

Typicality and meaning potentials

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Dictionaries characteristically give a great deal of information about word meaning, but comparatively little information about word use. In this paper I want to look at both aspects of language and discuss how dictionaries might be different in order to redress the balance.

Important in all this will be the notion of *typicality*. It seems likely that facts about the ways in which words are typically used are at least as important to dictionary readers as facts about the rarer occurrences and wilder possibilities of meaning. If a learner or translator is wondering about how to use a word naturally, a dictionary that holds up strong models of typicality is going to be of much more use than one that explains all sorts of marginal and untypical words and senses. Language teachers tell us that some dictionary users read their dictionaries as if they actually do give information about typical usage rather than possible usage, sometimes with unfortunate results. Comparison of dictionary texts with a corpus of natural language shows that dictionaries do not in fact give much prominence to typicality.

To illustrate the problem, let us look at just one little word, which is not particularly common. It is *hackles*.

A glance at a selection of contemporary dictionaries will show that they contain a vast amount of information about *hackle* as a term in fly-fishing, flax-processing, and medieval headgear, as well as about the erectile feathers on the back of the neck of a cock and the erectile hairs on the back of the neck of a dog. In all of these dictionaries, the meaning of *hackles* concerned with an angry reaction is assigned to a relatively lowly position.

If we turn to the learners' dictionaries, we find that most of them agree that what learners need to know about *hackles* is a) that hackles are the feathers on the back of the neck of a cock or the hairs on the back of the neck of a dog, and b) that there is an idiom associated with this meaning that has something to do with feelings of anger. The dictionaries are not unanimous about the form of the idiom:

1. with his ~ up,
have one's/get sb's ~ up (OALD)
2. have/get one's hackles up,
with one's hackles up (LDOCE)
3. make someone's hackles rise (CULD)
4. make someone's hackles rise (LDEI)
5. raise sb's hackles (ODCIE)

CONCORDANCES TO THE LEMMA HACKLE
FROM THE BIRMINGHAM CORPUS OF ENGLISH TEXTS

=== RES hackle 3

1 GW0120 330 so roosterish, with so much heart, so much cry and hackle and hope -- tuneless. Even as a boy I knew he'
2 GW0249 216 ial - drifting without drag and riding high on the hackle points to simulate the posture of the natural
3 GW0249 232 image of the artificial that is riding high on the hackle points perfectly acceptable to trout that show

=== RES hacked 1

4 GW0221 234 yke.' I walked towards the car and at once the dog hacked up, curling its lip and growling. As I came c

=== E7 hackles 3

5 GW0019 AU BR and were here to stay for a few days' holiday. My hackles immediately rose and I said they couldn't
6 GW0119 BR BR survey the autumn world, and liberal and radical hackles rise, and fresh faces are about, and the
7 GW0019 AU BR en by packs of camp dogs who raced out with their hackles up to tell me and, Diggity to get out of th

=== RES hackles 10

8 GW0221 234 German. To my surprise it immediately lowered its hackles and became quiet, gazing at her almost as tho
9 GW???? 341 wn along her lower jaw appeared to rise in prickly hackles; at no time that evening had she looked so pl
10 GW0123 8 tatesman proposed, who was guaranteed to raise the hackles of Harold ("I can understand the man in the s
11 GW0249 227 slight, irregular drag of this sort that makes the hackles of the wet-fly dressing perform the opening a
12 GW???? 382 l see the light on.' Whatever else might rouse the hackles of her scepticism, she firmly believed in his
13 GW0249 224 the end of the finger and to stroke this onto the hackles or hair of the fly. The same grease can be use
14 GW0124 97 ined by the script and production. To this day, my hackles rise when I hear actors talking about "gettin
15 GW0138 60 one night.' "Nup. No vacancy.' I began to feel my hackles rising. "Then why is that sign on -- VACANC
16 GW0222 151 ndah with Minnie (who fled) and with Bloxsaw whose hackles rose when Tusker in his harlequin disguise em
17 GW0208 205 en two dogs stand growling nose to nose with their hackles up and a bone between them, the chances are t

=== RES hackling 1

18 GW0011 230 broad wooden blade, or with a special "scutcher": "Hackling" is the next step, and consists of dragging

Do these forms of words give good guidance on the typical encoding of *hackles*? To answer this question, we need to look at a large number of occurrences of the word.

At the University of Birmingham by the end of 1985, a corpus of 17.8 million words had been collected, concordanced, and analysed in some detail by a team of lexicographers. For further details of corpus work at Birmingham, see the paper by Jeremy Clear in this volume.

Fig. 1 shows the concordance to the lemma HACKLE in the 17.8 million word corpus. (It should be explained that the left-hand columns give information about the source of the citation and about the nationality of the writer and the publisher.) From the material in Fig. 1, we may pick out the following recurring features as typical, and use them as evidence for some of the conventions associated with *hackles*. The most obvious feature is that the word in current English is typically a plural noun (lines 5–17). This comes as no surprise. How, then, is it used?

1. It occurs strikingly often (eleven times out of thirteen) with a possessive: seven times with a possessive determiner (lines 5, 7, 8, 14, 15, 16, 17), and four times with a possessive qualifier (lines 10, 11, 12, 13). The pattern with a possessive is so strong that it may be more satisfactory to regard 6 and 9 as exploitations of this convention rather than as evidence against it. I return to the subject of exploitations below.
2. It occurs five times in subject position, and these occurrences correlate strongly with: a) a possessive determiner and b) the verb RISE. The type expression, then, seems to be 'My hackles rose'. This is intransitive. It contrasts with the expression 'with one's hackles up', and the various transitive expressions such as 'get someone's hackles up' and 'make someone's hackles rise', preferred by the learners' dictionaries. The point is not that these expressions are wrong or unnatural. It is merely that they do not seem to be the *most typical* forms.
3. If a distinction is made within the semantics of anger between expressions used by speakers of themselves and expressions used to refer to others, *hackles* will be assigned to the former, for 'My hackles rose' is slightly more typical than 'His/her hackles rose'.
4. A person's hackles rising is described as a response to an event mentioned nearby in the discourse.
5. There is weak evidence (lines 7 and 17) that there may be a preference in English to use the expression 'with their hackles up' of dogs rather than people. The 17.8 m word corpus is not large enough to resolve the issue, but it does at least serve to prompt a hypothesis.
6. Finally, lines 2, 3, and 18 point us to two technical fields (fly-fishing and flax processing) for meanings of the types *hackle* and *hackling*, as does line 13 with respect to *hackles*. The evidence for these meanings from a general corpus is weak, but that does not necessarily mean that the convention is weak within its own domain. Probably, it is necessary to set up specialized technical corpora if we are to enquire further into such specialized technical conventions of language. We shall then be faced with the problems of deciding how to represent the relative importance of the specialized corpora in relation both to the general corpora and to one another.

Conventions and exploitations of phraseology in English

What conclusions about lexicographical practice or theory can we draw so far?

Firstly, dictionaries of the future may try to identify and explain each word in its most typical context, in contrast to the traditional practice of listing a citation form such as *hackle*. Dictionaries that offer *hackles* rather than *hackle* as the entry form have taken a first cautious step in this direction.

We should not imagine that this is an issue restricted to a small class of words. It can be illustrated clearly with *hackles*, but almost all words in the language exhibit lexical selection preferences to a greater or lesser degree, preferences which dictionaries give little guidance on. A glance at any dictionary will show that *take* is one of the most complex words, semantically, in the language. Corpus evidence shows that it is also one of the most common, with a wide range of possible direct objects. But if we ask what direct objects are typical, we find, interestingly enough, that the question is not unanswerable. At the level of surface lexical choice, over 15% of occurrences of *take* are accounted for by a choice of direct object from a set of just 18 lexical items (*place, care, part, a look, advantage, a risk, account, action, no notice, steps, an interest, responsibility, the view that, a decision, refuge, a chance, a picture, a photograph*). Moreover, these direct-object preferences correlate with subject preferences: *events* take place; *people* take care.

Turning to the remaining 85% and looking just below the surface, we find that there are three clear groups into which the majority of direct objects of *take* fall: expressions of time, words denoting physical objects, and words denoting persons. Moreover, these three types of direct object in turn correlate with syntactic structures. Once we have dealt with the first eighteen lexical direct objects just mentioned, most of the remaining uses of *take* fall under just three type expressions:

7. An action or event will take/took a particular time.
- 8a. A person took something.
- 8b. A person took another person somewhere.

There are, of course, other patterns, and there are variations on these themes, but these three patterns are noticeably common. Traditional dictionaries fail to capture generalizations of this kind.

If lexicographers are to look for generalizations about typicality, they will also need mechanisms to help them distinguish the typical from the non-typical. A useful notion here is that of *exploitation*, a term borrowed from Grice 1975: 49.

Line 6 in Fig. 1 provides an example of the exploitation of a convention. We have already observed that a lexicographic account of *hackles* will say that a possessive is required. Line 6 is not a counterexample invalidating this observation, nor yet is it evidence for a second, different convention associated with *hackles*. They are evidence, rather, for the way in which the selection preference *hackles*

[N-PL [+ POSS]] has been exploited. The adjectives 'liberal and radical' should be taken as a displaced possessive: a transformation, for rhetorical purposes, of some fuller structure such as 'the hackles of liberal and radical persons'; otherwise the semantic interpretation of the whole runs into serious difficulties.

At this point, we may invoke a lexicographical maxim: namely that, as far as conventionality is concerned, one piece of evidence is no evidence at all. A single piece of evidence can only be evidence for an idiosyncrasy. What is more, repeated evidence from the same source is still not evidence for a convention, but only evidence for the repetitive nature of idiosyncrasy. Lexicographers, like other data gatherers, require confirmation of their hypotheses by evidence from two or more independent sources.

It is, I suggest, the business of a dictionary to record the conventions associated with each word (type or lemma), within whatever limitation of size and scope that are set by principled decision and by practicalities such as the availability of funds and space. It is the business of a theory of communication, not of a dictionary, to show how these conventions are exploited. The two, however, need to be closely linked, both by dictionary makers and dictionary users: more closely than they generally are today.

Of course, in one sense, *every* use of a convention is an exploitation. But in some cases it is the convention that needs explaining; in other cases, it is the way in which the convention is exploited. Just two examples of the latter may be selected from the *hackles* material.

Let us look first at line 9. It is from Patrick White's *The Vivisector*. Looking at the fragment in a wider context, we can see that the image of the hairs on a dog's neck rising is being exploited as a metaphor for the down on a woman's chin standing erect on goose pimples on a cold evening. The character of the woman being described is relevant. She is described as 'plain' and 'frumpish'. She has a 'tight mouth', which is 'disapproving'. In such a context, we may choose to believe that the word *hackles* is being exploited not only for the physical metaphor, but also for its semantic notions of anger or readiness to argue. Whatever the value of this kind of observation, one thing seems certain: it does not belong in a dictionary.

In line 12, there are several effects going on. I will single out one. The corpus evidence, along with the dictionaries, lead us to expect 'raise' where 'rouse' is actually used. In part, it may be that 'raise' and 'rouse' have overlapped semantically in the way that similar-sounding words often do, whether or not they are etymologically related (cf. *flaunt* and *flout*). There is, however, more to it than a mere metaphor playing on the physical elevation of spots of flesh: the verb choice calls into play the semantics of other expressions. A glance at the concordances for *rouse* shows us the following lines, among others:

My mother was a dragon when roused.
It had roused considerable controversy.
The proposal roused fears among the public . . .

This roused her to such a pitch that she began to grunt.
 . . . all his roused moral indignation . . .
 . . . he roused the American people to an outburst of . . .
 He could move quickly when roused to anger.
 . . . many times ere this had been roused to anger against him.

Sinclair (1984) outlines an apparatus for the discussion of the naturalness of fragments of text. In particular, he proposes three parameters: neutrality, isolation, and idiomaticity. The choice of *rouse* in line 12 may not score highly on the scale of idiomaticity, but for precisely that reason it is rhetorically effective, in much the same way that metaphors can be rhetorically effective. Moreover, line 12 contains features that enable us to judge it as typically natural on the parameters of neutrality and isolation. When a writer is exploiting one convention by flouting it, he or she usually observes other conventions meticulously. If too many conventions were flouted at the same time, the results would, no doubt, be uninterpretable. However, the concern of lexicographers with such matters must be mainly to recognize that they are irrelevant to lexicography.

Making typical phraseology explicit in dictionaries

Let us now consider the business of definition writing. (I prefer to call them explanations rather than definitions, for reason explained in Hanks 1979 and elsewhere.) How can *hackles* best be explained, in the light of what has been said so far?

Implicit in every dictionary entry is a connective between the boldface entry word (or words) and the lightface explanation. This connective may perhaps be assumed to be some word such as 'means', 'refers to', or 'denotes', but in standard dictionaries it is never explicitly stated. No consideration seems to have been given to the possibility that there might be different kinds of connection between the two parts, and that the connective might be made explicit. I am going to suggest that making the connective explicit brings considerable benefits. Primarily, it will enable us to identify different levels of information in the appropriate place: lexico-syntactic information on the left-hand side of the connective, and semantic information on the right-hand side. This stylistic device would relieve much of the pressure on lexicographic prose style. For example, it would enable us to word explanations in the manner of 9:

9.

A dog that has its hackles up is one that is angry or ready to fight.		
[explicandum in a context]	[connective]	[explicans, giving semantics]
[left-hand side]	[connective]	[right-hand side]

This is not only more natural in terms of prose style; it also offers better chances of accuracy. It shows how the word is used, not merely what, in isolation, it is supposed to mean.

What problems are encountered in wording explanations in this way? Let us first look at some of the problems with the left-hand side. The main problem here is establishing the right level of generality. Is it only dogs that have their hackles up? Is there an expression of the type "a person has his hackles up", and if so does it mean the same when used of people as when used of animals? Is it natural to say of a dog, "Its hackles rose"? What is the status of "make someone's hackles rise"?

There are no easy solutions to such questions. But evidence from a large corpus, coupled with the inherent ability of natural languages to generalize, will help us to pick forms of words that offer good chances of showing, at an appropriate level of generality, how each word is used. This is surely better than pretending that words exist and have meaning in total isolation.

English dictionaries, from Johnson onwards, tend to be based on naive reductionist Leibnitzian assumptions about the relation between definiendum and definiens. There is assumed to be a simple equation between the two, and the role of the lexicographer is assumed to be to construct a form of words for the second which can be substituted for the first, *salva veritate*. Except in idioms dictionaries, little or no attention is paid to the selection of the left-hand side of the equation: what, precisely, should we select for explanation? It is assumed that dictionaries explain single words, or at most two-word compounds and occasional irreducible idiomatic phrases. This assumption is directly responsible for the contorted style of modern dictionaries. It seems to me that in fact much of the information given by modern dictionaries is given on the wrong side of the equation. That is, it is placed within the definiens, although in fact it is part of the context of the definiendum. Selection restrictions on the direct object of transitive verbs is a case in point. Putting a superordinate direct object in brackets and using funny syntax may salve the lexicographer's conscience, but it doesn't add to the explanatory power, and it doesn't move the information to the right side of the equation.

To illustrate this point, while avoiding invidious comparisons, I will give a couple of examples from a dictionary of which I myself am the editor, namely COLLINS ENGLISH DICTIONARY.

The first is the following sense of the verb *throw* (it is sense 11 in the dictionary, quoted as item 10 in this paper).

10. to be subjected to (a fit).

The point is, of course, that you can say 'she threw a fit' and mean that she behaved in a violent, uncontrolled manner. But the dictionary seems to imply a wider generality than is in fact the case. You can throw a fit, a temper tantrum, a wobbly, or a faint; you cannot throw a piece of bad behaviour, an angry moment, an illness, or any of many other things in the same semantic area. The selection preferences of the verb with words of this semantic class are limited and very strong. It is hard for lexicographers to find ways of making such facts clear, but that does not mean that we should not try.

In the same entry (*throw*) in CED, we find another sense:

11. to cause to fall or be upset; dislodge: *the horse soon threw his rider.*

But *throw* does *not*, ordinarily, mean 'dislodge'. There is a marked selection preference on the subject for 'horse' and another marked selection preference on the direct object for a human referent before it can have this meaning. What is more, these two correlate. Facts of this kind, which linguists began to recognize explicitly over a decade ago, need to be made explicit in future dictionaries.

One way of showing selection preferences would be to state them explicitly on the left-hand side of the equation, making the equation explicit. 12 and 13 give informal examples.

12. If you say that your hackles rose, you mean that you began to feel angry because of a situation that has arisen or because of something that has happened.
13. If you say that a dog did something with its hackles up, you mean that it did it with the hairs on the back of its neck standing up, showing that it was angry or ready to fight.

Explanations like this function as models or prototypes, for the user to exploit according to the standard exploitation rules of the language. If such devices are to be used in dictionaries, the users need access to such rules. They need to know that there are systems of preferences at work in languages. They must, at the very least, know that some lexical choices, in speaking and writing, are more typical than others, that there are others that are infrequent but not necessarily wrong. Other choices do not occur naturally in the usage of native speakers, and can for all practical purposes be deemed wrong. In this scenario, dictionary users treat their dictionaries as offering models for exploitation, not as a decision-making tool enabling them to distinguish everything that is a hackle from everything that is not. Lexicographers must hope that language teachers will give students access to the notion of linguistic preferences from the earliest possible moment, if students are to be able to make proper use of dictionaries that describe the preferential character of natural language accurately. The crude notion of a clear division between correct and incorrect is an enemy of accurate language description.

Private beliefs and public meanings in dictionary definitions

Having considered the type of convention that, in my view, belongs on the left-hand side of the dictionary's implicit or explicit equation, let us now turn to the right-hand side.

It seems less likely that, as readers and hearers, we construct interpretations by 'disambiguating' – choosing from a finite list of possible meanings – than that we *construct* interpretations for ourselves by predicting from context. Inter-

pretations for a lexical item are therefore often predicted before it actually occurs in a discourse. These predictions are confirmed, expanded, or disconfirmed when the lexical item actually occurs. Whether the effect was intentional or not on the part of the utterer is beside the point. A text, once it exists, is privileged.

In interpreting the traces left behind by the perpetrators of printed texts, the reader makes reference to his or her beliefs about what the words used conventionally mean. These beliefs are what lexicographers attempt to enshrine on the right-hand side of their lexicographical equations.

The beliefs are of a special kind. Although they are private beliefs, they are beliefs about what is public knowledge. They are tenaciously held, for they are what each individual relies on, both in interpreting the utterances of others and in constructing utterances of his or her own.

Such beliefs may or may not be well founded. If one is grossly ill-founded, the believer is likely to find out, by virtue of some sort of pragmatic failure. If it is mildly ill-founded, as is no doubt often the case, it may well be that no one will ever know.

The reader does not rely on mutual knowledge, but on a private belief about what is mutual knowledge. Communication can, and often does, fail at the level of detail. At a grosser level, it succeeds because of the colossal redundancy of texts – which of course, in another perspective, gives them massive interpretive potential, and in yet another perspective gives the lexical items in them the quality of predictability which I have already referred to.

Although there is, in every natural language, a public dimension to word meaning, which it is the duty of lexicographers to capture, we have no direct access to it. No amount of data will elicit it, for it is buried in the minds of the individuals who make up the speech community.

Turning again to our example word, we may notice that none of the expressions used in the dictionary definitions of *hackles* – ‘anger’, ‘resentment’, ‘readiness to fight or argue’, and so on – co-occurs with it in any of the texts. Of course not: the term *hackles* was chosen by the writers and speakers who used it precisely in paradigmatic contrast with these other expressions. The choice of *any* word at any point in a discourse raises the question, what is the special contribution of that word to the discourse? Much of what is contributed will depend on the context into which the term is introduced, among other matters. But at core, each term in a language has a particular set of potentials for contributing meaning to discourse. These potentials are what are described in dictionary definitions. If we find a form of words that accurately and informatively captures the potential of a given term, we must not be surprised if the form of words does not substitute exactly for the definiendum in a context: in such a case, we would be in the presence of an *exploitation* of a convention, not merely *use* of a convention.

What we try to do, then, when we write an explanation of what a word means, is to select, from all the many possible statements that could be made about what is not overtly present in the texts before us, a) the form of words that

most accurately captures the special contribution that the word in question is making to the texts before us, and b), even more importantly, the form of words that most accurately captures the special contribution that the word in question *can* make to any text in which it is used. This involves us in saying what we, privately, believe to be the shared public beliefs about the words we are explaining.

It will be readily seen, from this description, what an infinite potential there is for phrasing and rephrasing and discussing and disagreeing over forms of words in dictionary defining. In identifying this kind of convention, and constructing forms of words to capture such conventions, lexicographers are driven to draw deeply on a special kind of private belief: their own private beliefs about what is public knowledge. Forms of words constructed in this way are peculiarly vulnerable to simple denial by other native speakers, who are in a position to say, "Well, I'm a native speaker, and I don't share your belief that this is public knowledge." As fellow members of the language-using public, such deniers have an equal claim to be right. The mere fact of enjoying a passionate conviction that your form of words is accurate does not guarantee its accuracy. And we are all passionately convinced that we use and understand our native language accurately.

One final point about the right-hand side of the explanatory equation: just as a separate corpus is needed to identify patterns of usage in technical language, so separate groups of informants are needed to construct explanations. As Putnam (1975) points out, in assigning meanings to words there is within a language community what he calls "division of linguistic labour". No one member of a language community understands *every* term in the language; some people understand some terms more fully than others, although both deep understanders and shallow understanders can use the same terms for communicative purposes. The implications for lexicography are obvious: if you want an explanation of what a term in physics or economics means, you ask a physicist or an economist, not a linguist or a philologist. Better still, to avoid cabalistic explanations, a lexicographer may choose to play the professional layman in trying to agree on a form of words with a physicist or an economist, so that some balance is struck between accuracy and comprehensibility. As regards the evidence before us, the implication is that we would be unwise to attempt to word an explanation that accounts for lines 2, 3, 11, and 12 of Fig. 1 without consulting a fly-fisherman. From the data, the lexicographer may hypothesize the existence of a technical idiom – "riding high on the hackle points" – but the data does not tell us what this means, i.e. what its special contribution to a fly-fishing text might be. For that, we need to consult a user of the term, not a series of instances of its use.

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