” and as “vague language.” The term *hedges* was put forward by Glucksberg and Keysar (1993); as

Requests for reprints should be sent to Lynne Cameron, School of Education, University of Leeds, Leeds LS2 9JT, United Kingdom. E-mail: L.J.Cameron@education.leeds.ac.uk

¹Tuning devices are in bold italics.

part of the development of their class inclusion view of metaphor, they argued that hedges help to interpret metaphor by reducing the degree of implicative elaboration required, and that, from their particular theoretical point of view, hedging weakens metaphoricity by making class inclusion more explicit. Their examples were invented rather than from real discourse data, and it is possible that this may have led to a simplified picture. The term *vague language* was coined by Channell (1994) to refer to a range of expressions, including *sort of* and *something or other*, which are used to weaken the explicitness of propositions. Working with a large corpus of informal spoken English, Carter and McCarthy (1995) noted the frequent use of vague language and suggested that one of its functions is associated with the interpersonal context, in that it reduces the directness or assertiveness of an utterance, although they did not discuss metaphorical language specifically.

Each label suggests a particular point of view: to describe a term as “vague” is to take a semantic, rather than a discourse, perspective—what might be vague to the analyst may have exactly the appropriate level of precision for a speaker’s purpose on a given occasion. On the other hand, the label “hedge” foregrounds the decision of the speaker but backgrounds the listener or receiver. We found that a third approach, a discourse perspective that takes into consideration the hearers’ as well as the speakers’ needs, provided useful insights into the function of expressions like these. We therefore use the term *tuning device*, as we find it better captures the interactional and discourse nature and role of this language as used in talk around metaphor (see also Cameron, 2003). In the rest of the article, we develop a description of the discourse function of “tuning” a metaphor, which includes notions such as alerting the hearer to any problem in interpretation, and suggesting which interpretation, literal or metaphorical, is intended.

We developed an innovative methodology by combining the use of a very large, computer-sorted corpora with use of a smaller, hand-sorted corpora. Both corpora were analyzed with detailed attention to context and speaker meaning to identify metaphorical language in spoken discourse and to explore the uses of a number of tuning devices that regularly co-occur with it.

METHODOLOGY

Methodological Issues

Corpus methodology has been proposed as one way toward generating a reliable description of the typical context and use of linguistic metaphors (Deignan, 1999; Steen, 1999). Metaphor researchers have used both small corpora, of a size that can be searched by hand (e.g., Cameron, 2003; Santa Ana, 1999), and corpora of many millions of words that can only be searched using computerized techniques such as concordancing and automatically generated frequency lists (Deignan, 1999;

Koller, 2002). Both types of corpora are potentially enormously rich sources of data for the metaphor analyst, but neither is without problems.

The main problem with the use of a small corpus is that findings may not be generalizable. For instance, the frequency and metaphorical use of a particular word form is inevitably influenced by the collection of data from a limited number of discourse events. This leads to the possibility that one particular speaker's idiosyncratic use may dominate the citations for a particular word. Furthermore, words or metaphorical uses other than the most frequent may simply not occur, or occur too few times to make any generalization possible. These difficulties should not occur when searching a large computer-sorted corpus, which can often generate insights into language use that are supported by many thousands of citations from hundreds of sources, and can provide a reasonable quantity of evidence for even relatively infrequent words.

However, there are at least two problems in analyzing metaphorical use through corpora too large to hand sort. First, most large corpora provide the researcher with only outline information about context. There have been attempts to sample spoken corpora for sociolinguistic variables such as social class, sex, and age, and to make this information available to the user (see Kennedy, 1998, for a description of various widely used corpora), but the cost and complexity of collecting spoken data means that there is a trade-off between contextual information and the size of corpus. The second problem in searching large corpora is that patterns may be missed, because the researcher usually begins by searching for particular linguistic forms. If he or she has not identified a particular form as worthy of study, it may not emerge from the data during the analysis, and an important metaphorical use may be missed. This reflects a fundamental difficulty in researching linguistic metaphors through a corpus: We are trying to trace patterns of meaning but can only begin our analysis by looking at forms.

The combination of an analysis of a small corpus with the examination of concordances from a large corpus is an attempt to tackle the problems of each type of study; reading the small corpus end-to-end provided clues as to significant patterns, which could then be used as starting points for searches in the large corpus.

Procedure

The small corpus consisted of 28,285 words of transcribed talk, recorded in a primary (elementary) school in the United Kingdom. Observation field notes and written texts used in classroom activities were also collected. Through a detailed examination of the whole corpus, including a number of interrater checks, instances of linguistic metaphor were identified (details in Cameron, 1999, 2003). Using socio-cultural constructs from Vygotsky (1962) and Bakhtin (1981), metaphor was explored as a tool in the construction and negotiation of shared understanding within the particular social and institutional context of the primary school classroom.

The linguistic context of the metaphors was studied, and words and phrases that regularly co-occurred with them were identified, leading to the compilation of a list of tuning devices used around metaphor, together with a set of pragmatic microfunctions for their use. We took from the small corpus the following tuning devices to explore in the large corpus: *actually, almost, imagine, just, kind of, a little, really, sort of*.

A key distinction was made between deliberate metaphors that seemed to be used for a specific, educational, and ideational discourse purposes, and conventionalized metaphors that seemed to be used as part of normal, everyday language resources, often for interactional and organizational purposes (Cameron, 2003). Deliberate metaphors were often nominal and tended to use less familiar lexis; around 10% of the metaphors identified were classed as deliberate. Although we might expect to find tuning devices around deliberate metaphors, carrying out the hedging function noted by Glucksberg and Keysar (1993), we also looked for tuning around conventionalized metaphors.

We also noticed in the small corpus that several tuning devices were often used together, and this feature was therefore explored in the large corpus.

The large corpus was the 9 million word collection of spoken data from the section of the Bank of English that is available through Cobuild Direct. Corpus software was used to search for the aforementioned tuning devices, their concordances were analyzed for pragmatic function, their most frequent collocates were identified, and the concordances of these were studied. This process yielded several further tuning devices.

FINDINGS

Tuning Devices in the Small Corpus

In the classroom discourse data, metaphor was used with an ideational macrofunction, to make abstract ideas more concrete, as would be predicted from writing in the cognitivist school (e.g., Lakoff, 1993). However, other macrofunctions emerged as more frequent. These other organizational and interpersonal functions primarily concerned managing the procedure of lessons, and, with affective force, controlling of behavior and giving feedback to students.

It was found that both deliberate and conventionalized metaphors are often tuned for listeners. The following extract shows conventionalized and deliberate metaphors used with several tuning devices, as the teacher explains to the pupils how a man's name was derived from the name of the mountain where he lived. The first metaphor is conventionalized, whereas the second and third, "*nickname*" and "*corruption*," are deliberate. All three are tuned. (We should note that *corruption* was probably a new term to the pupils, so that to them it was not a technical word.)

3. Teacher: for people who are writing about Skidda (.) um (.) remember it *actually* “comes from” the word Skiddaw which is a hill (.) but (.) he’s been named after it (.) but (.) it’s been ????? you drop the W and it’s Skidda (.) and it’s a *sort of* “nickname” (.) a *sort of* “corruption” of Skiddaw.

Examination of each of the tuning devices in the small corpus showed that, in the classroom context, metaphor tuning was usually done by a teacher for students and served the discourse and interpersonal functions of:

- (a) directing students to a particular interpretation.
- (b) adjusting the strength of a metaphor.

These are now described.

Directing listeners to a particular interpretation. In the following citation from 3, the teacher uses the tuning device *sort of* to prevent a metaphor from being understood literally:

4. ... a *sort of* “nickname” (.) a *sort of* “corruption.”

Tuning devices are also used for the reverse microfunction, to prevent a metaphorical interpretation of a statement that was intended to be taken literally. In the following example, the teacher explains the formation of igneous rocks in volcanoes. Students who did not know that rock can literally melt might interpret the word metaphorically:

- 5. ... just imagine rock getting so hot that it *actually* melts.
- 6. ... you can *actually* see the new structure (of rocks).

Tuning devices also serve to indicate the nature of the mapping to be made between Topic and Vehicle. A mapping might involve approximation or comparison, as in the following example:

7. ... volcanic lava is *like* “runny butter.”

Adjusting the strength of the metaphor. Tuning devices are used to tone down the potential strength of a metaphor or mitigate its implications for the students:

- 8. ... *just* “make a little mental note.” (finding apostrophes in a reading text)
- 9. ... can you go back *just* a “whisper.” (dancing practice)
- 10. ... you can’t *just* “let it rip.” (dancing practice)

11. ... it just looks like a *kind of* “*shuffle*.” (boys’ dancing)

They are also used for the opposite effect, to mark metaphors for even greater emphasis, although slightly less frequently:

12. ... we need to *really* “*polish it up*.” (dancing practice)

The markers in the small corpus were part of the teachers’ resources for fine-tuning their talk so that students would understand the intended meaning, both ideational and affective. Metaphor used by itself would be a rather blunt tool, open to misinterpretation or overly strong, in the discourse context of the classroom; the tuning devices enabled teachers to subtly adjust the metaphorical meaning to suit the management or pedagogical function of the moment.

In the next section, we show that the more specific functions of tuning devices in the small classroom corpus were also found, in somewhat more general terms, replicated in the larger corpus.

Tuning Devices in the Large Corpus

Examination of the large corpus showed evidence of tuning devices used to direct interpretation and to adjust the strength of a metaphor, but showed some differences from the small corpus, attributable to the interpersonal context of talk. A further microfunction emerged: to alert interlocutors to unexpectedness or semantic mismatch. We now show examples of each of these.

Directing the interpretation of metaphor. As in the small corpus, the tuning devices in the large corpus appear to serve a range of pragmatic microfunctions, loosely described as offering cues to how the speaker intends metaphorically used language to be interpreted. One difference between the language of the two corpora is that in the mostly adult–adult talk of the large corpus, speakers are less directive, and this is reflected in the use of tuning devices. In the classroom discourse of the small corpus, *imagine* was regularly used by teachers to encourage students to conceptualize an entity in a particular way. In the large corpus, the tuning device *imagine* is very infrequent; in 752 citations of the word form, only 2 are used to direct a listener to a metaphorical interpretation. One of these 2 citations is from a lecturer talking to undergraduate students in a seminar, a situation where a more directive use of language is appropriate.

In the large corpus, the only examples of tuning devices used to direct interpretation are some uses of *like* and *so to speak*. In the following examples, they appear to be intended to point hearers toward a metaphorical interpretation of what follows:

13. Er the more up-welling you have from below the slower your communication between the surface and the deep water. The thermocline is *like* an “*insulating sheet*” separating the two regions.
14. ... but the majority of people I think erm take it “*on the chin*” *so to speak*.
15. It was a difficult department to run because the girls tended to “*run to you for cover*” *so to speak*.

Citation 13 is from advanced educational discourse, and the function of *like* here may be to remind listeners that the metaphor is just that, an aid to understanding not a literal explanation, and that the reality is more complex. In Citations 14 and 15, *so to speak* appears, on the surface, to tell the hearer explicitly that the expression that it tunes is not intended literally. In fact, a literal interpretation, though just possible, is extremely unlikely in these and other citations, including this tuning device in the corpus. On closer analysis, then, the function of *so to speak* seems multilayered, possibly suggesting humor or irony, a metalinguistic comment on the use of metaphor. This is a relatively frequent use of *so to speak*; of the 72 citations in the large corpus, 29 have this function. As a proportion of the citations of *like*, this function is far rarer, but it is difficult to see whether this is meaningful, as *like* is both highly frequent (there are 24,638 citations of the adverbial use alone in the corpus) and multifunctional.

It seems, then, that the use of tuning devices to direct hearers to a particular interpretation, whether literal or metaphorical, was, overall, relatively rare in the large corpus. Where it does occur, it is associated with playful language use.

Adjusting the strength of a metaphor. In Citation 16, the speaker appears to be using the tuning device *actually* to emphasize the meaning of a metaphor that he or she may have judged to be so well-worn that it will otherwise be missed.

16. So you can *actually* “*switch off*” and be in the country.

To appear to suggest that a metaphor should be interpreted literally is a well-attested way of stressing its (metaphorical) meaning, sometimes to comical effect in utterances such as:

17. He *literally* “*went through the roof*.” (with anger)

The use of tuning devices to show tentativeness about the appropriateness of a metaphor is found in the concordance for *if you like*. In Citation 18, “*ambled*” is used metaphorically to describe slow progress, and in Citation 19, “*showered*” is metaphorical. In each case, *if you like* appears to have the function of a token check that the metaphor is acceptable to the hearer.

18. I mean I think that in some ways they had the service on a shoestring in the past and you know it's just "*ambled*" along *if you like*.
19. ... you obviously have to be *if you like* er "*showered*" with French vocabulary.

Alerting interlocutors to the unexpected. In many cases, tuning devices seemed to have a wider function of signalling an unexpected or pragmatically difficult stretch of text. In the following example, the speaker seems to be alerting the hearer to an unexpected interpretation of what follows.

20. Fryer he was the he was er *in a way* our "*midwife*" because he was Secretary of the Agricultural Research Council.

In Citation 20, the speaker is using a word that is a relatively unconventional metaphor. (It is infrequent in the large corpus.) We interpret the hesitation and use of the tuning device *in a way* as signalling the possible awkwardness of this use. It accounts for around 10% of citations for *in a way*.

In the following citation, *actually* signals a literal interpretation and also serves to emphasize that this is unexpected, probably for humorous effect.

21. Right, well I was going to *actually* cook something.

Sort of and *kind of* also seem to have a tuning function and can be used, as in the following citations, to signal that a stretch of discourse coming up may be less than straightforward to interpret. This can be regarded as an attempt to cushion any semantic mismatch between the metaphor and its referent.

22. Monday and Tuesday I'm usually a bit of a vegetable ... and Thursday I'm out in the evening so it's nice having this *sort of* "*island*" in the middle of the week.
23. I suppose that's just the *kind of* "*legacy*" of me having stood on the terraces since I was ten where you become aware of a very tight I mean there's all this crowd going on there's a game going on on the field ...

The latter function, coping with semantic mismatch, is more marked with *in a way*. In the following citation, the metaphor "*rung of the ladder*" is used, and *in a way* seems to signal that the speaker feels the metaphor is a slightly awkward one and appeals to the hearer to interpret it meaningfully.

24. He was looking at sort of liberal attitudes and conservative attitudes and feminist attitudes and I think maybe being able to successfully put a label

and say that it is an ism of one kind again. That's pushing them onto the "next rung of the ladder" *in a way*.

Tuning deliberate and conventionalized metaphors. One of our most important findings was that, in the small corpus, tuning devices seemed to be used with a high degree of sensitivity to notions about the hearers' developing linguistic knowledge, taking account of the fact that they might be unfamiliar with even conventional metaphorical uses. We base this suggestion on the lack of evidence of a direct relationship between the conventionality of a metaphor in an abstract sense and the use of tuning devices around it. Tuning devices were used as frequently with conventional metaphors as with deliberate ones. This was counter to our expectation that less conventional metaphors would be used with more tuning devices.

However, the pattern seems to be different in the large corpus. We examined the concordances for "island," "ladder," and "legacy"—the metaphors tuned in Examples 22, 23, and 24—to see how frequent the metaphorical use was as a proportion of total citations and what proportion of metaphorical citations included tuning devices. Results are given in Table 1.

These examples seem to show a strong relationship between relative proportions of metaphorical use and use of tuning devices. Very few citations of "island" are used metaphorically, and these are almost all tuned, whereas a much higher proportion of citations of "ladder" and "legacy" are used metaphorically, and tuning is rarer. It could be inferred that where a metaphor is relatively frequent, the hearer is less likely to need to be directed to a metaphorical interpretation. In the small corpus, however, teachers are aware that nonliteral meanings, however conventional they are, may present problems to their young hearers and tune the metaphors accordingly.

More research examining a large number of lexical items and looking at context in detail needs to be undertaken to support these suggestions, however, and there may be other reasons why tuning is used or not used in the large corpus. For instance, in citations for "ladder," there is a tendency for metaphorical uses to occur in semifixed expressions such as "climb the ladder," and for "ladder" to be qualified with a term from the target domain, in expressions such as "career ladder." All the metaphorical citations of "ladder" occurred in one or both of these linguistic

TABLE 1
Metaphorical Use and Tuning Devices for "Island," "Ladder," and "Legacy"

<i>Lexical Item</i>	<i>Island</i>	<i>Ladder</i>	<i>Legacy</i>
1. Total number of citations	142	50	20
2. Number of metaphorical citations (% of 1)	6 (4%)	21 (42%)	10 (50%)
3. Number of metaphorical citations occurring with tuning devices (% of 2)	5 (78%)	1 (7%)	1 (10%)

devices, both of which help to signal a metaphorical interpretation. These tendencies were not found for “*island*” and so may provide an alternative explanation as to why its metaphorical use needs more tuning.

The one example in which “*legacy*” is tuned, the aforementioned Example 24, suggests that rather than signalling unexpected metaphoricity, the tuning device *kind of* may signal a shift of register, “*legacy*” being perhaps inappropriately formal for a casual conversation about football. *Kind of* is used in this way in other corpus examples, including 25, where it tunes the metaphor “*dating agency*,” which could be perceived as a little informal for the context.

25. ... there's also erm actual support from from again key people with whom we've made contact over the years through development of of projects and resources. ... Erm so you'll have a you know a close relationship with however many schools it is for three or four years and this sort of process —Right. You also act as a *kind of* “*dating agency*” to match people.

Considering the evidence from both the small and large corpora, what seems to determine whether a tuning device is required, and whether more than one is used, may be the metaphor's “expectedness” in a particular discourse context rather than degree of conventionalization per se. Factors contributing to whether a metaphor might be expected or otherwise include its conventionality, but also the ease with which the hearer will be able to match the Vehicle with the intended Topic, the existence or otherwise of other linguistic clues to interpretation, and its fit with the register of the cotext. This is significant given that a good deal of attention has been given to classifying degrees of conventionality or otherwise of particular metaphors in isolation (e.g., Goatly, 1997). It would seem that conventionality as a decontextualized feature may be subordinate to expectedness, a discourse-related quality dependent on the speakers and the unfolding text.

Use of multiple tuning devices. Studies of the cotext of metaphorically used words in the large corpus showed that co-occurrence of tuning devices around a metaphor is indeed generalizable from the small corpus. In the following example, the tuning devices *sort of* and *as it were* are both used around the metaphor “*chained to*”:

26. ... but when men are *sort of* “*chained*” *as it were* to a female they lead a different life.

In the example used in the introduction, the devices *like* and *sort of* are used before the metaphor “*putting down roots*.”

27. This is where my family grew up and there's a lot of history here and erm so you s it's *like sort of* "putting down roots" here.

It may be that the use of multiple tuning devices accompanies metaphors in particular need of tuning, perhaps because they are particularly strong, unexpected, or open to several interpretations. This hypothesis needs further research.

CONCLUSIONS

Linked analysis of the two corpora has shown that metaphors in talk are often accompanied by words or phrases that serve to alert an interlocutor to unexpectedness in the discourse, to direct his or her interpretation, and to adjust the strength and emphasis of a metaphor. These tuning devices are found in adult–adult and adult–child talk and in a range of genres and contexts of talk. A corollary to this finding is that, given the frequency of tuning, the absence of tuning devices around metaphor in discourse may be significant, suggesting that direct and unmitigated metaphor is being used for some purpose.

Investigating metaphor in contextualized social interaction requires rich data and produces "thick," detailed interpretations. Only a relatively small amount of data can be examined this way. A large corpus offers opportunities to see patterns of metaphor use that are not visible on the small scale. However, in bringing together many examples in a large corpus, much of the detailed information about context of use is lost. It is necessary to recognize that the separation of form from details of use and meaning produces a different object of study, even though we call both "metaphor." By combining a small intensively studied corpus and a large corpus, this study shows how it is possible to build on localized descriptive interpretations of metaphor in situated interaction to explore the wider picture of metaphor in spoken English.

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