# Mind, Language and Metaphor EuroConference on the Processing of Metaphor and Metonymy – From Computers to Neuropsychology

Granada, Spain, 24-29 April 2004

# Habeas Corpus: direct access, salience, and delexicalisation in corpus-based metaphor studies

Gill Philip
University of Bologna, Italy

#### 1. Introduction

In recent years, the psycholinquistic literature has seen very active debate with regard to the ways in which figurative language is processed (see Ariel 2002; see also Gibbs 2002; Giora 1997, 2002 for comprehensive overviews on the topic). Two of the principal trends offer apparently irreconcilable views on the subject. On the one hand, the direct-access view (Gibbs 1994, 2002) argues that the processing of figurative language does not differ significantly from that of non-figurative language, and that for this reason its treatment as a 'special' kind of language is largely misplaced. Contrasting with this is the graded salience hypothesis (Giora 1997, Giora and Fein 1999, Peleg et al 2001, Giora 2002), in which it is argued that the interpretation of language strings is determined by the degree of saliency of particular elements within that string. As these two views seem so totally at odds with one another, arguing for diametrically opposed approaches to the comprehension of figurative language, it should be stressed that the two frameworks are based on different facets of figurative language. The direct-access view (2.1) focuses its investigations on conventional and familiar idioms and metaphors; these are part of the language user's repertoire, not external to it, and bear a resemblance to single words in that they can be defined as "highly overlearned word sequences that comprehenders have experience with as holistic units" (Titone & Connine 1999:1655). The graded salience hypothesis (2.2) concentrates on the opposite end of the semantic spectrum, focusing its attentions on the strategies employed in the interpretation and contextualisation of unfamiliar expressions which, by definition, do not make up part of the language user's conventional repertoire. That these researchers and their coworkers have come up with apparently irreconcilable differences in their explanations of figurative-language comprehension can be explained by this fundamental difference in focus, as different objects of study are bound to give rise to different results and result in the formation of different hypotheses.

#### 2.1 The direct-access view'

As was mentioned above, the *direct access view* focuses primarily on familiar figurative language, including conventional metaphorical utterances and irony in addition to proverbs, idioms and the like. Gibbs' interest is to ascertain to what extent the pragmatics of an utterance override its compositional meaning in

interpretative processes. As he states:

The *direct access view* simply claims that listeners need not automatically analyze the *complete* literal meanings of linguistic expressions before accessing pragmatic knowledge to figure out what speakers mean to communicate.

(Gibbs 2002: 460)

The *direct access view* prompts a re-assessment of the definition of literal meaning, which is often understood as "context-free, semantic meaning" (ibid: 475). Yet Gibbs notes that literal meaning is not merely what is said but, more importantly, what the implications of the utterance are, with the result that it is reliant on – not independent of – context and pragmatics<sup>1</sup>. In order to interpret an utterance successfully, it must be located in context, as this is the only way to reduce multiple possible meanings to just one – that which the speaker intends.

In recognising the importance of context and pragmatic knowledge for the literal as well as for the figurative, the question is raised as to whether traditional distinctions between these two 'types' of language, and the ways in which they are interpreted, are in fact valid.

Simply referring to some pieces of language as "literal" and others as "figurative", or whatever other tropes may be of interest, does not empirically establish that literal meanings are somehow different than figurative meanings, or are produced and understood by different cognitive mechanisms. (ibid: 474)

In approaching the different language 'types' in the same way, Gibbs is able to show that the same strategies are put into operation in order to understand the intended meaning, irrespective of whether the test item is literal or figurative. It is the context into which the test item is inserted that guides the reader towards the correct interpretation of a language item; thus it can be shown that disambiguation and the selection of meaning is determined largely by context rather than some other element which is inherent in the test item itself. When the test item in question can exist both as a literal sequence and a figurative one (as is the case with many idioms such as 'kick the bucket' or 'spill the beans'), the *direct access view* argues that the literal meaning is not necessarily activated before the reader arrives at a figurative interpretation, because this would not be consistent with the contextual meaning. The *graded salience hypothesis* argues a different case, however, and this is discussed in 2.2.

#### 2.2 The graded salience hypothesis

The *graded salience hypothesis* "posits the priority of salient (coded, context-independent, prominent) meanings" (Giora 2002: 490). In one sense, this approach marks a return to the prominence of context-free meaning, resting as is does on the inherent semantic content of the language items in question. But context does take on an important role in processing:

<sup>&</sup>lt;sup>1</sup> The role of contextual and pragmatic information has long been acknowledged as fundamental for the interpretation of *non*-literal language, but not for literal language (Gibbs 2002: 475).

[T]he graded salience hypothesis assumes that contextual information may affect comprehension immediately. However, such processes do not interact with lexical accessing, but run in parallel.

(Peleg et al. 2001: 176)

What this amounts to is that context reduces the possible meanings of a language item, but does not normally allow that item to take on new meanings, such as the pragmatic meanings that Gibbs is concerned with (Giora 2002:495). The most likely meaning is selected from the range of salient or prominent meanings of the language item, with context guiding rather than directly influencing the selection.

Giora and co-workers argue that salience is all-pervasive, and that the successful interpretation of language items in experimental conditions is determined by the degree of saliency (high-low) of the words or expressions under examination, and not whether they are literal or figurative. In other words, the more familiar certain words are, the more prominent they are likely to be in the mental lexicon; familiarity is related to frequency, and the higher the frequency of a word, the more senses or sub-senses is it likely to have, which in turn increases the likelihood that one which is contextually appropriate can be selected. Although the intended meaning of an unfamiliar utterance cannot be ascertained without contextual clues, context is ultimately secondary to the meaning-selection process as it neither predicts nor contributes to intended meaning but merely limits the possibilities.

#### 2.3 Commentary

Although it is not explicitly stated, the *graded salience hypothesis* accounts for the discrepancies which arise when the *direct access view* is applied to unfamiliar language items (its effectiveness with regard to conventional utterances goes unchallenged). It is interesting to note that just as the *direct access view* focuses its investigations on conventional and familiar figurative expressions, to the exclusion of the unfamiliar, no conventional utterances appear in the test items associated with the *graded salience hypothesis*, which concentrates on unconventional and unfamiliar expressions alone. For this reason, the claims made by both sides must be viewed critically.

It would appear to be the case that, contrary to traditional belief, literal and non-literal language do not in fact behave differently. The perceived differences do, however, seem to apply to the ways in which novel utterances are interpreted, in contrast to the conventional. Unfamiliar and novel figurative language is difficult to understand, as the utterance has to be identified as being non-literal in the first place, before any attempt can then be made to arrive at its intended meaning. Context is undoubtedly valuable to the interpretation process, but the most effective approach is based on most-familiar meanings first, in accordance with the graded salience hypothesis. On the other hand, conventional figurative language poses little difficulty in its interpretation, consisting as it does of learned sequences which are associated with particular meanings. The familiarity of these sequences means that they are interpreted much in the same way as individual words are – their meanings are learned at some prior stage, making them subsequently familiar and accessible to us. Thus an idiom such as 'caught red-handed', once learned, is more readily associated with the figurative meaning (to be discovered in the act of committing some misdemeanor) than the literal interpretation based

on the compositional meaning (to be discovered with red hands). In this case, the role of salience is clearly subservient to the pragmatic function of the word sequence, and here the *direct access view* offers the most plausible explanation to the processes at work.

#### 3.1 Language corpora and the theory of delexicalisation

The *direct access view* and the *graded salience hypothesis* offer alternative accounts for the processes in operation in language comprehension. Both of these psycholinguistic approaches focus on the outward manifestation of mental action, such as reading times and eye movement monitoring. However, an alternative approach to assessing the effects of figurative language meaning can be provided by the use of a large general reference corpus. This lays bare not only the individual occurrence of a language item, but multiple occurrences too, each in their original context of use, making it possible to assess the relationship of an isolated occurrence to a norm – in Saussurean parlance, of *langue* to its *parole* (Tognini-Bonelli 2001:4).

Corpus linguistics places an emphasis on repeated language events in order to ascertain what is central and typical of the use of any given language item when it is used in everyday communicative acts. By being aware of the typical, it is possible to assess the effect of the atypical in an objective manner, with the added advantage that results are replicable and independent of the human subjects' mental states.

Analysis based on language corpora indicates that normal language tends to be more phraseological than compositional. According to Sinclair (1991), the repeated patternings found in typical language use parallel the phraseological patternings of learned word-sequences such as idioms and proverbs, and he coined the term *idiom principle* (ibid. 110) to describe this phenomenon. The habitual co-selection of lexical counters results in the creation of formulaic strings (Wray 2002), or *extended units of meaning* (Sinclair 1996). These need not be 'idiomatic' as such, nor even figurative, but they share a feature typical to idiomatic phrases, namely *semantic bleaching* or, as it is known in corpus linguistics, *delexicalisation*<sup>2</sup>, which can be defined as "the reduction of the independent lexical content of a word, or group of words, so that it comes to fulfil a particular function but has no meaning apart from this to contribute to the phrase in which it occurs." (Partington 1993: 183). The result of delexicalisation is that the compositional meaning of a phrase takes second place to the functional, pragmatic meaning. Delexicalised utterances cannot accurately be described as figurative; on the contrary, they are no longer able to exert their full meaning potential, let alone support secondary meanings. As Gibbs notes (see 2.1), the meaning of such language is largely dependent on contextual cues – in the form of lexical patternings – rather than some internal, innate semantic core.

Louw (2000) develops Sinclair's (1991) view of language as operating alternately within the framework of the *idiom principle* and within that of the *open-choice principle* (ibid. 109), by considering them as extremes positioned at either end of a semantic cline ranging from "full intuitive citational meaning" at one end, through

<sup>&</sup>lt;sup>2</sup> This term was initially used to refer to verbs whose function was structural rather than semantic, such as 'take' in 'take a look' and 'give' in 'give [sb.] a slap'. Delexicalisation is now used in a more general sense to describe any language chunk which is semantically 'washed out'.

to "delexical, phraseological, textual meaning" at the other.

Louw's use of the term *full intuitive* highlights the fact that our intuitive notions of word-meaning tend to favour salient, decontextualised meanings over less salient ones. He posits that these meanings are triggered when words are found in isolation and when they appear in unusual combinations: the more normal the collocation, the more likely it is that the combination will be interpreted as a non-compositional (quasi-idiomatic) sequence, and vice versa (see Table 1).

Cline showing the involvement of collocation in metaphor						
Grammarian's	Symbol	Private	Poetic	Full and	Delexical	Learned
citational		symbolism	imagery	delexical		expressions
examples	Word			metaphors in	Normal	
	"shorn"	Normal	Related	text	collocates	Set
	of collocates	collocates	metaphors act			collocates
		replaced	as collocates	For		
		systematicall	to keep	humorous		
		y by poet,	meaning "full	effect		
		e.g. Plath	intuitive"			
		bald + eyes				

fewer normal full intuitive, collocates citational delexical, more normal phraseological, collocates textual

Table 1. Cline of lexical and delexical meaning (Louw 2000: 15)

When viewed in schematic form, as in Table 1, is becomes apparent that the *direct access view* of figurative language comprehension is relevant to the contextualised pragmatic meanings of the right-hand columns, whereas the *graded salience hypothesis* explains the *full intuitive* meanings in the left-hand columns. These two views do not overlap, but Louw's theory of progressive delexicalisation makes it clear why this is the case, as well as offering a compatible theory which can be used to investigate the full range of figurative language.

#### 3.2 This study

The research upon which this paper is based (Philip 2003) started out as an attempt to understand when, and under what conditions, the connotative meanings of colour words became activated in idiomatic and metaphorical expressions such as 'see red' and 'green with envy'. As the initial hypothesis was that these connotations were not always activated, it became necessary to understand what factors were responsible

for this apparent switching on and off of meaning. There are many explanations in existence which account for the figurative and connotative meanings of such expressions in etymological terms, but none of these contribute satisfactorily to defining their contextualised meaning in a synchronic perspective. The analysis carried out was of a descriptive nature and was entirely corpus-based, drawing on data<sup>3</sup> from the Bank of English corpus<sup>4</sup>. This paper presents the findings of that study, which confirm both the findings of the *direct access view* and of the *graded salience hypothesis*, but find their best account within the framework provided by the *theory of progressive delexicalisation*.

Using a corpus to analyse language illustrates the extent to which intuitive beliefs about meaning contrast with the reality of language *in rebus*. As far as phraseological sequences are concerned, it can be surprising to observe that there is nearly as much fixity outside the boundaries of the phrase as there is within it. This regularity in the context corresponds to the *extended unit of meaning* mentioned in 3 above, and is to be considered as part of the overall selection of the phrase in question. The extent to which the context affects meaning can be observed in a concordance program, as the regularity that is normally hidden from view is laid bare. The case study in 4 below demonstrates that context makes a significant contribution in determining language choice and delimiting meaning, both in regular, canonical instances of figurative language, and in creative exploitations of them in deliberate word-play.

## 4. Case study: catch red-handed

Is the adoption of the phrase 'to catch somebody red-handed' driven by a desire to use metaphor, or is there some other reason governing its use? Taking as a point of departure the Hallidayan notion that language should be based on a theory of meaning as choice (1992:15), it can be postulated that the choice of the expression 'to catch somebody red-handed' is made in the context of a paradigm which includes such expressions as 'to catch somebody in the act' and 'to catch somebody in flagrante delicto'. Whether this selection is conscious or otherwise cannot be answered by the corpus data; what can be addressed are the factors that make to catch somebody 'red-handed' more appropriate than to catch somebody 'in flagrante delicto' or 'in the act' in a given context.

'Red-handed' can be defined synthetically as follows:

#### Red-handed, a.

- i. In the very act of crime, having the evidences of guilt still upon the person, esp. in phr. to take, or be taken, redhanded....
- **b.** Fresh from the commission of murder or homicide; having the hands red with blood...
- **c.** That sheds or has shed blood; bloody, sanguinary, violent. ...

(The Oxford English Dictionary; see Appendix1 for full entry)

The definition suggests that the collocation appears with the verb 'take', reflecting the etymological origins of

<sup>&</sup>lt;sup>3</sup> 65 figurative colour-word expressions in English and those near synonyms which displayed similar phraseological patterning.

<sup>&</sup>lt;sup>4</sup> The University of Birmingham/ HarperCollins

the phrase; this contrasts with other definitions of the phrase, including Moon (ed.) 1995, which give 'catch' as the typical collocating verb. In the data studied, 175 of the 191 occurrences of 'red handed' occurred with the verb 'catch'. The metonymical motivation for the central collocation 'red-handed' is made explicit in subsenses b and c, and, taken together, the definitions suggest that the phrase is used when an individual is caught perpetrating some bloody, violent crime. No information is given explain the relationship holding between the expression and the events it is used to describe, nor what governs its selection in preference to a near-synonym such as 'to catch somebody in the act'. This information can, however, be discovered in corpus data.

Looking closely at 'to catch somebody red-handed' in the corpus (Appendix 2a), it can be observed that those who are 'caught red-handed' are usually criminals (e.g. 'thief', 'culprit', 'bandit', 'poacher', 'drug syndicate member'), typically being caught with illegal drugs or weapons, or carrying out acts of fraud or theft, all of which are easily identifiable as acts of criminal behaviour. Alternatively, they are individuals – usually of high standing (e.g. 'high-echelon public servant', 'the future king') – who are found to be behaving inappropriately or illegally. It is interesting to note that none of the examples found make any mention of murder, despite the fact that this pre-eminent criminal act lies at the origins of the verbal expression. The implications of this significant omission are that the historical origins of the phrase are no longer perceived as relevant to its pragmatic meaning.

Moving on to a near-synonym of this phrase – 'in flagrante delicto' (in the act of the crime) – a similar dislocation of etymological and pragmatic senses can be found. Its etymology belies the fact that this expression is used to talk about illicit sex, which is not a crime as such but merely a particular kind of morally questionable behaviour. Furthermore, traditional descriptions do not reveal what language users – as attested in the corpus data – apparently know all too well: that the use of the expression almost invariably involves people of relatively high social standing ('headmaster', 'celebrities', 'famous businessman') having illicit affairs with others of lower social standing, such as 'women of ill-repute', 'mill-girls' and 'guardsmen'. (see Appendix 2b)

When we compare these two phrases in use, we find that it is their contextual preferences that distinguish one from the other, making them mutually exclusive: only 3 of the 191 occurrences of 'red-handed' carry any implication of sexual behaviour, and of the 23 occurrences of 'in flagrante delicto' which involve human subjects, not one refers to anything other than sex. This fact lends overwhelming support to the notion that context, rather than etymology, motivates the choice of one expression over another in discourse.

A third phrase which belongs to the same paradigm those already discussed is 'catch somebody in the act'. At first glance, this phrase appears not to attract lexical and semantic fixity to the same degree as the others. However this apparent flexibility is due to the incompleteness of the phrase. A random selection of concordance lines (Appendix 2c) shows that the most frequent collocate following the phrase is 'of' – 'to be caught in the act of...' (Appendix 2d) – and it requires an action: not any action whatsoever, but a crime or otherwise unacceptable action, for example, 'stealing', 'pillaging', 'adultery'. This action is specified as an extended part of the lexical group rather than being semantically inherent to the shorter phrase, and it is this

need for specificity and completion that distinguishes 'caught in the act' from the other two, more idiomatic expressions. Once the action is specified, however, its flexibility is restricted by the contextual patterning. Table 2 summarises the types of participants being caught, alongside their actions, as an established set of participants can be identified for each of the actions, just as they can with the idiomatic phrases given above.

participants						
red-handed	in flagrante delicto	in the act (of)				
thief	businessman	rocks				
culprit(s)	headmaster	stars				
gangs	senior officer celebrities	welfare mothers				
criminals	members of the upper class	husband				
killers	wife	politician				
robbers	ex-boyfriend	students				
man		scientists				
workers		criminals				
members		thieves				
		vandals				
actions						
red-handed	in flagrante delicto	in the act (of)				
leaving	found	pillaging				
running	caught	stealing				
taking	discovered	filming or photographing				
carrying	photographed	some terrible misdemeanour				
laden		receiving 'male visitors'				
trying to smuggle		incendiarism				
bombing						

Table 2. Comparison of 'red-handed', 'in flagrante delicto', and 'in the act'

As a meaningful unit in current English, 'caught red-handed' has no relationship whatsoever to the original meaning (which can be glossed as with blood on your hands'). It is not used in the context of serious physical injury, murder or other bloody death, even though such a context would be literal and as such plausible and possible. Instead, we find it referring to theft and illegal dealing in drugs and arms, which are not generally bloody activities. More importantly, perhaps, it is used when the crime is being committed, or about to be committed, but never when it is a *fait accompli*; so even if the crimes were to have been bloody, the blood would not yet have appeared on the scene. If we take these facts of the term's usage into account, we are forced to acknowledge that the metaphor's imagery is incompatible with the events it is used to describe. 'Catch red-handed' is not selected for its image but for its meaning – its pragmatic function – and the choice of this expression can be contrasted with the contextual conditions necessary for the choice of one of its near synonyms. Even though the metaphor is active and produces an image in a *full intuitive* context, when it is used in a communicative linguistic context, the function and pragmatic meaning override the imagery to produce a delexicalised string which is processed as a non-decomposable meaningful whole, with its own discrete semantic value.

#### 5. Catch red handed: creative exploitation and relexicalisation

Not all language use is conventional. Language users are creative, and they bend and twist the conventional to suit their communicative purpose. The extremes of this are highly visible in newspaper headlines and the like, where fixed phrases provide a structure upon which deliberate puns can be coined. To illustrate this point, let us examine some variant forms of the original phrase examined – 'red-handed' – and observe what happens to meaning as the utterance departs from its conventional form.

It is rare for language users to deviate notably from canonical forms and their co-selected contextual patterning. The data source used as the basis of this study, comprising 450 million words of running text, yielded only 3 variants to the phrase 'red-handed'5. These are reproduced in Appendix 3, along with a further 10 examples which were found through an additional search engine 6 using the Internet as the data source.

Despite the variation found to the canonical phrase, the variant forms still refer to the kind of crimes that the canonical version typically describes – robbery, shooting, vandalism and the like. The structure is familiar enough for this meaning to be conveyed, although there is a novel element to be incorporated into the overall interpretation. The variants make it necessary to seek some reference in the context to explain the modification of the canonical phrase. Thus it is a 'flasher' who is caught 'red-cock-handed' (literal, *full intuitive* meaning), a 'hi-fi thief' who is caught 'scarlet handed' (reference to pop band Simply Red, again a literal meaning), and Mr Green is caught 'scarlet handed' with Miss Scarlet (pun on name which, being a shade of re, yet again trigger a *full intuitive* meaning). These contextual clues allow us to select the intended meaning of the new word in the phrase, in accordance with the *graded salience hypothesis*, whereby the context indicates which of the possible meanings is most likely to be the one intended. The examples cited all give these clues in the immediate context; some others require several sentences of context, or even a whole article, before the source of the colour relevance is ascertained. This is especially true when the phrase is found in the title of an article or in a newspaper headline.

In some cases, the phrase retains its canonical form but is located in an atypical cotext. This cotext is recognisably different from the normal cotext because it draws attention to part of the (normally delexicalised) phrase. The effect is rather like a palimpsest, as there is are different readings to be made simultaneously at more than one level. Innovation reverses the delexicalisation of the phrase by forcing it to go through a process of decomposition and re-composition (re-lexicalisation), which allows contextually-relevant meanings of the component words to be activated, when in a delexicalised string they would remain latent?

<sup>&</sup>lt;sup>5</sup> This figure does not include variation to the verb 'catch', but only those variations which changed or supplemented the meaning of the core collocation – identified as 'red-handed'.

<sup>6.</sup> Search carried out on Google 19/iv/2004. Terms searched: [black/ white/ blue/ green/ yellow/ grey/ gray/ brown/ purple/ orange/ pink + handed] and [scarlet/ crimson/ vermilion + handed].

<sup>&</sup>lt;sup>7</sup> This semantic 'latency' is what Gernsbacher and Robertson (1999) interpret as the suppression of meaning. I would argue that, rather than being *suppressed*, meanings are *latent*, only being activated when the cotextual environment is favourable.

#### 6. Conclusions

The data discussed so far have demonstrated that the *direct-access view* and the *graded salience hypothesis* each explain adequately the factors operating in the interpretation of particular types of figurative language (conventional, learned and familiar, versus unconventional, innovative and unfamiliar respectively). But what of the language that occupies the middle ground, that which is neither wholly conventional nor particularly inventive? Those units that are known as 'fixed expressions' can and regularly do undergo variation to their form. These variations range from changes which do not compromise the meaning conveyed, such as minor changes to the syntactic structure and substitution of one term for a synonym, and pass through a cline of lexical and grammatical variability which ultimately peaks in deliberate word-play, which is a noticeable, though somewhat infrequent linguistic phenomenon.

Language is a mixture of the innovative and the mundane, and most phraseological variation belongs to the latter grouping – it is unremarkable and operates at a very simplistic level. It is difficult to find and gather together examples of common-or-garden variation precisely because it tends to go unnoticed, thus linguistic research focuses on the accessible – the delights of puns and other word-play on he one hand, and the repeated patterns of canonical forms on the other. By ignoring the middle ground, and overlooking the fact that most variation is fairly innocuous, the artificial distinction between different 'types' of language is maintained. The two extremes must be accounted for as two ends of a continuum, not as watertight and autonomous categories of language which bear no relation to one another.

Returning to the phrase 'catch red-handed', it can be noted that this phrase permits very little variation. It was mentioned in 4. that only 10 examples involving variant colours was found on the entire World Wide Web, so it should come as no surprise that the corpus data yielded only five occurrences of the canonical phrase with an alternative to the verb 'catch', all of which are clearly synonyms – 'nab' (2), 'apprehend' (2), and 'find'(1). Other phrases appear to be more flexible (see Philip 2000), and it is difficult to predict with any certainty what kinds of phrase are most likely to undergo variation. The existence of near synonyms displaying similar phraseological characteristics, as in the case study presented in this paper, may well be a factor which limits the degree to which variation to the phrase can be tolerated. Other factors are doubtless connected with the pragmatics of everyday communication – trends, in-talk, politics and suchlike. However further investigations must be carried out in order to lend weight to these hypotheses. Yet it is the precise point at which normal variation becomes marked variation, where the trend towards delexicalisation is halted or reversed, which must be looked at more closely if any real understanding of figurative language is to be reached. It may well prove to be the case that traditional divisions between literal and non-literal language have been misguided. The evidence presented here already suggests that the differences lie elsewhere, being found along the cline connecting the innovative and the conventional.

#### References

Ariel, M. (2002) "Introduction." Journal of Pragmatics 34, 345-348.

Gernsbacher, M.A. and R.R.W. Robertson (1999) "The role of suppression in figurative language comprehension" *Journal of Pragmatics* 31, 1619-1630.

Gibbs, R. W. (2002) "A new look at literal meaning in understanding what is said and implicated." *Journal of Pragmatics* 34, 457-486.

Gibbs, R.W. (1994) The Poetics of Mind. Cambridge: Cambridge University Press.

Giora, R. (2002) "Literal vs. figurative meaning: Different or equal?" Journal of Pragmatics 34, 487-506.

Giora, R. (1997) "Understanding figurative and literal language: The graded salience hypothesis." *Cognitive Linguistics* 8, 183-206.

Giora, R. and O. Fein (1999) "On understanding familiar and less-familiar language" *Journal of Pragmatics* 31, 1601-1618.

Halliday, M.A.K. (1992) "Language Theory and Translation Practice". *Rivista Internazionale di tecnica della traduzione* 1, 15-25.

Louw, W.E. (2000) "Some implications of progressive delexicalisation and semantic prosodies for Hallidayan metaphorical modes of expression and Lakoffian 'Metaphors We Live By'". Functions of Language 4, 1-35.

Titone, D.A. & C.M. Connine (1999). "On the compositional and noncompositional nature of idiomatic expressions". *Journal of Pragmatics* 31, 1655-1674.

Tognini-Bonelli, E. (2001) Corpus Linguistics at Work. Amsterdam: John Benjamins.

Peleg, O., R. Giora and O. Fein (2001) "Salience and Context Effects: Two Are Better Than One" in *Metaphor and Symbol* 16 (3-4). 173-192.

Philip, G. (2000) "An idiomatic theme and variations". In Heffer, C. and Sauntson, H. (eds.) Words in Context: A Tribute to John Sinclair on his Retirement. English Language Research Discourse Analysis Monographs no. 18, Birmingham University, Birmingham, 221-233.

Philip, G. (2003) Connotation And Collocation: A Corpus-Based Investigation Of Colour Words In English And Italian. Unpublished PhD thesis, The University of Birmingham (UK).

Sinclair, J. M. (1991) Corpus, Concordance, Collocation. Oxford: Oxford University Press.

Sinclair, J. M. (1996) "The Search for Units of Meaning" in *Textus* IX (1), 75-106.

Wray, A. (2002) Formulaic Language and the Lexicon. Cambridge: CUP

## red-handed, a.

- 1. In the very act of crime, having the evidences of guilt still upon the person, esp. in phr. to take, or be taken, redhanded.
- App. First in Scott: the older Sc. phrase was REDHAND. **1819** Scott *Ivanhoe* xxv, I did but tie one fellow, who was taken redhanded and in the fact, to the horns of a wild stag.
- **1857** G. IAWRENCE *Guy Liv. iv*, The fact of the property being found in our possession constituted a *flagrans delictum* we were caught 'red-handed'. **1893** EARL DUNMORE *Pamirs I.* 306 A notorious thief was caught red-handed in the act of breaking open a lock.
- **b.** Fresh from the commission of murder or homicide; having the hands red with blood.
- **1861** *Reynolds' Newsp.* 24 Nov., Call a drum-head courtmartial, and hang the murderer red-handed! **1885** MABEL PEACOCK in *Academy* 10 Oct. 239/3 When Abel in thine arms lay dead, And Cain red-handed turned and fled.
- fig. **1878** Bosw. Smith *Carthage* 175 While Hamiltan was returning redhanded from his desperate victory.
- **c.** That sheds or has shed blood; bloody, sanguinary, violent.
- **1879** TOURGEE *Fool's Err.* (1883) 16 He had hitherto been a red-handed slayer of men! **1894** CROCKETT *Raiders* (ed. 3) 38 The evil gypsies of the hill red-handed men.

## **red handed, red-hand,** a. and sb.

**A.** adj. **1.** Sc. (orig. Law). = redhanded **1**. (common in 16th c.)

**1432** *Sc. Acts Jas, I*, c. 2 Gif he may be ouretakeys he salbe put in sikkir festines quil *Pe* law be done on hym .. Ande be it red hand it salbe done win Pat sonne. **1535** STEWART Cron. Scot. III. 274 That samin carle .. Come the thrid nicht,... To steill the irnes, and wes tane reid hand. Reg. Privy Council Scot. Ser. 1. III. 346 The said justice and warden sall tak na mannis tennent or servand for executing of justice upon him, except he be tane reid-hand. **1678** SIR G. MACKENZIE Crim. Law 136 If he be not taken red-hand the sheriff cannot proceed against him. **1700** in Hector Judic. Recs. Renfrewsh. (1876) 188 Taken red hand with soume small goods a little from the house. **1768** ERSKINE Inst. Law Scot. II. iv §4 The case where the murderer is seized red-hand or in the act. **1881** Mrs. Walford *Dick* Netherby vii, We'll tak' the hoos I' the flank, an' catch the twa o' them reid-hand.

## Appendix 2a: 25 random concordance lines: CATCH red-handed

reports that `25 motorists who were caught red-handed by traffic-men in the Corniche while practising A prominent Chart Thai supporter was caught red-handed in a house stacked high with small-denomination ponsible". The gang was finally caught red-handed in an armed police ambush in September 1992 as t tion. PC Stephen Margiotta, 41, was caught red-handed on a secret video camera installed at Romford, E ve deterrent. `Before we had to catch them red-handed raiding the nest," he said. `Otherwise once they n his allotment shed to catch the culprits red-handed. But instead of finding vandals during his v sh Province who time and again were caught red-handed as they were driven back by a more powerful and is tricky - unless the thieves are caught red-handed. Even if they are caught, they are lightly r ces Minister Glen) came out and caught him red-handed with his brush and tin. A special Inner meet # and I ended up catching the future king red-handed with his mistress. The house was in darkness operation aimed at catching whale-killers red-handed. Australians and New Zealanders have reason to t aste of time and money, when you're caught red-handed with the chicken in your hands, so to speak. this morning after allegedly being caught `red handed" with 200g of marijuana. Borallon general ma H: Two 17-year-old youths have been caught red-handed trying to place1000 illegal bets in a sting whic achlan had to resign because he was caught red-handed trying to fit up a Minister for something that h h. <b> VINE T </b> A bandit was caught red-handed, ran way, was captured, and then threw himself t ather than an embezzler and a thief caught red-handed. Modern banking was legitimised. Unlike front. He ran out and caught the boy `red-handed". I didn't hit him hard. Mr Sorgel said. light and believed she'd caught a culprit red-handed. As a head came out of the pipe, she grabbed EVISE # Page # 23 Caught painting town red-handed By PETER HANSEN HIDDEN cameras planted on Brisba garden wall to steal apples and was caught red-handed by the owner, George Bernard Shaw. The playw g operation. The Americans were caught red-handed and five were expelled. As a result, the who they had seized from PRI officials caught red-handed. Or is sticky-fingered? The sweets had a gre nd eventually catch drug syndicate members red-handed. The man has produced documents which show p ally taking six days. You've caught us red-handed." a spokesman said. Our typists put in a wor

## Appendix 2b: 25 random concordance lines: CATCH in flagrante delicto

raph PA News 1 <h> The List </h> IN FLAGRANTE DELICTO: Howard Hughes and Bette Davis were caught papers about the headmaster being caught in flagrante delicto with, how shall I put it, a woman of ill-r nothing better than catching celebrities in flagrante delicto just ask EastEnders star Gillian Taylforth the famous businessman found by his wife in flagrante delicto. What can I do to make it up? Woul the famous businessman found by his wife in flagrante delicto. `What can I do to make it up? Would y the famous businessman found by his wife in flagrante delicto. What can I do to make it up? Woul leniency shown to a senior officer found in flagrante delicto in the car park at Roma Street headquarter ained fame this year when she was caught in flagrante delicto with British actor Hugh Grant during a cut it at the time. My woman has often said, in flagrante delicto, `Tell me what it's like. What does it claim to have seen Caroline and Pergami in flagrante delicto on a sofa was too frightened to come to Lo e for maths is that Mrs Nobel was caught in flagrante delicto with a mathematician. It's an intriguing n to, but he wrongly thought he caught her in flagrante delicto with an old boyfriend, Leonardo, because s dog, a German shepherd. She caught them in flagrante delicto." What, the record guy and the dog?" s ot leave Carl there and then, discovered in flagrante delicto as we were, and go off and live with him i econdly, the man had caught young Gordon in flagrante delicto with one of the mill-girls; there had been unds that his wife had been photographed in flagrante delicto. In other words, she thought, we were caug ith one Lambert Plaidy; being discovered in flagrante delicto by Sir Edwin, and in the Rice family fourou've caught your father and brother <f> in flagrante delicto, <f> shall we say, it makes it awkward for in `Birds of America" showed three jays `in flagrante delicto", stolen egg in beak. Yet the handsome cre nerators, he has not yet caught a circle in flagrante delicto. Such failure is hardly news among the ime motets who killed his wife and lover in flagrante delicto. Mr Bletschacher was amazed by the spe experiences. Ruby's father is discovered in flagrante delicto in the backyard while family and neighbour When Alicia finds Vanessa and Fergus in flagrante delicto on the college high table, she decides to ogical, if Ms March and Mr Leung are not in flagrante delicto then it's as near the knuckle as makes no members of the upper class being caught in flagrante delicto (on the job) with guardsmen in the public

## Appendix 2c: 25 random concordance lines: CATCH in the act

cover on a cookery course in Co Kildare to catch an adulteress in the act amid the rising tons of the stuff before we could arrive and catch them in the act. What the early Spanish </hl> <subh> Switched on - Molecular cages catch genes in the act </subh> <bl> By LILA again so they <ZF1> could <ZF0> could actually catch them in the act you know I thought No way I'm luck than by design because it is difficult to catch the criminals in the act, Dr Pyle said. plan to extort money from Joy and, if he was, catch him in the act? On November 3, Chertoff The rape crisis controversy, tic talk, and catching warts in the act. By James Le Fanu Trial recorded on camera, meaning the offenders were caught in the act. But they were never arrested. came to rotate so fast. Now they have caught one in the act of being spun CAMBRIDGE, location in Italy to film the pasta actually caught in the act of growing. Not to be outdone (or movies in, say, The Pretty Stenographer; or, Caught in the Act: New York studio - 26 feet - An into the woodwork." Are you a member of Caught in the Act?" Marsha asked the newcomer. from committing the perfect crime, he'd been caught in the act, said Mr. Bevan, leaving behind by 25 per cent. <h> Science: Airborne elves caught in the act </h> <b> By BOB HOLMES </b> My Soul - Modern Talking 10 Baby Come Back - Caught In The Act Australia 1 Never Ever - All s cheeks when she relives the moment she was caught in the act on a sun-lounger in Cuba! Karen, a or lewd and libidinous behaviour -- if she was caught in the act. A spokeswoman said: `It might with police. Some were armed looters caught in the act; others died in a crossfire of how hard you listened for it could never be caught in the act. Once He looked at me through the me that young man you were brought in with was caught in the act with the weapon still in his Barrie Goulding, maker of the £10.99 video Caught in the Act, said yesterday he wanted to fuel features included first-person experiences, caught-in-the-act" security video-grabs and coverage s highly controversial CCTV video compilation Caught in the Act! went on sale yesterday. mps and What could look cooler than our Neon Cat Lamp caught in the act of slinking across your bedroom, Federal District police who claimed to have caught them in the act of rape and sexual assault of

program.34 States staged `midnight raids" to catch welfare mothers in the act of receiving `male have begun to perform experiments designed to catch the human brain in the act of `seeing", or in says that in the future it may be possible to catch the rocks in the act of moving. But this will will peer into the dust of distant nebulae to catch stars in the act of forming; it will examine sheries officer John Ellis said: `You need to catch them in the act of actually stealing. Anyone that have planets in the right plane, and catching the planets in the act of passing in front was the personification of Shearer's tirade, caught in the act of helping himself. It was an the first time a galaxy-sized thing has been caught in the act of forming," said James Gunn, a would not be quilty of a crime unless he were caught in the act of filming or photographing a dollars for the apprehension of any soldier caught in the act of incendiarism. Though Slocum into her purse and gazed across the room. Caught in the act of watching them, the blonde dictated that it would be a big mistake to be caught in the act of climbing up the wooden arms by to keep what he had seen to himself: he had caught her in the act of rolling down the little red over 14,000 copies. Security officers caught some students in the act of stealing, but no unlikely name of Milky Boy. Mojammed Jan was caught in the act of stealing, and one of his men Want some nice examples of famous scientists caught in the act of trying to have things both was accidental. Perhaps the theropod was caught in the act of pillaging a nest of eggs. of the educational process, that, if you are caught engaging in the act of, you will be punished. o Camera was slim, young, and had indeed been caught in the act of turning: a handsome profile, like betraying himself. However, having been caught in the act of stealing he had to rethink his sexual script makes it easy for a man to get caught up in the act of performing. At the same oticed nothing? She felt like a naughty child caught in the act of some terrible misdemeanour. The Wilson, said: `John was shot and killed while caught in the act of committing a hot-prowl ail's idea of paradise. A prominent Labour MP caught in the act of not practising what the party sober for life, a dedicated reform politician caught in the act of being human in a milieu where Federal District police who claimed to have caught them in the act of rape and sexual assault of

## Appendix 3: variant forms of CATCH red handed