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Colour in English

From Metonymy to Metaphor

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Abstract

Colour words abound with figurative meanings, expressing much more than visual signals. Some of these figurative properties are well known; in English, for example, *black* is associated with EVIL and *blue* with DEPRESSION. Colours themselves are also described in metaphorical terms using lexis from other domains of experience, such as when we talk of *deep blue*, drawing on the domain of spatial position.

Both metaphor and colour are of central concern to semantic theory; moreover, colour is recognised as a highly productive metaphoric field. Despite this, comparatively few works have dealt with these topics in unison, and even those few have tended to focus on Basic Colour Terms (BCTs) rather than including non-BCTs. This thesis addresses the need for an integrated study of both BCTs and non-BCTs, and provides an overview of metaphor and metonymy within the semantic area of colour.

Conducted as part of the Mapping Metaphor project, this research uses the unique data source of the *Historical Thesaurus of English* (HT) to identify areas of meaning that share vocabulary with colour and thus point to figurative uses. The lexicographic evidence is then compared to current language use, found in the *British National Corpus* (BNC) and the *Corpus of Contemporary American* (COCA), to test for currency and further developments or changes in meaning.

First, terms for saturation, tone and brightness are discussed. This lexis often functions as hue modifiers and is found to transfer into COLOUR from areas such as LIFE, EMOTION, TRUTH and MORALITY. The evidence for cross-modal links between COLOUR with SOUND, TOUCH and DIMENSION is then presented. Each BCT is discussed in turn, along with a selection of non-BCTs, where it is revealed how frequently hue terms engage in figurative meanings. This includes the secondary BCTs, with the only exception being *orange*, and a number of non-BCTs. All of the evidence discussed confirms that figurative uses of colour originate through a process of metonymy, although these are often extended into metaphor.

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Abbreviation List

BCC Basic Colour Category

BCT Basic Colour Term

BNC British National Corpus

BoE Bank of English

BYU Brigham Young University

COCA Corpus of Contemporary American English

HT Historical Thesaurus of the Oxford English Dictionary

MIPVU Metaphor Identification Procedure (Vrije Universiteit)

MM Mapping Metaphor with the Historical Thesaurus project

OED Oxford English Dictionary

UE Universals and Evolution model

1 Introduction

After 40 years of research at the University of Glasgow, the completion of the *Historical Thesaurus* (HT) database, published as the *Historical Thesaurus of the Oxford English Dictionary* (Kay, Roberts, Samuels and Wotherspoon 2009), has made it possible to systematically map the development of metaphor in English. Meanings are arranged in a unique classification of semantic categories. The AHRC-funded Mapping Metaphor with the *Historical Thesaurus* project utilises this complex hierarchical system to identify potential metaphorical links through lexical overlap between distant thesaurus categories. The focus of this investigation is on the categories of colour, and it will trace links with other areas of meaning.

Both metaphor and colour have attracted a lot of interest in Cognitive Linguistics and consequently there is a large literature dedicated to each topic. Studies that look at the figurative meanings of colour, however, are comparatively fewer in number and focus on a small selection of colour terms. This is despite the fact that colour lexis is full of figurative meanings, both as a source and target.

I contribute to addressing this gap by carrying out an investigation of the colour domain in English. There are four data chapters in this thesis. Chapters 4 and 5 analyse the metaphorical language surrounding colour that is not bound to individual hues and turns attention to some of the less-studied, but fundamentally important, aspects of colour: saturation, tone and brightness. A lot of lexis in the colour domain has been borrowed through processes of metaphor and metonymy, and is often used to qualify hue terms. Chapter 5 is dedicated to the special case of cross-modal language, often described as synaesthetic metaphor, and traces the linguistic evidence for the ways colour perception is connected to the other senses of taste, smell, sound, touch and dimension (see Section 5.1).

The figurative meanings of phrases containing individual colour terms are discussed in Chapters 6 and 7. While most previous research has focused on the most salient hue terms, each basic colour term along with a selection of non-basic colour terms will be analysed here. The primary BCTs (*black*, *white*, *red*, *green*, *yellow* and *blue*) are presented in Chapter 6 and the secondary BCTs (*brown*, *purple*, *pink*, *orange* and *grey*) and selection of non-BCTs are presented in Chapter 7.

The current study is situated within the Mapping Metaphor project, drawing on its core methodology, while also employing further analysis, including corpus analysis within the *British National Corpus* (BNC) and the *Corpus of Contemporary American English* (COCA). Although this study offers a diachronic perspective it focuses more heavily on modern evidence. While the lexicographic element of the study can reveal the original motivations behind the figurative uses of colour, comparing them with current language use shows whether a metaphoric or metonymic mapping is a live one. Corpus evidence also reveals developments in meaning, prompting discussion on the ways metaphor and metonymy interact within the domain of colour.

2 Literature Review

This thesis analyses figurative senses of lexemes in the semantic area of colour in English. This review begins with an overview of conceptual metaphor and metonymy along with the notion of the semantic domain. The field of colour studies is also discussed, starting with some of the controversies of colour research and moving on to the figurative use of colour. Finally, some of the methodologies used by researchers in the areas of metaphor study are presented, from more historical, dictionary-based approaches, to the use of corpus linguistics.

2.1 Conceptual Metaphor and Metonymy

The following sections discuss the topics of metaphor and metonymy in Cognitive Linguistics, and the role the semantic domain plays within this framework.

2.1.1 Conceptual Metaphor

Metaphor is a cognitive mechanism that involves "understanding and experiencing one kind of thing in terms of another" (Lakoff and Johnson 1980a: 5). For centuries metaphor was considered to be a figure of speech, being taken as a matter of special language that is both conscious and deliberate. Literary, or creative, metaphors are manipulated by authors to create a particular effect on a reader or listener. Figurative expressions were thought to be "fancier ways of saying some things that could be said in literal, simple ways" and so were dismissed as being uninteresting and irrelevant by most researchers (Kövecses, Palmer and Dirven 2002: 138). As summarised by Lakoff:

If you have something to say, you could presumably say it straightforwardly without metaphor; if you chose metaphor it was for some poetic or rhetorical purpose, perhaps for elegance or economy, but not for plain speech and ordinary thought. (Lakoff 1986: 215)

Lakoff and Johnson's *Metaphors We Live By* (1980) is often credited as a turning point in the study of metaphor. While they presented a persuasive account of how metaphor underlies our thought processes, which resulted in revived interest in the topic, many of their ideas were not entirely new. Richards (1936: 94) was one of the first to recognise that metaphor was more significant than a poetic device, observing that "*Thought* is

metaphoric, and proceeds by comparison, and the metaphors of language derive therefrom". A volume edited by Ortony in 1979 (republished in 1993) brought together scholars from various disciplines, from linguistics to education, and psychology and philosophy, to tackle a number of topics on metaphor, such as the distinction between literal and figurative language, which are still debated today. Reddy (1979) analysed how language is used to conceptualise communication itself, giving numerous examples including: Try to pack more thoughts into fewer words, Put those thoughts down on paper before you lose them and Your words are hollow – you don't mean them (ibid.: 287-291). On first look it may seem difficult to find any metaphor here at all; these expressions are such conventional ways of saying something that, in fact, it would be difficult to express the ideas any other way. Reddy argued that what these examples show is how communication is thought of as the transferral from one person to another of ideas; the speaker puts ideas (conceived of as objects) into words (containers) and sends them (along a conduit) to the receiver. Lakoff (1993: 2) observed that while other theorists had identified some of the features of metaphor, it was Reddy who was the first to demonstrate it using examples of language that were meticulously analysed. It was this paper that convinced Lakoff (1993: 204) that the locus of metaphor is thought, not language, and led him, along with Johnson, to put forward a theory of conceptual metaphor in the early 1980s. Reddy (1979) outlined how the basic concept of communication is understood via metaphor and Lakoff and Johnson extended this to the whole of conceptualisation.

They found that most of our ordinary conceptual system is comprehended via metaphor, including many of the most basic concepts, such as time, quantity, state, change, action, cause and purpose (Lakoff 1993: 212). For example, the concept of time is mapped onto the concept of money in the metaphor TIME IS MONEY (Lakoff and Johnson 1980a: 7-8):

You're wasting my time
I don't have the time to give you
That flat tyre cost me an hour
I've invested a lot of time in her
You're running out of time
Is that worth your while?
Do you have much time left?

Expressions such as these can offer insight into the metaphorical nature of the concepts that structure our everyday activities and these examples show how the concepts of time and money are closely tied together in our culture. Work is typically associated with the time it takes as people are paid by the hour, month or year. However, Lakoff and Johnson (1980a: 9) point out that this is not an essential way to conceptualise time and there are cultures where time is not conceptualised as money, a valuable commodity or a limited resource.

Lakoff and Johnson (1999: 6) strongly oppose the view that metaphor is just a matter of language, and claim that human thought processes are largely metaphorical. The impetus to get away from the traditional view of metaphor as a rhetorical device has forced the assertion that metaphor works conventionally, automatically and unconsciously. Consequently, the opposition between deliberate and non-deliberate metaphor is seldom broached in contemporary metaphor research, according to Steen (2013). He suggests that deliberate metaphor is a matter not of creating new linguistic forms and conceptual structures, but of the revitalization of existing ones, and that its function is to change perspectives (ibid.: 52, 59).

2.1.2 Conceptual Metonymy

While cognitive linguistics has fully embraced metaphor research since Lakoff and Johnson, interest in metonymy was slower to ignite. It has been established that metonymy, like metaphor, is conceptual and not solely linguistic (for example Lakoff and Johnson 1980a: 38; Gibbs 1999: 66; Panther and Thornburg 2002). Yet, according to Gibbs (1999: 61), metonymy was for a long time "clearly subservient in most scholars' minds to the master trope of metaphor". While this is no longer the case (for example Panther and Radden 1999; Dirven and Pörings 2002; Barcelona 2003), metonymy tends to be defined by its relationship to metaphor, and a lot of recent work on metonymy focused on the differences between the two processes (Allan 2008: 11). A standard definition is that metaphor is based on similarity and involves two different domains, and metonymy is based on contiguity and involves only one domain (Kövecses 2010).

Despite being considered to be separate conceptual processes (Lakoff and Johnson 1980a: 36), distinguishing between the notions of metaphor and metonymy is "notoriously difficult" (Radden 2003: 93). Barcelona (2003: 209) found that applying the cognitive

theories of metaphor and metonymy to sets of authentic examples was, in the most part, successful and yet:

in quite a few other cases they were not so easy to apply, simply because it was not at all easy to decide whether the example in question was metaphorical, metonymic, or both.

This indicated to Barcelona that the definitions of metaphor and metonymy still required some refinement if the identification of real life examples could be problematic.

According to Dirven (2002a: 20), Taylor (1995 [1989]) was the first cognitive linguist to develop the idea of metonymy-based metaphors even though he discusses metonymy and metaphor separately. Goossens (1990: 323) states that, despite being distinct cognitive processes, it "appears to be the case that the two are not mutually exclusive" leading to his coining of the cover term *metaphtonymy* to increase awareness of the fact that metaphor and metonymy can be intertwined.

The intertwining nature of metaphor and metonymy is particularly relevant for the current study, which will examine how both processes are used in the colour domain. An alternative interpretation is to view metaphor and metonymy along a continuum, rather than as separate processes. Dirven (2002b: 93) describes the "metaphor—metonymy continuum" where each mechanism can be placed somewhere on the scale depending on how conceptually close the source and target are. In a similar vein, Allan (2008: 66), Radden (2003: 93) and Barcelona (2000b: 31) all suggest that a continuum of metaphor and metonymy has clear cases at either end and unclear or fuzzy cases in between. Dirven (1985: 100) has also suggested that synaesthetic metaphor, or cross-modal metaphor, be placed in the middle of the metaphor-metonymy continuum. He points out that in spite of the differences between these processes, they are all similar in that they are "associative processes which eliminate or cancel the first or literal interpretation, so that another, viz. figurative interpretation must be looked for" (ibid.: 100). The topic of cross-modal metaphors is analysed in detail in Chapter 5 of the current work.

Both Taylor (1995[1989]: 124; 2002: 325) and Barcelona (2002: 215) have taken this one step further and have suggested that metonymy is in fact a more basic meaning extension than metaphor. Niemeier (1998: 124) believes that researchers should bear in mind the intermediate meaning allocations when researching metonymy, rather than only focusing

on its extreme pole. She later advances her position by arguing that the equal ranking of metaphor and metonymy is not necessarily a given as it appears that many metonymies antecede metaphors, and that many, if not all, metaphors are dependent on a conceptually prior metonymic conceptualisation (2003: 195). Barcelona (2003: 31) is unequivocal in his statement that "the seeds for *any* metaphorical transfer are to be found in a metonymic projection."

2.1.3 The Domain Approach

A central idea within conceptual metaphor theory is that metaphor should be analysed as a mapping between two domains; the *target* domain is conceptualised and understood in terms of the *source* domain. One experiential domain is partially mapped onto a different experiential domain and traditionally it is believed that both will belong to different superordinate domains (Barcelona 2002: 211). In contrast, metonymy is said to occur within a single domain rather than across domains (for example Goossens 1990: 325), or as Dirven (2002a: 14) describes it, metonymy is *domain highlighting*, whereas metaphor is *domain mapping*.

Metaphor is traditionally assumed to proceed from concrete to abstract domains (for example; Sweetser 1990: 59; Shen 1995; Lakoff and Johnson 1999: 155; Warren 2002: 122), and this process is known as concretisation. Uni-directional links have been found to be far more frequent than bi-directional links, and yet examples of the latter have been found. For example, while concrete to abstract metaphorical mappings are more common, in a study using the Historical Thesaurus data, Allan (2008: 186) documented a number of semantic shifts in the opposite direction. The abstract meanings of *dull* and *keen* relating to stupidity and intelligence, for example, are recorded earlier than the concrete. The Mapping Metaphor methodology does not distinguish between source and target domains at the coding stage and so all metaphor is coded, whether the category being coded is the source or the target. The Historical Thesaurus includes all dates for the span of each word sense, making it possible to uncover more counter examples in the present study. For example, the C13 "Hearing and noise" category shows metaphorical links with D34 "Colour" in both directions (discussed in Chapter 4).

Within Cognitive Grammar domains can be basic or abstract (Langacker 1987: 147-182). A basic domain involves concepts that cannot be reduced to any more basic cognitive structure, such as space and time, as well as sensory domains of colour and temperature

(ibid.: 149). Abstract domains, therefore, include higher order concepts, equivalent to Lakoff's idealized cognitive model, and what has also been called a frame, a schema or a script (ibid.: 150). Another distinction in Langacker's theory is that domains can be either locational or configurational. A locational domain is one which can be defined with a single point on one or more scales in contrast to a configurational domain, which can accommodate a number of distinct values, such as time and space. Colour terms designate regions of the colour space defined with respect to the dimensions of hue, brightness and saturation (ibid.: 190-191) and so make up a locational domain with multiple dimensions. It has been well established that not all points on a scale are necessarily equal, with some areas of the colour spectrum affording a higher degree of salience (ibid.).

Wallington (2010: 236) is critical of the reliance on domains in conceptual metaphor theory, which he maintains has come at the expense of "describing and cataloguing the types of information or meaning that seem to be used in metaphor". He notes the difficulty in delimiting the boundaries between domains and argues that, in practice, there is often not a direct correspondence between source and target domains.

Lakoff and Johnson (1980b: 198) note that no single, non-metaphorical concept is ever structured in exactly the right way precisely to define any single abstract concept. Each will define only certain aspects of the abstract domain and so several concrete domains may be drawn on for any one given abstract concept, which can result in clusters of metaphors. Examples from Lakoff and Johnson (1980b: 198-200) include: ideas can be conceptualised as people (Cognitive psychology is still in its infancy), plants (She has a fertile imagination), money (He has a wealth of ideas), cutting instruments (That's an incisive idea), food (There are too many facts in the paper for me to digest them all) and fashions (That idea went out of style years ago). Kövecses (2000) describes this as the scope of metaphor, and asks how many and what kind of target domains a single source concept can apply to. He explains that emotions that are inherently positive or negative, for example, such as happiness and sadness, can be equated with health or illnesses (healthy or sick relationship) and yet this aspect of the emotion concept can be highlighted through many additional source domains: up-down, light-dark, warm-cold, valuable-non-valuable. The metaphors involving these source domains "have a wider scope than the domain of emotion" (ibid.: 44), arguing that the distribution of linguistic metaphors can be accounted for by the overarching conceptual metaphors.

Barcelona (2002: 209) found that when corpus examples of metaphor or metonymy could be confidently identified it could be difficult to decide on the superordinate class(es) of metaphors or metonymies to which they could be assigned. He goes on to say:

Unfortunately, we will still have to wait some time until much more research has been done into the kinds and hierarchies of metaphors and metonymies in English and other languages before being able to provide some plausible answers to the classificatory problem. (ibid.)

The HT, with its complex hierarchical system of senses, provides an opportunity to address this problem of classification. The MM project maps metaphorical links between the categories of the HT, and while these do not correspond directly to domains, they can offer a useful framework in which to discuss the boundaries and nature of a domain (see Section 3.1.3). A similar stance is taken by Hardie, Koller, Rayson and Semino (2007) in their study on the use of a semantic annotation tool for metaphor analysis. They state that the semantic fields that are automatically annotated "can be seen as roughly corresponding to the domains of metaphor theory".

One of the main reasons why the categories cannot be considered to be domains is because of their subjective nature. According to Barcelona (2000a: 8), a cognitive domain can be understood as an encyclopaedic domain, in that it includes entrenched knowledge about a domain that a speaker may have. Consequently, people's boundaries vary from one another. Barcelona asks that if it is the case that no neat distinction between boundaries can be made, how, then, can we distinguish between metaphor and metonymy. This issue is rationalised by Allan (2008: 65), who maintains that the idea of conceptual domains has proved theoretically useful and the inability to assign clear boundaries is not due to any weakness with the theory. Rather, the way encyclopaedic knowledge is learned and organised in human thought is "inherently messy" and this is reflected in the fuzzy boundaries between domains. Both the problem regarding the separation of metaphor and metonymy and the identification of the superordinate class of metaphor will be returned to in Chapter 3.

Sweetser (1990: 18) poses the question of whether there is a predisposition to draw from certain concrete domains in deriving vocabulary for a particular abstract concept. She suggests that "[s]tudies of systematic metaphorical connections between domains are thus needed, in addition to local studies of relevant semantic contrasts" (ibid.:19). The MM

project addresses this need in that it has identified systematic connections across the whole of semantic space covering both abstract and concrete areas. The present study offers insight into one highly figurative domain, that of colour, and aims to shed light on the domains with which it is particularly productive in forming metaphors and metonymies.

2.2 Colour

The figurative mappings of one semantic domain, that of colour, are examined in this thesis. The difficulty in establishing what constitutes a domain is evidenced in the discussion above and in order to present a full picture of what may constitute the colour domain a discussion of colour semantics more generally is given here. Although this thesis is concerned with colour metaphors and metonymies, it is also important to consider the denotative properties of colour in order to gain a better understanding of how its meaning can be extended.

According to Saunders and van Brakel (1997: 175) it is "notoriously difficult to separate saturation and lightness" terms. The ambiguity that surrounds the terminology of colour has been discussed by Biggam with special reference to the term *brightness* (2007: 2012). While a three way division into *hue*, *saturation* and *brightness* is more common, Biggam outlines her use of the "four crucial terms", including the addition of *tone* (2012: 3), and these are given below:

- 1. The most prototypical element of colour in the Western world at the present day is *hue*. Examples of English hue terms include *red*, *blue*, *green* and *purple*. Hues, and their corresponding wavelengths, refer to the spectrum of visible light which is perceived to be broken up into separate areas.
- 2. The *saturation* of a colour "refers to the purity or otherwise of a hue, in relation to the amount of grey it is perceived to contain" (Biggam 2012: 3). A fully saturated hue would contain no grey and would change to a lower saturated colour as small amounts of grey are added. The terms *vivid* and *dull* are two examples of colour terms relating to saturation and not to hue, and refer to colours with no grey added or with a lot of grey added.
- 3. The *tone* of a colour refers to the amount of black or white added to the hue, and runs from *pale* at one extreme to *dark* at the other. The *achromatic* colours refer to a black, white and grey tone range.

4. Finally, colours may be considered *bright* according to four criteria: surface illumination, space illumination, light-emission and reflectivity (Biggam 2007: 183). In PDE, a fully saturated hue is often referred to as *bright*, and this ambiguity arises because, in this sense, "the eye-catching nature of true brightness is used metaphorically of vivid hues" (Biggam 2012: 5).

In the last point, Biggam touches on the metaphorical properties of terminology used to describe the colour lexicon. Several terms are used so frequently in the colour domain they are no longer perceived of as metaphors at all. The metaphorical properties of saturation, tone and brightness terms are discussed in Chapters 4 and 5 and the metaphorical properties of hue are discussed in Chapters 6 and 7.

2.2.1 Controversies in Colour Universals

This section discusses some topics that have been debated in colour semantics, from the BCCs to the use of terms, such as *brightness*.

2.2.1.1 Basic Colour Categories

Berlin and Kay's (1969) seminal work on colour universals presented a serious challenge to the relativist consensus on colour terminologies and language more generally. The prevailing doctrine at the time of publication of Berlin and Kay's study was that of the arbitrary nature of meaning and how language affects thought. The domain of colour was taken as a prime example of this as the following statement from Bloomfield's (1933) classic textbook demonstrates:

Physicists view the color spectrum as a continuous scale of light waves of different lengths, ranging from 40 to 72 hundred-thousandths of a millimetre, but languages mark off different parts of this scale quite arbitrarily and without precise limits, in the meaning of such color-names as *violet*, *blue*, *green*, *yellow*, *orange*, *red* and the color names of different languages do not embrace the same gradations. (1933: 140)

Berlin and Kay suggested their main finding invalidated this belief in relativity and they hypothesised that there was an underlying pattern of universality. They proposed that not all colour terms have equal status as some colour terms are more basic than others. The following characteristics were given as a guide to BCT status:

- 1) [A basic colour term] is *monolexemic*; that is its meaning is not predictable from its parts.
- 2) Its signification is not included in that of any other color term.
- 3) Its application must not be restricted to a narrow class of objects.
- 4) It must be psychologically salient for informants. (1969: 6)

Berlin and Kay claimed these four criteria suffice in nearly all cases to determine the basic colour terms in a language. In doubtful cases the following subsidiary criteria can be employed:

- 5) The doubtful form should have the same distributional potential as the previously established basic terms.
- 6) Colour terms that are also the name of an object characteristically having that colour are suspect.
- 7) Recent foreign loanwords may be suspect.
- 8) The word should not be morphologically complex. (1969: 6)

The results of their investigation provided a strong challenge to the prevailing relativist consensus on colour terminologies. They succeeded in confirming their hypothesis claiming to show that the foci, or best exemplars, of the basic colour categories were very similar across the languages studied even though their boundaries varied widely. The foci of the basic colour categories appeared in just eleven regions of the colour space which correspond to the English speakers' foci of *black*, *white*, *red*, *yellow*, *green*, *blue*, *brown*, *grey*, *pink*, *purple* and *orange*.

Berlin and Kay also discovered what appeared to be a universal process which stipulates that BCTs appear in a fixed order. They suggested that an evolutionary ordering occurs in the development of colour terminologies with, in its earliest form, seven stages in the development, with languages having between two and eleven BCTs, depending on the evolutionary stage they are at: stage I *black* and *white*; stage II *red*; stage III *green* or *yellow*; stage IV *yellow* or *green*; stage V *blue*; stage VI *brown*; stage VII *purple*, *pink*, *grey* and *orange*. Due to the distributional restrictions, encoding of a stage could only occur if all prior categories were already encoded. This was just one of many features of the original Berlin and Kay hypothesis to fall under question.

The World Colour Survey (WCS) was started in 1976 and the final report published in 2009 (Kay, Berlin, Maffi, Merrifield and Cook). Drawing on data from 110 unwritten languages, the WCS aimed to test the evidence of Berlin and Kay's study against a larger set of empirical data. Berlin and Kay's original study (1969: 1) covered ninety-eight languages, which represented a wide variety of language families; however, only twenty of these were examined experimentally using Munsell colour chips and the remaining seventy-eight drew from literature on colour terms.

The issues of macro categories raised concerns. Rosch Heider (1972a, 1972b) discovered that the Dani language, while being a Stage I system, had terms covering not only brightness and tone, but also had a grounding in hue. The term *mili* covers dark and cool hues and *mola* covers light and warm hues. As Biggam notes (2012: 73), confusion arose surrounding the labels of a Stage I system "black" and "white", which simultaneously refer to foci and macro categories.

Berlin and Kay (1969: 35) considered the possibility that there may be languages with more than eleven basic colour categories, citing two terms for Hungarian RED and two terms for Russian BLUE. This problematic area in the original theory was later addressed by Kay and McDaniel (1978). Biggam (2012: 77) states that while much of Kay and McDaniel's evidence needs to be treated with caution, as certain aspects of their neurological theories have been shown to be wrong, their work did provide some innovations. For instance, their account accords the BCTs unequal status as the first six BCCs (BLACK, WHITE, RED, YELLOW, GREEN and BLUE) are referred to as primary BCTs (1978: 626). They claim that there are nine potential BCCs, which can be modelled on fuzzy intersection, made up by BLACK, WHITE, RED, GREEN, YELLOW, BLUE, BROWN, PURPLE, PINK, ORANGE and GREY, along with the composite categories LIGHT-WARM, DARK-COOL, WARM and COOL (ibid.: 637).

Another revision by Kay (1975: 260) noted the presence of the category GRUE denoted by a BCT spanning both BLUE and GREEN. GRUE never splits into GREEN and BLUE before the YELLOW focus is named and so stage II is followed by GRUE, which is followed by YELLOW, or YELLOW which is followed by GRUE. Kay (1975) also confirmed the tentative suggestion in the original work (1969: 45) that GREY could appear as a wild card at any stage.

As observed by Biggam (2012: 19), despite the fact that the theory has been revised and developed since its publication, Basic Color Terms shaped the landscape of colour research. For example, there was a surge in research on cross-cultural colour categories and the number of BCTs in various languages. Further research into Hungarian terms for RED has concluded that while piros is basic, vörös is not (MacLaury, Almási and Kövecses 1997; Uusküla and Sutrop 2007), and the suggestion that Czech may possess two RED BCTs has also been shown to be unfounded (Uusküla 2008). It has been confirmed, however, that Russian has two BCTs for BLUE, *sinij* "dark blue" and *goluboj* "light blue", by several studies such as Corbett and Morgan (1998); Davies, Corbett, McGurk and MacDermid (1998); Moss, Davies, Corbett and Laws (1990) and Paramei (2005, 2007). Furthermore, Hippisley (2001) concluded that two BLUE BCTs are a broader characteristic of the Slavonic family, providing evidence for Ukrainian and Belarusian. Two salient BLUE terms have also been investigated in unrelated languages, Catalan (Davies, Corbett and Bayo Margalef 1995), Turkish (Ozgen and Davies 1998) and some Indian languages and urban Thai (Saunders and Van Brakel 1997) although the second BLUE term in each case has not yet reached basic status.

It has been suggested that French may have two BCTs in the brown region. Forbes (1979, 1986 and 2006) has examined an ongoing change in the French terms for BROWN which has seen *marron* rising in status at the expense of *brun*. Morgan (1993: 12) found that *beige* may be on its way to achieving basic status. When investigating colour naming, Boynton (1997: 145) suggested that another BCT "*ought* to exist" in English in what is considered the brown area of the spectrum after finding insecurity in naming. This region was variously called *peach*, *tan* and other non-basic terms (ibid.: 144-145).

2.2.1.2 Non-Hue Vocabulary

As touched on above, most English speakers in the present day think of colour in terms of individual hues, but this colour system is not the only way to perceive and categorise colour and different cultures place emphasis on other features of colour. Even over the course of the history of English, a gradual semantic shift has occurred, moving emphasis from brightness colour concepts to almost exclusively hue concepts. Casson (1994) claims this took place around the late Middle English period (1350-1500), but this is questioned by Biggam (2007: 186) who suggests that the process began before Old English. Biggam points out that Casson creates a bias against Old English by limiting his study to simplex

terms formed by metonymic extension. This was a process rare in Old English, a language which was highly productive in compounding. In contrast, during the Middle English period English lost the majority of its inflections, which, together with case, had previously been used to define its syntactic function. Instead, this was determined by the position of a word and allowed for a much greater flexibility for words to change word groups, allowing nouns to be used as adjectives to modify other nouns. Biggam (2007: 185) goes on to suggest that the proposed lack of interest in hue in Old English has been grossly exaggerated.

One feature of the change in colour system is that a number of qualifiers were generated forming a "new type of colour terminology with considerable basicness" (Kerttula 2002: 307). She discusses how this type of colour terminology has been ignored by colour term theories, which mainly refer to brightness as an earlier and a much less developed phase in colour naming and expresses her own initial hesitation when collecting qualifiers for her study, as many "did not seem proper colour terms" (ibid.: 307). In the end Kerttula (ibid.: 311) did include these terms in her study, and concluded that qualifying terms "form a parallel and probably permanent colour term group" as most are still in use, despite the increased hue terminology in English. Chapters 4 and 5 are based around this type of colour terminology.

2.2.2 What is a Literal Use of Colour?

While this thesis is primarily focused on the figurative uses of colour terms, it is useful to consider what the literal use of colour may be and what meanings make up the colour domain. "Literal" and "figurative" meanings can be very difficult to separate (for example Philip 2011: 23), and it has been shown that secondary, figurative meanings of colour terms are derived from the prototypical meanings. Philip (2006: 66-67) argues that the literal meaning of a colour term is better thought of as its prototypical meaning:

[w]hen dealing with colour words, the notion of literal meaning is very problematic, as the only true literal meaning of a colour term is found in its iconic capacity; the sun is *yellow*, the sky is *blue* (or *grey...*), blood is *red*. When used in this way, colour terms carry no meaning beyond the representation of hue. Instead of *literal*, it is helpful to speak of colour as having *prototypical* meaning, which allows a greater degree of flexibility in the range of application.

Verspoor and de Bie-Kerékjártó (2006: 82) suggest that "when used in the literal sense" colours are always attributes "of" something. In pointing out that colour always belongs to objects or attributes, meaning it is never experienced in isolation, they raise an interesting point about the epiphenomenal nature of colours. While most cultures in the Western world can divorce colour from its associated object, and accordingly have a concept for colour, other cultures do not necessarily do so.

One of the objections to Berlin and Kay's study was the lack of neutrality in using Munsell chips, which represent a very limited number of features of colour appearance (Saunders and van Brakel 1988: 364). Saunders and van Brakel argue that colour cannot be reduced to dimensions of hue, saturation and brightness; consequently colour is not an autonomous phenomenon. Saunders (2006: 96) later states that while colour has been considered a coherent domain, she believes that if it can be called so then it is of an artifacial kind. Wierzbicka (1996: 288) claims that the notion of colour is far from universal, but highlights several universal or near-universal features for, more broadly, the domain of seeing. She observes that a universal or near-universal feature has to do with the importance of the environment as a fundamental frame of reference (ibid.: 289). Another universal or near-universal feature, Wierzbicka (ibid.) claims, is the role of comparison and this is productive in forming non-BCTs.

In Steinvall's (2002) corpus study of colour terms, he argues that it is reasonable to assume there is a colour domain which is universal in character, and that it is an irreducible (basic) domain (ibid.: 28). However, he also stresses the importance of considering usage in a wider sense in any description of the colour domain. Allan (2008: 11-12) states that colours are an example of a concept that "can be 'classified' into domains in a "relatively straightforward and uncontroversial way" because they are part of a restrictive set.

2.2.3 Extensions in Colour Meaning

Biggam (2012: 218) highlights that colour metonymies can work in two ways. First of all, the names of entities are adopted as colour terms through a process of metonymy. Wyler (2002: 143) comments that "colour words are, in most cases, metaphors themselves" due to the fact that their etymologies can often be traced back to prototypical objects of the colour they represent. While this process may be more accurately described as one of metonymy, rather than metaphor, Wyler makes an important observation

regarding how colour terms arise. A great number of non-BCTs are derived from the names of pigments, dyes, plants, fruit, minerals, metals and animal-related words; all items which have a prototypical colour association (Kerttula 2002: 242-50). Some of these terms may have a transparent referent such as *emerald*, *gold*, *lemon* and *rose* and others that are derived from those which are now semantically opaque to most speakers, such as *beige*, *crimson*, *ecru* and *sepia* (Casson 1994: 8).

The second type of colour metonymy is when a colour word or phrase including a colour term can stand for a non-colour concept, for example, *blue collar* can stand for a manual worker. Most colour symbolism can be traced back to a metonymic motivation, according to Niemeier (1998). This is a view that is echoed by several other scholars dealing with the domain of colour. Verspoor and de Bie-Kerékjártó (2006) suggest that the majority of expressions containing BLUE in their study were formed through metonymy, after a colour of a salient object, and in a few cases the word-formation was mixed with metaphor. According to Allan (2009: 637) it is "perhaps predictable" that all figurative uses of colour terms surveyed are directly or indirectly based upon the visual attributes of the denotatum, alluding to the metonymic nature of colour terms. Philip (2011: 87) writes:

[C]olour words have a rather particular status in figurative language, because their semantic transparency is so great that they are almost obliged to conform to truth conditions. As a result, they regularly form metonymic relations (*see red, in the pink of health, green with envy*) but colour metaphors displaying no metonymical motivation whatsoever are very rare, if indeed possible at all in the normal run of language.

This process gives rise to many figurative expressions in English and often develops into metaphor, as discussed in Chapters 6 and 7. Steinvall (2002) dedicates a chapter to the figurative use of colour terms in his study, but believes this "vast" area deserves a comprehensive account (ibid.: 187), and Niemeier suggests that research should focus not only on Basic Colour Terms (BCTs) but also on non-BCTs (1998: 142). This thesis addresses this need and provides an overview of metaphor and metonymy within the semantic area of colour.

2.2.4 Cross-Modal or Synaesthetic Metaphors

Colour is sometimes used in expressions, such as a *warm colour* or a *dull colour*, and these are so conventionalised they are "felt to belong to the conventional lexicon of the language" (Dirven 1985: 100). Metaphors that transfer between the sensory domains of colour, sound, touch, smell and taste have traditionally been referred to as *synaesthetic metaphors* (Ullmann 1957). This type of metaphorical transfer borrows its name from the neurological condition that affects a small percentage of the population who experience a blending of the senses. According to Cacciari, Manfredo and Corradini (2004: 170), synaesthetic metaphors "represent the most extensively investigated case of metaphorical use of perceptual language in that they exploit systematic, cross-modal, sensory similarities".

First, an outline of types of neurological synaesthesia, focusing on those involving colour, will be given followed by a discussion on the use of the term in application to conceptual metaphors, which are of interest in this study.

2.2.4.1 What is Synaesthesia?

Questions such as "What is the colour of the number eight?" or "What does the word *train* taste like?" may sound slightly silly to the majority of the population, but to a few these are legitimate questions that can be answered honestly and consistently over time. Such people have *synaesthesia*, a condition whereby two or more senses are connected. Despite medicine being aware of synaesthesia for almost 300 years, the subject was largely forgotten and left unexplained after a peak in interest between 1860 and 1930 (Cytowic 2002: 3). After this point it was picked up by psychologists, but it was a long time before neurologists seriously considered synaesthesia, having previously dismissed it as fantasy resulting from an overactive imagination or drug use (Cytowic 2002: 6). After such a long period of neglect, an acceptance of the neurological basis of and a resurged interest in synaesthesia are improving understanding of the phenomenon (Simner 2011: 315).

Synaesthetic experiences are made up of two parts; the trigger (or *inducer*) and a particular experience (or *concurrent*) (Grossenbacher 1997). There are vast numbers of trigger and experience combinations that are possible. One of the most common variants is perceiving colours in response to letters and numbers (*chromatic-graphemic synaesthesia*), which was found in 45% of synaesthetes in a study by Simner et al. (2006: 1030), and a variation of this type, when the sounds of words trigger the perception of colour (*chromatic-lexical*

synaesthesia; Baron-Cohen, Wyke and Binnie 1987). Some people see colours when they hear music (*music-colour* synaesthesia; Ward, Huckstep and Tsakanikos 2006) or, in less common variants, words induce tastes (*lexical-gustatory synaesthesia*; Simner and Ward 2006) or shapes are experienced from tastes (Cytowic 2003; Jones et al. 2011), for example.

Both triggers and responses vary according to the individual, but colour is a prominent feature of many synaesthetic experiences (Cytowic 2002: 26). This finding has been corroborated in a large scale prevalence survey, in which the "vast majority" of synaesthetes were found to experience colour when presented with another sensory experience (Simner et al. 2006: 1030).

The first defining feature of synaesthesia, as outlined by Cytowic (2002: 67), is that the experiences are "involuntary and cannot be suppressed" meaning that synaesthetes' associations are largely subconscious. That said, it has been suggested that when reading for meaning chromatic-graphemic synaesthetes may be unaware of colour (Rich, Bradshaw and Mattingley 2005: 68; Kay and Mulvenna 2006: 205). Furthermore, 46% of respondents in a large scale study reported that the vividness of their synaesthetic experience could be increased by focusing their attention and one informant explained:

It's kind of like looking at your own nose—if you try, you can see it clearly, but you don't walk around the whole time 'seeing' your nose. But it's always there and you can see it, just that you don't unless you're attending to it. (Rich, Bradshaw and Mattingley 2005: 68)

Next, experiences are perceived as real and do not simply appear in the mind. Cytowic recalls a friend describing his synaesthetic experience:

"If there's no shape, there's no flavour."

I tried not to register any surprise. "Where do you feel these shapes?" I asked. "All over," he said, straightening up, "but mostly I feel things rubbed against my face or sitting in my hands." (Cytowic 2003: 4)

Furthermore, synaesthetes will have consistent experiences given the same stimuli throughout their life, and this will be distinctive to them. Synaesthete Kay recalls her astonishment upon discovering:

[T]hat my fellow synaesthetes should have different perceptions from mine – that the world actually contained people who thought that Wednesday was red and five was yellow when both are self-evidently green. (Kay and Mulvenna 2006: 204).

In other words, while synaesthetes do not always agree on details, if Wednesdays are green then they will always be green to the individual, for example.

2.2.4.2 Cross-Modal Metaphor

Cacciari, et al. (2004: 170) defines a *synaesthetic metaphor* as a linguistic expression in which a term belonging to a sensory domain is extended to name a state or event belonging to a different perceptual domain. For example, metaphors such as a *warm red* or a *sharp citrus* have been labelled as "synaesthetic" when the domains that map onto one another in conceptual metaphors correspond to the senses that are crossed in synaesthesia (colour, smell, taste, sound, touch and dimension).

The problematic nature of using this term for cross-modal metaphors used by the entire population is acknowledged by many researchers across many disciplines. Cazeau points out such descriptions can only be "loosely" called synaesthetic (2002: 3), a distinction also made by Hupka, Otto, Reidl, Tarabrina and Zaleski (1997: 157). Marks (1996: 42) concludes that encompassing the range of phenomenon with one term gives an oversimplification of the topic "likely to result in treating all of the manifestations as one and the same", and subsequently refers to cross sensory correspondences in language as "weak synaesthesia" (for example, Marks 2013; Martino and Marks 2001). Furthermore, Cytowic (2002: xxiv) reserves the term "synaesthesia" only for those who may be diagnosed with meeting strict criteria and laments the fact that early psychologists "repeated the notion that synesthesia was merely a more intense form of metaphorical speech" common to everyone.

While it is accepted that the metaphors used by the majority of the population in everyday language are not the same phenomenon as the neurological condition that affects only a

small number of people, there is an emerging view that synaesthetes and non-synaesthetes lie on a continuum of cross-sensory association (Simner 2011: 309). The crucial distinction between the neurological condition and the use of cross-modal metaphor is that "synesthetes experience a *real percept*" (Cytowic and Wood 1982: 23).

It has been suggested for some time that there is a common underlying mechanism between cross-modal associations and neurological synaesthesia (for example, Marks 1982: 192, 1996: 43; Ward, Huckstep and Tsakanikos 2006: 268-9; Smith et al. 2011: 327). Marks (1982) found that non-synaesthetes not only match bright colours with loudness and higher pitches but they also rate the word *sunlight* as louder than *moonlight*, and a sneeze as brighter than a cough. In a study of sound colour synaesthetes and a control group Ward, Huckstepp and Tsakanikos (2006) discovered that while, as expected, the synaesthetes had a much higher degree of internal consistency and specificity of colour associations, both groups were "remarkably similar" in other ways, such as associating an increase of lightness with pitch.

While these results offer intriguing results on the relationship between the synaesthesia and cross-modal metaphor, a point that fails to be addressed in the literature is the variation within synaesthetes. Specific examples, such as pitch and colour are linked via a common attribute of intensity revealing a metaphorical mapping and are suggested to be innate connections (Marks and Bornstein 1987: 87). More research into the levels of agreement or disagreement among synaesthetes and across a range of connections is needed to shed light on the issue.

Ullmann (1957) studied the cross-modal metaphors in English, American, French and Hungarian, analysing the sense transfers from one domain to another. He suggested the sensory modalities can be placed on a graduated scale, from the highest modality, sight, followed by sound, smell and taste to the lowest modality, touch. Ullmann's findings were paralleled by Williams (1976) who carried out a diachronic study in semantic change of more than 100 sensory adjectives in English. He proposed a systematic sequence along which a lexeme metaphorically transfers that is represented in Figure 1:

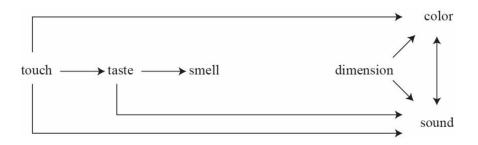


Figure 1. The direction of sense transfer (Williams 1976: 463)

What both Ullmann and Williams discovered was that the overall frequencies of each type of metaphor were overwhelmingly asymmetrical; touch was most frequently the source of transfers and sound was the main target sense domain. This translates to research by Barcelona (2002) and Barcelona and Soriano (2004), who discuss the DEVIANT SOUND IS A DEVIANT COLOUR metaphor. It was found that loud sounds are equated with vivid, gaudy colours, and while this metaphor was evidenced in both English and Spanish, it manifests itself in subtly different ways in each language.

For projects applying the metaphor identification procedure (MIPVU), Dorst, Reijnierse and Venhuizen (2013) identified colour as one of three groups for which determining the basic meaning was problematic. Their study discussed lexical items that shared a sense with humans, such as *flamboyant*, *cheerful*, *subdued*, *pale*, *sombre*, *darkly*, *boldly*, *loud* and *strong*, and concluded that colour terms form a "semantic group that merits a more extensive investigation", as this group shows that the distinction between concrete and abstract and human and non-human senses is far from clear cut (ibid.: 92). The present study investigates this area more fully, and uses the MM categories to reveal which areas of meaning transfer lexis into COLOUR.

2.3 Methodologies in the Study of Figurative Language

The following section reviews the methods used in the analysis of figurative language, mainly focusing on studies on colour, moving from the more traditional approach of using dictionary-based evidence to the use of corpora.

2.3.1 Historical Analysis of Metaphor and Metonymy

Both historical-philological semantics (Geeraerts 1988) and cognitive semantics are concerned with semantic change. Trim (2007: xiii) notes that, in spite of the vast number of books on metaphor that have been published in recent years, there seems to be a lack of studies concerning the historical evolution of metaphor. His diachronic study covers a

large number of metaphors, including those on colour, and considers several languages. This has perhaps come at the expense of a more detailed analysis, as Trim often makes bold statements, in the discussion on colour and elsewhere.

When discussing the differences in colour symbolism between English and Chinese, Trim maintains that "patterns of colour symbolisation can be arbitrary and therefore often very culture-specific" (ibid.: 59). I would argue, however, that it is in fact the other way around; colour symbolism is inextricably bound up in culture which is why they can *appear* arbitrary. Verspoor and de Bie-Kerékjártó (2006) studied the figurative uses of *blue* and its equivalents in English, Dutch, German and Swedish and non-Indo-European languages Finnish and Hungarian. While they discovered that a number of senses of *blue* were shared between different languages, for example: aristocracy, puritanism, abstinence; *bluish* to stand for cold, drunkenness or a bruise and the characterization of plants or animals with a bluish tinge, others remain confined to a particular culture such as *bluestocking* (intellectual), in English, and *blåband* (=blueband, sign of temperance), in Swedish.

Even within a culture, extended meanings of colours can appear arbitrary. Niemeier (1998: 120) notes that colour metonymies have evolved over time and so are often rooted in a language stage prior to the current one. Consequently, the original motivation of figurative meanings can become difficult to understand when changes occur in the source domain itself. Steinvall (2002: 187) describes the figurative use of colour terms as when they "no longer refer to colour at all, but to other concepts". He argues (ibid.: 204) that the original motivations are no longer present for most language users, who, as a result, may have difficulty deciphering their senses. The example of *purple* and its connection with ROYALTY is cited by Steinvall as monarchs no longer indicate their status through wearing a particular colour of robes. Another reason that Steinvall does not cite is the cultural knowledge that the purple dye was once very expensive and could only be afforded by the very rich, and consequently why it was an indicator of wealth and status (see Section 7.2.2). Once the original motivation has been lost, he continues, the metonymic meaning appears only in frozen phrases. He argues that while these meanings are based originally on metonymy, it seems that the connection between colour and certain moods has "become almost metaphorical" (ibid.: 215). Consequently, from a synchronic perspective, if language users understand the motivation behind a phrase it can be interpreted as metonymy whereas if they do not it can be interpreted as a metaphor. These issues are revisited in later chapters.

In some cases, within one language a colour term can develop separate senses that can seem contradictory. For instance, *red* can mean "stop", as found in stop signs and traffic lights because of its salience, yet it can also be associated with fast speed as high speed trains are called *red balls* and *red goods* are fast selling items and, in this case speakers associate *red* with the verb "go" rather than "stop" (Verosub 1994: 28). Both Niemeier (2007) and Verspoor and de Bie-Kerékjártó (2006) also allude to the seemingly contradictory meanings of *blue* in the phrases *blue stocking* and *blue movie*. In the present study it is found that each individual colour has developed several different figurative meanings, which can derive either from different motivations, or the same metonymic basis that has developed along a different path.

2.3.1.1 Dictionary Evidence

Through an examination of entries in monolingual Chinese and English, and bilingual Chinese-English dictionaries, Bai (2010) found that although the literal denotations are similar between the two languages, the connotations of *red* do not map exactly onto counterparts in the other language due to cultural and linguistic differences. According to Bai, *red* has a special place in Chinese culture because in ancient times people worshipped the Sun God, which has led to positive idiomatic expressions such as someone who is energetic being *hong guan man mian* "red light all over face", someone who has good luck being *yun gao zhao* "red fortune high shine" and someone who has a loyal heart being *hong xin* "red heart" (ibid.: 35). Both languages have positive and negative associations with the colour, but Bai concludes that in contrast with its use in Chinese, *red* in English is mostly related to negative connotations due to its main connection with blood (ibid.: 37).

Another cross-cultural examination of the metaphorical uses of colour terms was carried out by Derrig (1978) who examined four diverse languages: Chinese, Mongolian, Yacatecan Maya and Zulu. She analysed phrases from various dictionaries, except for Yacatecan Maya for which the phrases were gathered from only one native speaker, and found that *black*, *white*, *red*, *yellow* and *blue/green* all share non-literal senses between languages. The only colour terms with shared meanings across all four languages were *black* ("dark" and "evil") and *white* ("clear" and "innocent"). *Red* and *yellow* share meanings across three of the languages and *blue* and *green* share meanings across no more than two languages. Unfortunately, results are displayed in a table that does not tell us which meaning extensions are present in each language, only the total out of the four languages studied. Derrig (ibid.: 87) describes these cross-cultural shared meaning

extensions as "striking" and cites this as evidence for a correlation between the Berlin and Kay sequence and the extent of figurative use of colour terms.

Derrig's claim is refuted by Kikuchi and Lichtenberg (1983: 40) who state it has "no evidence". However, they adopt a very similar methodology to Derrig, as they also examine a series of unrelated languages, in total twenty-eight, and use dictionaries for their data, supplemented by native speakers in a few cases. They also include a detailed appendix of the semantic extensions found under each basic colour term (except *orange* for which they found no examples) in each language. Recognising that parallel developments in colour metaphors appear across the languages under investigation, they suggest that this is due to similarities in the perception of the world.

Several other scholars reject the correlation between the figurative use of colour terms and the Berlin and Kay sequence. For example, Wyler (1992), who covers various aspects of colour language and devotes a chapter of his book to the figurative use of colour terms, states that only five basic colour terms generate figurative expressions freely: *black*, *white*, *red*, *blue* and *green*. His conclusion should be treated with caution, however, as he ambiguously dismisses *orange*, *purple*, *pink* and *grey*, stating that they "do not or only rarely occur in figurative usage" yet provides examples for each except *orange* (ibid.: 141). Furthermore, in a footnote he questions whether the use of *scarlet* in the title of *The Scarlet Letter* may point to a figurative usage, which in the present study is considered as such. A partial correlation between the figurative use of colour terms and the Berlin and Kay sequence was found by Hill (2008) in his study of colour terms in the Slavic languages. The total number of metaphorical uses of each term was ranked from the most to least metaphorically productive as *black*, *white*, *green*, *red*, *yellow*, *blue* and *grey*.

Other studies have combined the use of dictionaries with other sources. Bennett (1988) covers a wide use of colour terms in English, from idioms to type modification (though he calls this *radicalisation*) and some place names, which he collected from a variety of sources, including dictionaries, newspapers and personal communication. A large part of his book is made up of an appendix of colour collocations and forms what is undoubtedly a rich resource. However, he expresses his puzzlement that there may be degrees of metaphor as "a metaphor is presumably not a graded phenomenon, a phrase being either metaphor or not" (ibid.: 23-24). This stance is not one shared by the present author. As discussed in 2.2.2, there is often great difficulty in deciding what constitutes a metaphor.

The present study will discuss examples that show that the boundary between literal and metaphorical language is often not clear, and metonymy often lies in between.

Drawing on a range of resources, from the OED to song lyrics to various adverts and Shakespearean plays, Allan (2009) explores a number of phrases containing English colour terms, including: *black*, *white*, *red*, *yellow*, *green*, *blue*, *brown*, and *grey*, along with a few metallic terms. A full account of Allan's methodology is never presented, however, and as with Bennett's approach it appears slightly haphazard. He takes a new perspective on the analysis of the connotations of these colour terms by judging whether the phrases in which the colour terms occur are typically orthophemistic (straight-talking), euphemistic (sweet-talking) or dysphemistic (offensive) (2009: 627). However, despite setting up this three-way classification, Allan often opts to describe the use of each colour as either positive or negative, and several phrases are not analyzed at all. As this section has revealed, there is a research gap that the present study will fill.

2.3.1.2 Historical Thesaurus Evidence

The HT data underlies the MM project and the present thesis. Prior to the publication of the HT in 2009, a number of studies were based on HT material, including several PhD theses (Chase 1983, Thornton 1988, Reay 1991, Sylvester 1991, Coleman 1992 and Allan 2003), often written while the author was simultaneously categorising the area of the HT under investigation. Several of these have resulted in published monographs of individual case studies. The complete categorisation for a particular area of semantic meaning is presented by Sylvester (1994) on the vocabulary surrounding the semantic field of EXPECTATION along with a discussion on how the lexis has developed. Coleman's (1999) Love, sex, and marriage: a historical thesaurus presents the classification for these three related fields. Coleman (ibid.: 16) is critical of scholars who use a few linguistic examples to support a "sweeping generalisation": she herself uses the HT to give comprehensive evidence from which more reliable conclusions can be drawn. Colour features in Coleman's thesaurus across all three areas; examples from the field of LOVE include: white-haired boy (or son) and blue-eyed boy; examples from the field of SEX include: redlight district (an area of prostitution), green gown (a symbol of the loss of virginity), brown eye (the anus), purple (sexually explicit writing), pink (something vulgar or indecent) and off-colour (something improper or obscene); and examples from the field of MARRIAGE include yellowhammer (a jealous husband) and white wedding (a traditional wedding where the bride wears a white dress).

Tissari (2005) has carried out a lot of work on the domain of LOVE and uses Coleman's categorisation of the HT data. As with many other emotions, LOVE is well-established as being highly productive metaphorically (for example see Kövecses 1986; Lakoff 1986). Even though it is not the sole focus of Coleman's study, she does identify a number of metaphorical sources for her LOVE data, including warfare, magic, legal terms, madness and physical ailment (1999: 108-109). Tissari (2005: 153) re-analyses Coleman's data and, with a greater emphasis on metaphor, finds additional metaphors, such as LOVE IS A BOND and LOVE IS FIRE, which serves to highlight how vast the data are and how great the potential is for metaphorical analysis within individual domains. She argues that while metaphors of (ROMANTIC) LOVE have been studied before, it is only with the HT that a comparison between various kinds of love can now be made, for example between FAMILIAL LOVE, SEXUAL LOVE and RELIGIOUS LOVE.

Another thesis based on HT data that resulted in a book-length study is Allan's (2008) diachronic approach to theories of metaphor and metonymy. Her case study analyses the ways that English terms for INTELLIGENCE (including its opposite STUPIDITY) have developed through processes of metaphor and metonymy. The field of INTELLIGENCE is broken down into three main sections: the senses, density and animals. In restricting her discussion to the strongest three connections, Allan discusses each example in very close detail. It is through her etymological investigations that she discovers not only that concrete senses of words do not always predate abstract ones (ibid.: 186-187), but that both concrete and abstract senses are "learned together and separated later", meaning that "in some cases it may not be possible to evidence earlier literal meanings" (ibid.: 62-63). Elsewhere, she posits that it is only through carefully considering the dating of individual lemmas that such revelations can be made, while bearing in mind discrepancies between the actual development of the word and the evidence that is available (2012: 35).

In addition to her detailed discussion of the three main source domains for INTELLIGENCE, Allan (2008) also presents a further thirty-six domains that were found to share links with INTELLIGENCE in an appendix. These include COLOUR, with the single example of a *green goose*, a term for a foolish person (ibid.: 155-156, 197). Allan discusses elsewhere that geese, as other birds, are often negatively portrayed as being unintelligent, suggesting this is due to the fact they tend to flock together (ibid.: 160). As the colour of unripe plants, *green* has developed a sense of youth and lack of development, and in the context of the

compound *green goose* this has extended to foolishness. The various extended meanings of *green* are discussed in Section 6.5.

A modified version of the MM methodology (discussed in Chapter 3) is presented by Anderson and Bramwell (2014a) in their analysis of five BCTs in English. They illustrate the wide range of semantic categories in which each colour occurs in the HT, revealing literal applications, type modification, metonymy and metaphor. In the case of metaphor, they found that the association between *black* and EVIL can be found across several HT categories, in expressions such as *blackmail*, *black market* and *black economy*, which, along with the use of *grey* for cases that are borderline between being legal and illegal, represents a systematic metaphorical link (ibid.: 144).

Crystal (2014) has published what he describes as a "window" into what the HT has to offer (xvi). He introduces the HT resource and outlines its potential applications before giving a timeline for the development of fifteen semantic fields. These areas were chosen to give a representative sample from each of the three main Level 1 categories and fields covered, including words for dying, being drunk, money, weather, old people and pop music. Crystal highlights a few metaphorical senses along the way, including the use of *blue* for drunkenness, which he says describes the bluish tone of the skin caused by a reduction in blood circulation that became used for the associated dejected mood, and finally to describe low spirits of any kind (ibid.: 42). For an alternative explanation of the development of *blue* in the senses of drunk and dejected see Section 6.6.1.

2.3.2 Corpus Evidence

Geeraerts (2009: 203) suggests that the cognitive mechanisms of meaning extension, such as metaphor and metonymy, are "now primarily analysed as synchronic phenomena". Yet, until this point, this review has covered studies that have drawn on dictionary and thesaurus evidence and perhaps corroborate Philip's (2003: 1) statement that:

Traditional research into figurative and connotative meaning has tended to focus heavily on etymology in assessing current meaning: something of an anomaly, as it mixes up the synchronic and diachronic aspects of language.

Later, Philip emphasises the importance of remembering that:

the vast majority of language users are ignorant of the etymology of the words and phrases that they use, and for this reason linguists must be wary of an overreliance on factual, though often trivial, etymological information when trying to shed light on pragmatic meaning. The pragmatic meaning of 'once in a blue moon' has of course nothing to do with moons or the colour blue, but draws on the rarity value of this event to describe other rare and unusual events. (ibid.: 172)

Here, Philip identifies how diachronic and synchronic analyses offer two very different takes on metaphor and metonymy; the first reveals the historical motivation behind the semantic change, whereas the second reveals the pragmatic function and current meaning. Gibbs (1993: 276) illustrates with examples how speaker intuition is rife with misinterpretations of the development of figurative meanings, and he states that this shows how difficult it is for speakers to have "valid intuitions about metaphoricity in diachronic processes". As a result, the etymology is considered for every lexical item.

What can be investigated is the current meaning of figurative language. In order to do this real language in current use must be analysed and several scholars have adopted corpora with this aim. Gieroń-Czepczor (2011: 31) acknowledges that opinions regarding the use of corpora can be divided, with many supporters, but also some who are cautious about the limitations of corpora, and those that think they should be used alongside an intuition-based approach. Using the BNC for English and the PWN Corpus (*Polskie Wydawnictwo Naukowe*) for Polish, Gieroń-Czepczor (2011) presents a synchronic analysis of six English and Polish colour terms and presents radial network diagrams for each colour. She concludes that the only shortcoming found with the use of corpora is the overwhelming prevalence of written language, as idiomatic language is characteristic of the spoken register (ibid.: 266). In spite of this, she concludes that corpora are valuable tools in such research, providing access to thousands of citations of naturally occurring language.

Niemeier (1998) carries out a corpus analysis of four BCTs in English, identifying what she describes as the universals of several colours, which are naturally-occurring entities such as blood, grass, the sea and sun (for red, green, blue and yellow, respectively) (ibid.: 126). She presents these in radial network diagrams, but elsewhere warns that such diagrams are "by no means complete because language constantly changes and new meaning extensions are created all the time, some of them getting entrenched and others

not" (2007: 146). However, comparing both of Niemeier's radial networks for *blue*, we find them almost identical despite a gap between publications of almost ten years, suggesting any changes are slow to happen (1998: 138; 2007: 150).

She selected the colours *red*, *green*, *blue* and *yellow* for her study due to their position in the Berlin and Kay evolutionary sequence and adds that it is "no coincidence" that there are a great many more metonymies relating to these colours than to *brown*, *grey*, *orange*, *purple* and *pink*. After finding the most metonymies for *red*, several for *blue*, whereas not so many for *yellow*, Niemeier (1998: 143) hints that "we might want to conclude that this fact has a certain significance". This significance may be a correlation with the UE sequence, or the relative frequencies of each term. Indeed, in a footnote she points out that *black* and *white* have many more entries in the BNC and Collins Cobuild than any of the colours she analyses, suggesting that she was correlating a higher frequency of general use, rather than specifically metonymical use.

Using the SCOTS corpus, Anderson (2011) investigates the literal, idiomatic and metaphorical uses of the colour term *red*, and its variant forms, in Scots. Using a concordance view can be helpful when a compound has more than one meaning. In the case of *red herring*, Anderson found that all metaphorical uses were singular whereas the one literal example was plural. She also identifies compounds with degrees of idiomaticity, such as *red tops* (i.e. tabloid newspapers), *red tape, rid bluidit* (= red-blooded), *red mist, red face* and *red neck*. Furthermore, the advantages of using the SCOTS resource are highlighted, as the correlation between use of language and textual data, such as genre and register, but also sociolinguistic factors, including gender, age, religion and social background. This provides evidence for only younger speakers using *red neck* in the sense of embarrassment and of *red face* being more common in writing than in speech (ibid.: 68). Where corpus analysis provides an insight into the culture from which the corpus is built, this unique tool opens up the possibility for a closer analysis of groups within cultures.

Of particular relevance to the present study is Philip's (2011) corpus analysis of colour idioms in the Bank of English (BoE) corpus. One of the main findings from her study is that fixed expressions are subject to variation in everyday language. Philip starts by analysing canonical forms before progressing to highly varied forms, which can be extremely problematic for retrieval from a corpus designed to allow extraction of specified strings of characters. For example, emphasis can be achieved by substituting a BCT for a

non-BCT of the same hue, or a colour term of a different hue, whereas mitigation can be achieved by substituting a less saturated colour, processes that are also found in the present study. Analysing large amounts of data led Philip to conclude that considering context is extremely important when studying figurative language as meaning extends beyond the boundaries of a single word, or even the whole idiom as a node.

The methodological problems and some potential solutions to the issue of extracting metaphor and metonymy from corpora are suggested by Stefanowitsch (2007). While acknowledging the fact that corpus-based research is "still very much in its initial stages", he maintains that this should not detract from the impact that this approach has already had on our understanding of metaphor (ibid.: 12). Early text-based studies involved manually searching by reading carefully through the texts in the corpora extracting metaphors found, which has obvious limitations. Searches for source domain vocabulary or target domain vocabulary can be undertaken, or a combination of both. Anderson (2014) adopts some of the methods outlined by Stefanowitsch for the identification and analysis of metaphor in the SCOTS corpus, and suggests that a more automated analysis might be made possible by the HT database. The majority of Anderson's analysis focuses on a sub-corpus of 250,000 words comprised of interviews with emigrant Scots speakers about reading practices. Given the context of the interviews, metaphors relating to travel, reading and memory emerged. Lists of synonyms were compiled from the HT in order to aid identification of metaphor.

2.4 Conclusions and Research Questions

Conceptual metaphor, metonymy and colour are central to semantic theory and have attracted a lot of interest since each entered the linguistic scene. This review has aimed to highlight some of the areas that have been open to debate, such as the relationship between metaphor and metonymy and what a domain is; two issues that are inextricably bound up with one another. The question of whether metonymy is more basic than, and possibly the underlying mechanism behind, a lot of metaphor can have different answers depending on whether it is approached from a synchronic or diachronic perspective. As the discussion reveals, what constitutes a domain is not straightforward, even for an area such as colour, which is sometimes considered to have fairly clearly delineated boundaries. This study uses the colour categories from the HT as a framework to explore this issue (see Section 3.1.2). This review has also surveyed the various ways researchers have approached the study of metaphor. Linguistic research has moved away from basing conclusions on

introspection and towards the analysis of real language use. A traditional approach to this is through the use of lexicographic evidence, which, in the cases of the OED and the HT, allows sense developments to be traced. Another approach is through the use of corpora. Though corpus work has limitations and presents methodological challenges, such as how to identify figurative language, it nevertheless provides vast quantities of data on which to draw reliable conclusions.

The current study will analyse the whole colour domain for figurative uses, including BCTs, non-BCTs and hue modifiers, which refer to features of tone, saturation and brightness. Using both lexicographic and corpus data allows for a combination of both a diachronic and synchronic approach. The motivations, or etymologies, of figurative colour uses are traced using dictionary and thesaurus evidence, and then corpora are consulted to identify current use and extensions of metaphor.

The main research questions to be addressed are:

- How does the general concept of colour lend itself to metaphor and metonymy?
- Which hue terms lend themselves to metaphor and metonymy, and in what ways?
- In which semantic domains are colour metaphors and metonymies particularly productive?
- How do the processes of metaphor and metonymy interact in the colour domain?

These questions will be addressed though analysis of colour in the HT and corpora. The D34 "Colour" category in the HT will provide evidence for answering the first research question. A lot of cross-modal language, such as *soft*, *warm* and *loud*, is recorded there, leading to the discussion of the role colour plays in cross-modal language. Colours recorded in the D35 "Individual colours" category will be studied and an investigation into their use in phrases with a figurative meaning will provide evidence for answering the second question. All basic colour terms in English will be analysed and compared with one another. This question will address whether there is a division between primary and secondary BCTs, along with whether non-basic colour terms lend themselves to metaphor. The third research question will be answered by examining which categories most frequently enter into metaphorical and metonymic relationships with colour. Finally, the discussion of metaphor and metonymy will identify and explain the differences between diachronic and synchronic analysis of metaphor.

3 Methodology

Completion of the HT has opened many possible avenues for research into the history of the English language and one such avenue is the development of figurative language. This study forms an in-depth analysis of the overlap of one semantic domain, that of colour, with other areas of meaning, and fits within the framework of the Mapping Metaphor with the *Historical Thesaurus* (MM) project, although also serves as a stand-alone project. The methodology for the research undertaken for this thesis can be split into two main parts: the dictionary-based approach and the corpus-based approach. These methods are combined in each of the four data and analysis chapters.

This chapter begins with an outline of the HT material, the main data source used in the thesis, and by extension the data of the OED. The thesaurus-based methodology is then outlined, including the similarities and differences with the MM project's methodology, and finally, details of the corpus study conducted on the *British National Corpus* and the *Corpus of Contemporary American English* are given. This combination of methodologies has been employed in order to address one of the major criticisms of cognitive linguistics: its reliance on the introspection of individual researchers (for example Glucksberg 2001:95, Geeraerts 2006, Gibbs 2006; Murphy 2006, 2007). As such, the present study draws on real language use; lexicographic evidence that can be analysed alongside corpus evidence.

While this study combines diachronic and synchronic methods, it is weighted towards language in the present day. The majority of the examples discussed are from modern corpora, with a few exceptions taken from the OED to illustrate senses not found in current use. As such, there are limitations to the diachronic side of the study. Dates of attestation for the figurative senses are given, but only discussed where they show a particularly interesting development. A comparison of the OED records with the BNC and COCA reveal if a figurative sense is still in use, or suggest if it has perhaps fallen out of use. Beyond this, the diachronic element of the study is restricted to the discussion on the interaction between metonymy and metaphor, and how one can develop into the next.

3.1 The Historical Thesaurus

Due to its size, fine-grained semantic detail, historical coverage and hierarchical organisation, the HT allows for a large-scale investigation into metaphor. The MM project exploits the unique structure of the HT by using the HT database to metaphorically "map" areas of meaning against one another and identify patterns in the language (see Section 3.1.3). The basic principle of the MM coding is that where lexis appears in more than one area of meaning, there may be metaphor. First, an outline of the HT resource is given, including details on dating and structure, before a description of the coding process.

3.1.1 Dating in the Historical Thesaurus

One of the unique features of the HT is its historical coverage and the inclusion of date information for all senses. This detailed date information for every sense allows for the identification of the date a metaphorical connection started and, if no longer current, ended. The primary data for the HT are from the *Oxford English Dictionary* (OED), a historical dictionary, which includes not only present-day meanings but also words which have become obsolete and obsolete meanings of words which still survive. The OED provides full evidence from the period from 1150 to the present, though the Old English (OE) (700-1150) data are more selective. OE words which did not survive after 1150 are excluded. This material was deemed to be of interest in its own right and was published as *A Thesaurus of Old English* (TOE) in 1995 by Roberts and Kay, and forms a major source of the HT. The TOE was compiled using material from various Anglo-Saxon dictionaries: *A Concise Anglo-Saxon Dictionary* (Hall 1960) and *An Anglo-Saxon Dictionary* (Bosworth and Toller 1882-1898) along with the new Toronto *Dictionary of Old English* as it became available.

The HT provides information on dates for every sense, giving the date of the earliest attestation along with either the final attestation or a mark to indicate when a sense is still in current use. For example, below is the entry for the adjective form of the secondary basic colour term *orange*:

01.09.04.07.10 (adj.) Orange

orange 1542- · orange-coloured 1678- · orangey 1778; 1913- · oranged 1862 · orange-hued 1881 · orangish(-looking) 1888- **01** bright orange flame-coloured 1596-1704; 1876- · orange-fiery 1922 **02** deep orange tangerine-coloured 1977 **03** ginger gingerish 1910- **04**

reddish orange hyacinth 1694; 1796 · red-orange 1879- **05** stained with henna hennaed 1924- · henna 1954-

Within each subcategory words are listed in chronological order of earliest attestation. The thesaurus marks the currency of words in various ways. Words from the OE period are either marked as freestanding forms or are linked to their modern descendants. The colour term *orange* was first recorded in 1542 and there was no basic term for the colour in the Old English period. Words considered to be in current use are marked with a dash in the thesaurus, for example *orange* and *gingerish* in the entry above. The last recorded date is given where this can be established, and where there is a gap in citations without any obvious reason, the dash has been replaced with a semi-colon. For example *orangey* was recorded in 1778, but not again until 1913. Words which only have one example citation in the OED, such as *orange-fiery*, which was only recorded once in 1922 are marked with a single date.

It should be noted that the OED considers a sense to be in current use if it is recorded as being in use, or potentially still in use, at the date 1870 (OED, xvii). This is due to the fact that, although the second edition of the OED, which the HT is based on, was released in 1989, this was not a fully revised edition and thus the latest OED material dates largely from the period 1884 to 1928, the publication date of the first edition. The entries for *yellow* and *brown*, for example, have not been updated since the first edition.

Despite this, the inclusion of date information for every sense in the HT makes it by far the most sophisticated resource available for a study such as this. Dates given in this thesis have been checked against the online OED to ensure they are up-to-date and correspond to the third edition where possible. Since 2004, the OED lexicographers have created draft additions which append a selection of compounds and phrases to the end of entries in the OED. On occasion in this research, other dictionaries are also referenced when they can pre-date a first attestation in the OED or offer an alternative motivation for a metaphorical use. When this is the case, a footnote is placed next the date in question and the alternative source detailed. Sometimes literal and figurative senses are conflated into a single entry in the OED. In these cases I have placed an asterisk next to the relevant dates to indicate that the date given has been selected as the first *figurative* sense from the examples given.

3.1.2 Structure of the Historical Thesaurus

The HT presents almost 800,000 meanings arranged in a complex hierarchical system of semantic categories. Unlike Roget's (1852) broadly linear classification, in the HT categories can relate to one another on the same hierarchical level or on a higher or lower level, either containing or being contained within another category. At the highest level, the HT data are arranged into the three primary divisions: Section I: The External World, Section II: The Mental World and Section III: The Social World. Within the three main divisions are subcategories arranged in hierarchies. The most general meanings are presented first in the HT, before narrowing down to more specific ones. Given that metaphor is generally considered to move from concrete to abstract domains (see Section 2.1.3), the HT structure provides the foundations upon which to examine the directionality of metaphor.

The hierarchical structure of the HT was devised long before the revival of linguistic interest in metaphor yet is well suited to its study. The three-part system was decided on due to the limitations of computing facilities available in the nineteen-eighties when the project went digital (Kay 2004: 60).

Every entry has an associated number string. For example, the category "Colour" is identified by the numerical code 01.04.09, and can be found within the first main section, The External World (01), then within Matter (01.09). These are shown below:

I: The External World

01 The world

01.01 The earth

01.02 Life

01.03 Physical sensibility

01.04 Matter

01.04.01 Alchemy

01.04.02 Chemistry

01.04.03 Properties of materials

01.04.04 Constitution of matter

01.04.05 Liquid

01.04.06 Gas

01.04.07 Physics

01.04.08 Light

01.04.09 Colour

01.04.09.07 Named colours

01.04.10 Condition of matter

The categories which the MM project used are based on those found in the HT. However, as no single level in the HT hierarchy corresponds to a basic level category, certain HT categories were compressed or expanded to facilitate the computational analysis. As a result a number of category names have been amended to suit the new scope of the semantic categories. The HT category for colour (01.04.09), shown above, was split in two, making the "Individual Colours" subcategory a MM category of its own. The size of the MM categories also varies; D34 "Colour" contains 1305 lexical items compared to the larger D35 "Individual colours" category with 3047, for example. The next level down within "Colour" comprises of the following subcategories:

```
01.04.09 Colour

01.04.09.01 Quality of Colour (n., adj., adv., vi., vt.)

01.04.09.02 State/mode of having colour (n.); Coloured (adj., vi.)

01.04.09.02.01 Absence of colour (n.); Colourless (adj., adv.); Lose colour (vi., vt.)

01.04.09.03 Colouring (n., adj.); Become coloured (vi.); Colour (vt.)

01.04.09.03.01 Painting (n.); Painted (adj.); Paint (vt.)

01.04.09.03.02 Staining (n.); Stained (adj.); Stain (vi., vt.)

01.04.09.03.03 Dyeing (n., adv.); Pertaining to dyeing (adj.); dye (vi., vt.)

01.04.09.03.04 Colouring matter (n., adj., adv.)

01.04.09.05 Change of colour (n.); Changing colour (adj.); Change colour (vi.); Change colour of (vt.)

01.04.09.06 Science of colour (n., adj., adv., vt.)
```

The "Individual Colours" category includes a breakdown of ten of Berlin and Kay's basic colour categories (WHITE, BLACK, RED, GREEN, YELLOW, BLUE, BROWN, GREY, PURPLE and ORANGE) and presents a list of hyponyms for each colour. The Thesaurus lacks a separate category at this level for PINK, listing it and its hyponyms under RED.

```
01.04.09.07 Named colours (n.)
01.04.09.07.01 White/whiteness (n.); White (adj.); Whitely (adv.)
01.04.09.07.02 Black/blackness (n.); Black (adj., adv., vt.)
01.04.09.07.03 Red/redness (n.); Red (adj., adv.); Be red (vi.); Surpass in redness (vt.)
01.04.09.07.04 Green/greenness (n.); Green (adj., adv.)
01.04.09.07.05 Yellow/yellowness (n.); Yellow (adj., adv.)
01.04.09.07.06 Blue/blueness (n.); Blue (adj., adv., vi.)
01.04.09.07.07 Brown/browness (n.); Brown (adj., adv.)
01.04.09.07.08 Grey/greyness (n.); Grey (adj., adv.)
01.04.09.07.09 Purple/purpleness (n.); Purple (adj., adv.)
01.04.09.07.10 Orange (n., adj.)
```

All lexis recorded with a colour sense in the OED is categorised in this section of the HT, from general concepts to the prototypical element of hue. This thesis uses the corresponding MM categories D34 "Colour" and D35 "Individual colours" to represent the area of meaning of colour. At times, semantically close categories will also be brought into the discussion.

3.1.3 Historical Thesaurus Analysis

The initial process of coding undertaken for the present research is very similar to that of the MM project as a whole (for further details on the MM project's methodology see Anderson and Bramwell 2014b and Alexander and Bramwell 2014). A database query is run to compare all the lexical items contained in one category, such as "Colour", with those of every other category. Categories with at least two distinct word-forms in common are considered by the coder.

Even though the initial "mapping", or comparison of lexical items, is performed computationally with a database query, the remaining work involved in coding the data is qualitative in nature. Each pair of overlapping categories is then coded again from the perspective of the other category. For example, when coding the category A16 "Minerals", the overlap with D34 "Colour" appears containing the same list of shared word forms.

The MM project and the present study do not distinguish between word classes because both are interested in the process of metaphor formation. This contrasts with other accounts of metaphor. The Pragglejaz group created a method that can be employed to identify metaphor in discourse called MIP (Metaphor Identification Procedure). Whereas original MIP (Pragglejaz Group 2007) also ignored parts of speech, in the updated version, MIPVU, lexical units are confined to word classes. Because most speakers are not aware of etymology, MIPVU considers the context in which each item is being used is given precedence over its history. The rationale behind this decision is that MIPVU focuses on "word use in context, not on the results of metaphorical word formation processes" (Steen, Dorst, Herrmann, Kaal and Krennmayr 2010: 17). While this demonstrates two separate goals of metaphorical analysis, treating parts of speech separately will result in discounting a large number of patterns.

The discussion in Section 2.1.3 showed that the notion of a domain, including that of a universal colour domain, is problematic. The MM categories are not intended to be understood as domains, but to represent areas of shared meaning that can be compared to other less similar areas. Nevertheless, metaphorical connections are revealed by the mapping between MM categories. Researchers can then use this information to conduct more detailed studies, such as in this thesis.

The HT categories were arrived at using a bottom-up approach in that lexicographers started with OED definitions, rather than a preconceived category structure. Language is not tidy and seldom fits into clearly defined categories, yet using the HT categorisation as a framework enables the MM team and future researchers to explore the patterns in language and the fuzzy boundaries within it. While lexemes provide evidence for semantic domains, or in this analysis, the MM categories, the overall aim of the MM project is to identify where conceptual metaphors survive the lifespan of individual words. In other words, it is the semantic categories which are coded, not lexical items.

A large amount of shared word-forms between categories are due to non-metaphorical, or literal, connections, which must be filtered out for the purposes of this research. The various types of connection between categories are outlined below.

3.1.3.1 Non-Metaphor

A large portion of the data can be attributed to what the Mapping Metaphor project termed 'Noise': lexical overlap between categories which is due to non-metaphorically motivated polysemy or homonymy. For example, the word wind appears in both C04 "Weariness" and E43 "Shape" categories. In the former category, it means to "deprive of 'wind' or put out of breath" (OED, wind verb², 11e), from the OE word wind for 'air in motion' (OED, wind noun¹, etymology and 1); whereas in the E43 "Shape" category wind means "To turn or pass (something) around something else so as to encircle or enclose it and be in contact with it; to twine, twist, fold, or wrap (something) about, round, or upon something else" (OED, wind verb¹, 14a) from the OE word windan. These two uses of wind are examples of homographs, a subset of homonyms, as the words are spelt the same but have different pronunciations. Another example of homonymy from D35 "Individual colours" is the word yellowing which also appears in B45 "Animal habitats and sounds". However, in the latter category the meaning of *yellowing* is an extension of *yell* by analogy with *bell* and *bellow* (OED, vellow verb², etymology) and so is unrelated to the verb "become yellow" (OED, yellowing, verb¹) from the colour term yellow, derived from OE geolu. Each word must be examined within the context of the category in which it appears in order to establish the precise sense of the word form.

In the case of D35 "Individual colours", many categories are connected to each other through the metonymic relation between a number of non-basic colour terms and their precolour meaning. Entities with a prototypical colour (whole) lend their name to the colour term (part). Colour terms may be divided into those which are transparent and those which are opaque. Transparent terms can be easily traced back to their pre-colour sense and if both the entity and colour senses are accessible then the forms become polysemous, for example the BCT *orange* and non-BCTs *gold*, *ruby* and *chocolate*. As a result, a large number of the overlaps with such polysemous terms profile the entity, not the colour, sense.

For example, the figurative meaning of the phrase *to lie/lay (up) in lavender* appears in E21 "Safety" is to "lay aside carefully for future use", "pawn" or "put out of the way of doing harm", which derives from the practice of storing clothes with the flowers and stalks of lavender to preserve them from moths (OED, *lavender*, noun² 2). Though this is an extended, metaphorical use of *lavender*, it is not via the colour *lavender*, but characteristics

of the plant, and so is not considered to represent a metaphorical connection between D35 "Individual colours" and E21 "Safety", but between B20 "Plants" and E21 "Safety".

Opaque terms, however, are synchronically un-analysable by most language users and are only understood as colour terms. Most BCTs are opaque terms, such as *red*, *yellow* and *purple*, along with many non-BCTs, such as *russet*, *vermillion* and *puce* (Casson, 1994: 8). Though opaque terms are currently monosemous, historically they too would have an entity sense and polysemous colour sense. As such, it is important to consider the etymology and pre-colour meanings to establish which sense (entity or colour) is being profiled.

In many cases, there is a clear semantic similarity between categories, but one that has not been motivated by metaphor. For example, a category which is very Relevant to D34 "Colour" is D33 "Darkness". Both concepts are intrinsically related to one another and so share lexical items. The connection between these categories is not metaphorical, rather it is more literal in nature. Often, but not exclusively, category pairs which are coded as Relevant are located close to one another in the HT, such as D33 "Darkness" and D34 "Colour" which are neighbouring categories. Clusters of Relevant categories often share metaphorical connections although one can usually be identified as holding the most appropriate link. These are discussed at various points throughout the thesis.

3.1.3.2 Metaphor

Category links which reveal a metaphorical connection are coded as Metaphor. It must be borne in mind that metaphorical links between categories may involve the source or target domain of the metaphor, or both. In addition to coding a connection as metaphorical, it was also graded as being Weak or Strong (not to be confused with Black's (1993) use of the terms weak and strong, which refer instead to conventional and novel metaphor). This distinction was made to differentiate between systematic and one-off metaphors.

One factor that proved a clear indication of whether a metaphorical connection was coded as Strong is frequency. For example, in the category H22 "Truth and falsity" there are several systematic metaphorical uses of colour terms: *greening* (a hoax making a person appear simple or gullible), *white* (something plausible or truthful), *whitewash* (to improve the appearance or conceal faults of something) and *black* and *blue* (serious error or blunder).

However, a link that is instantiated by only one or two words can also be graded as Strong. For example, the category E29 "Ability" contains variations of only one colour metaphor: *green, greenly* and *greeny*, all describing an inexperienced person. It is coded as a Strong Metaphor because it was considered to be important and widespread enough to be described as a systematic connection. Metaphor may be coded as Weak when there is only one or a few lexical items suggesting the link, such as *green* in A28 "Atmosphere and weather" which is used to describe a mild climate. This is clearly a metaphorical connection but supported by only one lexical item out of a high number of shared words and so it cannot be described as a systematic link. It is also borne in mind that earlier periods have less information available. Finally, cross-category links are taken into consideration, when evidence of a metaphorical link could be more accurately represented by a different category.

While there is an element of subjectivity in a Strong or Weak grading, each decision was made as part of the rigorous coding process. The coder weighs up all of the evidence available with reference to the principles described. Furthermore, as stated in 3.1.3, in order to ensure reliability of the method, every pair of overlapping categories was analysed twice, before a final decision was made, taking into consideration the coding from both directions.

3.1.3.3 Metonymy

In the MM project, cases of metonymically-grounded metaphor were included under the Metaphor code, serving as an umbrella term, whereas in the present study an additional code was created. The reason for doing this was because it has been established that colour is an area that lends itself to metonymy (see Section 2.2.3) and this has a major impact on the development of figurative uses of colour. Cases where the colour term is derived from the entity sense are coded as Metonymy. For example, there are almost three hundred lexical items that overlap between B24 "Cultivated plants" and D35 "Individual colours". Most of these are words for plants which have a distinctive colour, such as *lilac*, *oak*, *lemon*, *ginger* and *peppermint* and so lend their name to the colour. Similarly, Y09 "Money" displays several connections with colour, containing the basic colour terms: *black*, *white*, *red*, *green*, *brown*, and non-basic terms *gold*, *silver*, *copper*, *pewter*, *canary*, *snow* and *ochre*. Both D24 and Y09 are coded as a Strong Metonymy. Categories which

contain only one or few colour terms, such as *aurora/aurorally* in A26 "Astronomy" are coded as Weak Metonymy.

3.1.3.4 Additional HT Analysis

The methodology adopted for the analysis set out in Chapters 4 and 5 largely corresponds to the coding procedure of the MM project described above. In Chapters 6 and 7, the general figurative properties of colours are revealed by the MM project's core methodology, such as the association of red with *anger* and green with *envy* in English. Many of these connections are realized in phrases such as *seeing red* and *green with envy*, and yet these and others were not revealed by the MM coding procedure. The reason for this is that they were not included in the colour section of the HT, presumably because as a unit their primary meaning lies outwith the physical denotation of colour. In order to tease out these connections from the HT data, an extra methodological step was taken in this research to identify metaphorical phrases involving colour terms.

Instead of focussing only on a small selection of colour terms, this study aims to be as comprehensive as possible regarding the figurative properties of colour terms. All eleven BCTs in English are examined, along with non-basic colour terms that had figurative senses recorded in the OED. In addition, the figurative meanings of other non-basic colour terms that were not shown by the OED, but that I was aware of were added to the list. Searches were made for each colour term in the HT database, employing wildcards to catch entries that were hyphenated or compounded. Each search resulted not in a list of overlapping lexis shared by categories, as in the MM methodology, but every instance of, for example, *blue* that appears in the HT and the MM category in which it was categorised. This step revealed examples that supported the main metaphors identified in the initial coding process, as well as highlighting others that were not revealed there.

Even though the lexical overlap between categories for the MM coding was generated automatically, as was the data in the additional HT searches, using database queries, the remainder of the analysis was carried out manually. Interpreting the data is subjective, yet while others may come to different conclusions regarding specific details the overall analysis remains reliable.

3.2 Corpora

In addition to collecting information about the origins and span of usage of figurative uses of colour terms, I wanted to gain a synchronic perspective on how colour terms are currently used, if at all. The best way to do this was through the use of electronic corpora, which allow for a descriptive approach to language by providing collections of written and spoken language from a wide range of sources, Corpus analysis has been described as "the study of language based on 'real life' language use" (McEnery and Wilson 1996: 1), which aligns well with the lexicographic study it partners here. It is hoped that corpus data can reveal whether figurative senses recorded by the HT are still used in the present day and in the same sense.

Tognini-Bonelli (2001) presents a distinction between two types of corpus work: corpus-based and corpus-driven. Whereas the former approach uses corpora as a repository for examples that confirm existing beliefs about language, in the latter all theoretical statements directly reflect the evidence provided by the corpus (ibid.: 84). As an advocate of the corpus-driven method, Tognini-Bonelli asserts that "the commitment of the linguist is to the integrity of the data as a whole" and the corpus "is seen as more than a repository of examples to back pre-existing theories" (ibid.: 84). In doing so she gives the clear message that corpus-based work is considered to be the weaker approach of the two. However, Deignan (2005: 90) asserts that such studies can add value providing they go beyond corroborating existing beliefs and develop new systems when the data does not support previously held ideas. This can be done by beginning with theory developed in the literature, rather than intuition alone.

Although this study is corpus-based rather than corpus-driven, examples of figurative senses have not come from an individual researcher's intuition, but are recorded in the OED, based on quotations of real language use. The HT serves as a framework within which to assess corpus evidence. Lexicography has long been influenced by corpus-based methods (Biber, Conrad and Reppen 1998: 21). Both the dictionary and corpus elements of this thesis draw data from real language use, and I believe using both offers an advantage. While the corpus results in this study often do confirm previous ideas about language use, at times they also contradict it, and reveal subtle variation not previously captured, or new meanings altogether.

3.2.1 Selecting the Corpora

The aim of this research is to investigate the figurative use of colour in general language use, rather than in any particular genre, in the present day. Therefore, the *British National Corpus* (BNC) and the *Corpus of Contemporary American English* (COCA) were selected. The BNC is commonly considered the "gold standard" among British corpora (Anderson and Corbett 2009: 10), and for this research is accessed via the interface developed by Mark Davies at Brigham Young University (http://corpus.byu.edu/bnc/), who also created COCA (http://corpus.byu.edu/coca/). Both are large corpora: the BNC contains one hundred million words, of which 10% is spoken data, and COCA contains around four hundred and fifty million words, of which 20% is spoken data. On occasion, when discussing figurative uses that were not found in the BNC or COCA, examples are taken from the *LexisNexis* collection of newspapers.

The size of corpora began to increase at a great rate, in part, due to the electronic availability of written data; spoken data in contrast is much harder to obtain, due to the dependence on manual transcription (Leech 1993: 4). Corpora of specific areas of language are often much smaller in size, sometimes due to the limited resources available. Fillmore (1992: 38) suggests that the only way to know if a corpus is not big enough for a purpose is if a native speaker fails to find something that is intuitively expected, even though one of the main advantages of using corpora is to show counterintuitive findings. Both the BNC and COCA are general purpose corpora that have been created with the aim of providing a large number of texts in a range of genres and registers.

3.2.2 Methodological Considerations of Corpora

Working with large corpora brings methodological challenges. The numbers of corpus examples found for each metaphor in this study varied greatly, from single occurrences to those in the hundreds. On the one hand, many colour phrases appear in the corpora in relatively low numbers and so it can be difficult to draw any firm conclusions from them. When a sense occurs in low numbers in the corpora this may be indicative not simply of low salience, but that a new sense may be emerging, may be undergoing an increase in currency, or may be falling out of use. Even though the BNC covers the period from the 1980s to 1993 and COCA from 1990 to 2012, this represents only a snapshot of the language through a narrow window of time. However, analysing COCA in addition to the BNC provides not only the opportunity to consider more than one major variety of English,

and to contrast British and American use, but also to study senses that occur in lower frequencies, as COCA is over four times the size of the BNC.

On the other hand, many of the figurative uses occur in very large numbers. While it is possible to analyse every corpus example, such analysis is very time-consuming. This, along with the large number of colour metaphors revealed by the HT data, would have been a task too large for the scope of this research. The metaphors discussed in Chapters 4 and 5 are highly polysemous words, and so also frequently used words. As a result, the corpus material in these chapters offers illustrative, but not necessarily representative, examples that spark qualitative discussion.

Some usage figures for figurative phrases found in the BNC and COCA are provided in Chapters 6 and 7. This is not intended to be a full-scale quantitative analysis, but these figures are meant to be indicative of how well established a particular phrase is (for a similar stance see Allan 2008: 35). That said, it is acknowledged that frequency is not the sole measure of conventionalisation. In a few cases where the phrase in question occurred in numbers over 500, a random sample was analysed.

A further factor to bear in mind is that COCA is a type of monitor corpus in that new texts were continually added until the most recent addition in June 2012. This was done in a controlled manner, with a set number of words and breakdown of text-varieties with each addition. However, as the last addition was just after data collection had been completed for this study, there may be slight, and likely insignificant, discrepancies in the results if the study were to be replicated.

Numbers given are not definitive; in some cases it is not possible to ascertain the precise sense from the context, especially given that the BYU interfaces to the BNC and COCA display only restricted co-text. In the case of phrases, investigated in Chapters 6 and 7, the majority of these were always used with a figurative sense, but in a few cases there was also a possible literal meaning that had to be separated out: for example there are over a thousand examples of *red-hot* and its variations in COCA. Depending on the ambiguity of the word or phrase in question, it is entirely possible that another researcher would reach a different figure, as deciding whether something is metaphor, metonymy or something else is highly subjective (see Section 2.1).

If in doubt, I did not include examples I thought were unclear. The titles of songs, musical groups, TV programmes, films, books, magazines or events are likewise excluded: while these may be selected initially for their semantic content, this becomes irrelevant in future references. On occasion, the same text is duplicated in the corpora, but as such accidental duplication is infrequent, and any resulting effect is therefore of very minor significance, it has not been compensated for in the figures.

The corpus data shows that colour metaphors often feature in the headlines of newspaper articles. Semino (2008: 28) found that news headlines often draw on metaphorical punning. This type of wordplay is a signal for deliberate metaphor, "which alerts the addressee that it is intended to be realized *as* a metaphor" (Steen 2014: 59), and as a result captures the attention of the reader. These deliberate metaphors and puns involving colour remain in the study. Unlike the other types of titles that were excluded, headlines are given only once.

Another issue with working with corpora is that searches retrieve only the exact form entered and any variation can potentially get lost. Words recorded with a figurative sense in the OED were not always in the lemmatized form. For instance, *harmonization* is recorded with a metaphorical meaning of "agreement in colour" (OED, *harmonization*, noun 1b), yet *harmony* is not. In the OED, phrases including a colour term, discussed in Chapters 6 and 7, may be separated with a space (for example *white lie*) or a hyphen (for example *red-blooded*), or in a few cases compounded into one word (for example *bluestocking*). Whichever form is found in the OED is presented in tables in the analysis chapters. In the corpora, however, they may take a variety of forms (*bluestocking* appears as a compound and with a space and hyphen, for example). In order to maximise retrieval of potential forms from the corpora, wild cards were employed (for example *yellow**, where * stands for any number of characters, including zero and punctuation characters). Wildcards are also used to catch both British and American spellings of words such as *grey/gray* and *colour/color*, along with plural and other suffixes. It is nevertheless possible that some examples will have slipped through the (metaphorical) net.

3.3 Presentation of the Data

Throughout Chapters 4 to 7, results from the HT are presented in tables. For each word or phrase, the dates of first attestation and last recorded use of the *figurative* sense are provided in the Dates column, based on the dating information discussed in 3.1.1. At times, the OED conflates a literal and figurative sense into one entry. In such cases, I have

identified the first figurative sense from the list of examples and provided the corresponding date in the tables, marked with an asterisk. In Chapters 6 and 7 an indication of whether the figurative sense was found in either of the corpora is given, where Y=yes, N=no and O=other sense (i.e. it was found in the corpora, but in a different sense to that given by the OED). In the discussion of a particular sense, definitions from the OED are given along with references to the part of speech and sense number. MM category codes and names were updated during the course of this research and so this thesis uses the old codes and new names. An appendix is given at the end with the conversion to the new code system.

In Chapters 4 and 5, each MM category found to be metaphorically connected to colour is discussed according to MM category order, with source and target metaphors presented alongside one another in adjacent tables. The coding results of D34 "Colour" revealed a lot of cross-modal, or synaesthetic, language surrounding colour. In order to facilitate an investigation into cross-modal metaphors, MM categories covering sensory areas of meaning were identified using the HT classification system. The sensory areas are: colour, taste, smell, sound, touch and dimension (with colour and dimension standing for sight, following Williams 1976). Following a general discussion of colour metaphors in Chapter 4, cross-modal language is given its own dedicated treatment in Chapter 5. Some senses corresponded to MM categories more clearly than others and full details of categories are given in Chapter 5.

In Chapters 6 and 7, a table of results is given for each colour term. As the analysis was undertaken, it became clear that many of the colour phrases were not always grouped in categories that represented their extended meaning. For example, the phrase *blue streak* appears in E50 "Rate of movement and speed" and O03 "Speaking", reflecting its meaning of a fast-paced conversation. The OED notes a collocation with swearing, but this is not reflected by the inclusion within a relevant HT category. As such the figurative connection between *blue* and bad language is not explicit. Similarly, while *red light*, *yellow light* and *amber light* all appear within X02 "Transport", only *red light* appears in E23 "Disadvantage and harm", reflecting its metaphorical sense of impending danger. Furthermore, *green light* does not appear in any MM category. One possible reason for this is because these phrases were grouped for their more literal, metonymic interpretation. I decided against listing the metaphorical colour phrases by their corresponding MM category as they do not always capture the figurative meaning being mapped. Instead, I

grouped phrases by the general metaphorical theme that reflects the extended meaning and order them here chronologically. The discussion that follows the tables draws on both OED definitions and the results of the corpus analysis.

Illustrative quotations are provided from the corpora, usually with one example from each of the BNC and COCA, and include enough surrounding context to convey the figurative sense. Spelling and typographic errors have been removed, as has superfluous context. Any omitted words or added context have been marked in square brackets. The remaining quotations are presented as a compact sentence, with a capital letter and full stop, where the original may have been part of a longer unit. These alterations, however, do not alter the meaning.

3.4 Thesis Structure

The chapters that follow are structured around the two MM categories under investigation. Chapters 4 and 5 discuss the transfer of lexis to and from the MM category D34 "Colour". Lexis originally with a colour sense is transferred to other areas of meaning, for example one can feel *off-colour* or have a *spectrum* of ideas. And conversely, colours can be *vivid* and *fresh*, or *sober* and *dead*, showing how metaphorically-motivated polysemy has developed into colour qualifiers. Chapter 5 is dedicated to cross-modal language involving colour, such as *deep*, *soft* and *warm*. Chapter 6 discusses the primary BCTs and Chapter 7 discusses the secondary BCTs, from the D35 "Individual colours" category, that appear in phrases with a figurative meaning, such as *green with envy* and *grey area*, and a selection of non-basic terms, such as *scarlet*, *gold* and *beige*. Finally, Chapter 8 draws together the major findings of this thesis with a discussion on each research question.

4 Qualities of Colour

The analysis set out in Chapters 4 and 5 aims to address the first research question:

How does the general concept of colour lend itself to metaphor and metonymy?

In order to answer this question, the general concept of colour is explored in a broad way using the D34 "Colour" category, which offers a bird's eye view of colour. Chapters 4 and 5 are both based on this data. The special case of cross-modal language is discussed in Chapter 5, and the figurative connections with colour are discussed there. Chapter 4 discusses the remaining figurative links in D34 "Colour", which are not connected to the senses.

The MM analysis shows that the terminology in D34 "Colour" can be the target or the source, with meanings transferred both in and out of the category. Chapter 4 discusses how colour is bi-directional, with connections to and from weather, ill-health, emotion and morality. When colour acts as a target, lexis is transferred from other domains to describe aspects such as saturation, brightness and tone. This type of colour terminology, which often acts as a hue modifier, has been largely neglected from previous work. In addition, the most general, superordinate, terms, such as *colour*, *paint* and *spectrum*, are the source for metaphors into other areas of meaning.

The MM coding procedure was followed fairly closely in this and the following chapter. Data are presented in the order of their categorisation within the HT, and illustrative examples are provided from the corpora.

4.1 Colour in the Historical Thesaurus

As discussed in Chapter 3, the two Mapping Metaphor (MM) categories examined in this thesis originate from one Historical Thesaurus category, which was one of a small number of categories that were adjusted to better suit the needs of the MM project and this thesis. The sub-category 01.04.09.07 Named colours, including various basic and non-basic CTs, was separated from the rest of 01.04.09 Colour to create two MM categories relating to colour: D34 "Colour" and D35 "Individual colours". Sub-categories contained within the D34 "Colour" category are:

01.04.09 Colour

01.04.09.01 Quality of colour

01.04.09.02 State/mode of having colour

01.04.09.03 Painting

01.04.09.04 Colour relationships

01.04.09.05 Change of colour

01.04.09.06 Science of colour

The D34 "Colour" MM category therefore profiles various aspects of colour besides hue alone. Within the 01.04.09.01 Quality of colour subcategory, adjectival subheadings alone include: pertaining to tone; intense; faint/weak; vivid/bright; garish; pure/clear; impure/unclear; soft; dull; toned down; warm/glowing; cold; velvety; metallic; mat. This list reveals several dimensions of colour and the metaphorical nature, not only of the lexis contained within the category, but also of the subcategory titles.

4.2 Metaphors for Colour

The following section outlines the most systematic category links with the D34 "Colour" category found in the MM data.

4.2.1 Atmosphere and Weather

A bi-directional category link is evidenced between D34 "Colour" and A28 "Atmosphere and weather" and is shown in Tables 4.2.1a and 4.2.1b.

Table 4.2.1.a Colour to Atmosphere and weather connection

Target category	Lexemes	Dates of metaphorical
		transfer
A28 Atmosphere and	bleak	1590
weather		

Table 4.2.1.b Atmosphere and weather to Colour connection

Source category	Lexemes	Dates of metaphorical
		transfer
A28 Atmosphere and weather	serene	1751-1846
	mirage	1927-

An example which transfers a meaning from the D34 "Colour" category into the A28 "Atmosphere and weather" category is *bleak*, a sense relating to paleness (OED, *bleak*, etymology). The first recorded use of *bleak* is the sense found in the D34 "Colour" category: "Pale, pallid, wan; deficient in colour" from 1566 (OED, *bleak*, adjective 1). Only decades later, *bleak* was used with the sense of "cold, chilly" (OED, *bleak*, adjective 3), categorised within A28 "Atmosphere and weather" and also D03 "Weight and temperature". Examples in the target category include:

In fine weather it was pleasant to be in the harvest field, but as the season wore on lashings of cold or *bleak* shafts of wind driven rain made it disagreeable to handle the wet sheaves. (BNC)

It's been a bleak winter on the Oregon coast. 65 inches of rain have fallen in Astoria (COCA)

Transfers in the opposite direction include *serene*, which describes clear and calm days without cloud, wind or rain (OED, *serene*, adjective 1a), and this meaning can be extended to describe colour that is "pure, clear, bright" (OED, *serene*, adjective 1c). Alternatively, when derived from the extension of *serene* as something "restful to the eye" (OED, *serene*, adjective 2b), *serene* colours may be described as "quiet, sober" (OED, *serene*, adjective 1c). Examples from the corpora include:

The lounge was long, and wide, L-shaped, the luxurious furnishings reflecting the cool, *serene* hues of the sea. (BNC)

She starts with a *serene* color palette based on the deep greens and browns that are the essence of winter's makeup. (COCA)

Surround yourself with colors you love-vivid reds and purples, *serene* blues and greens, crisp whites and ivories. (COCA)

These examples show *serene* is used for the blue and green area of the spectrum. A *mirage* is the atmospheric phenomenon of "A deceptive image of a distant object formed by light

that is refracted as it passes through air of varying temperature" (OED, *mirage*, noun 1). The appearance of such images is likened to pale colours and in later use to *blue*, *grey* and *turquoise* in particular, often modifying the names of colours, such as *mirage blue* (OED, *mirage*, noun 3). While several hue terms (*white*, *blue*, *green*, *yellow* and *gray*) modify *mirage*, no examples were found which use *mirage* as a modifier in the BNC or in COCA.

4.2.2 Ill-health

A connection between ill-health and colour, that has a metonymic motivation based on colour changes of complexion, is revealed by B07 "Ill-health" and B30 "Skin" and is displayed in Tables 4.2.2a and 4.2.2b.

Table 4.2.2.a Colour to Ill-health connection

Target category	Lexemes	Dates of metaphorical
		transfer
B07 Ill-health	off-colour	1876-
B30 Skin	ash	c1374-

Table 4.2.2.b Ill-health to Colour connection

Source category	Lexemes	Dates of metaphorical
		transfer
B07 Ill-health	infect	a1398-
	languish	c1510-
	sick	1599-
	sickly	1695-
	sickness	1849
	sicken	1853-

B07 "Ill-health" provides examples of bi-directional metaphors with D34 "Colour". Someone who is slightly unwell or lethargic may be described as *off-colour* (OED, *off-colour*, adjective 2a). This is most likely based on the physiological change in pallor such as growing pale or having a greenish tint when sick. There are 15 examples in the BNC of people who are unwell being described as *off-colour*, and one in COCA, including:

Some elderly people suffer quite unnecessarily from the 'silent' types of illness which [...] might well be diagnosed if they visited their doctor at six-monthly intervals when feeling at all 'off colour'. (BNC)

Star mentally congratulated herself for being so perky and positive, despite her current *off-color* condition, which consisted of a guilt-ridden hangover and eighty-seven minutes of half sleep. (COCA)

Feeling off-colour was more frequent than *looking off-colour*, with 6 examples of the former and 2 of the latter, suggesting the metaphor is moving further away from its original motivation of the visual signal of sickness. Another indication of this is that animals and fish are also described as being *off-colour*, with 12 examples in the BNC, for example:

Yes, the dog had been slightly *off colour* for a week or two. (BNC)

How does a rat tell the experimenter that it has a headache or feels a bit off-colour? (BNC)

Although it is hard to draw reliable conclusions from a small number of instances, in these examples, animals are never described as *looking off-colour*. A range of animals were described as *off-colour*: dog, cat, rat, pig, horse and hippopotamus, none of which will have visual cues for their sickness in the same way as humans. Fish, on the other hand, can literally change colour as described in the headline:

Off colour Ram fades and dies. Two months ago I noticed one of my Rams had lost all its colour [...] and now the fish has died. (BNC)

Ash is recorded as a type of grey in D35 "Individual colours" and its derivatives appear in D34 "Colour" as "deadly pale". It is also categorised under B30 "Skin" with a figurative transfer of the colour term. The corpus evidence suggests that *ashen* has highly restricted reference to skin colour, or more specifically to describe paleness as the result of some emotional trauma, for example:

Lucy's voice was a strangled whisper. She looked ashen, her skin shiny with sweat. (BNC)

She took the phone call in the hallway, and then returned to the dining room looking *ashen*. Her face crumpled as she relayed the news. (COCA)

Ashen is often applied in contexts where the subject is tired or unwell, and collocates with emotions including: anger, fear, panic, rage, sadness, shock, stress and worry. Furthermore,

this sense is particularly productive in the corpora as the pallor is described as *ashen* 63 times in the BNC and 311 times in COCA.

Other colour terms often applied with restricted reference to skin tone are *livid* and *puce* and all are used in connection with emotion that results in a change in facial colour (see Section 7.6.3). When considered hues, the terms denote dark blue (*livid*), brownish purple (*puce*), and pale grey (*ashen*), none of which are prototypical descriptions of the colour of skin. The motivation behind the use of these terms for skin tone is metonymically based as when angry, embarrassed or afraid, blood rises to or drains from the face. Though an element of hyperbole is applied in order to emphasis the change in colour, and by extension emotional state, this is primarily based on tone and saturation, not hue.

Within the same definition as ill-health, the OED also states that *off-colour* can be extended further to include things "not up to the mark, defective, deficient, out of order" in instances where there is no physical change in colour (OED, *off-colour*, adjective 2b). Eight examples with this sense were found in the BNC, including:

Dungannon may have been disjointed at times, and this isn't a performance they will remember, but even an *off colour* display was more than good enough to keep their Cup hopes alive. (BNC)

If a player was obviously *off colour*, Karajan would never harry him. (BNC)

These examples describe the performance of sports teams or individuals in a team. Though the second example may appear ambiguous as to the exact use of *off-colour*, examining a wider context reveals it is a player in an orchestra who was not giving their best performance. In total, there were 35 examples of *off-colour* in the BNC, with the meaning of ill-health or more generally for a poor performance, and only one in COCA.

Vocabulary is also transferred into the colour domain from B07 "Ill-health". To *infect* with colour means to "dye, tinge, colour, stain" (OED, *infect*, verb 3b). Colour or light can *languish*, meaning it will "become faint" or "lose vigour or intensity" (OED, *languish*, verb 4a). To look *sick* is to have a "sickly hue" which is "pale, wan" (OED, *sick*, adjective 8). This was first used to describe colour by Shakespeare:

Similarly, *sickly* was also first applied by Shakespeare with the meaning: "To cover over (or o'er) with a *sickly* hue" (OED, *sickly*, verb 1a), this time in *Hamlet*:

1604 SHAKESPEARE <u>Hamlet</u> III. i. 87 Thus the natiue hiew of resolution Is *sickled* [1623 sicklied] ore with the pale cast of thought. (OED)

Although the last attested date of this in the OED is from 1876, one example was found in the BNC and 2 examples were found in COCA, all from fiction:

Out of this blur there stares a single set of eyes, eyes as *sicklied* o'er with cynicism as those of a dying cirrhotic hack. (BNC)

The blue picked out only the veins in her throat and temples and *sicklied* over what beauty she might have had. (COCA)

Sickly was also used to describe light or colour which is faint or feeble from 1695 to 1825 (OED, sickly, adjective 6). Examples of sickly as a modifier in the corpora include:

Her *sickly* pallor was receding and color began to return to her face. (COCA)

The foliage began to change, becoming *sickly* yellow or brown instead of shining grey and green. (BNC)

The sky had become a pale, *sickly* orange and gray. (COCA)

Various colours are modified by *sickly* in the corpora. The majority of examples describe someone's pallor, such as the first example, but *sickly* is also applied to other referents. In the final example the sky is described as sickly even though it cannot literally be unwell, suggesting that it is moving away from its source.

4.2.3 Life

A systematic metaphor can be found across a number of MM categories relating to life, including B01 "Life", B10 "Death" and C05 "Refreshment". Evidence is presented in Table 4.2.3.

Table 4.2.3 Life to Colour connection

Source category	Lexemes	Dates of metaphorical
		transfer
B01 Life	lively	c1425-
	livelihood	c1593
	liveliness	1713
	living	1876
	vive	1591-1671
	vivacity	1735-1808
	vividity	1813-
B10 Death	dead	1640-
	dead colour	1659-
C05 Refreshment	fresh	c1385-1860
	reviver	1817-

The earliest sense transferred to colour is *lively*, which has been used to describe "fresh, vivid, brilliant" colour since c1425 (OED, *lively*, adjective 5a). Examples from the corpora include:

White illuminates dark corners and en masse provides a still breathing space among more *lively* shades. (BNC)

RASPBERRIES: They should be a *lively* red color. Not maroon, which indicates that they are overripe. (COCA)

A brightness or brilliance of colour or light is described as *vivacity* of colour. The only examples found in the corpus are:

He would have liked to take her in his arms, to stroke the *vivacity* of that auburn hair. (BNC)

These people were presumably charmed by Watteau's novel subjects, [...] but early comments about his work stress above all the character and effects of his inspired handiwork: "the *vivacity* and truth of his color," (COCA)

However, the first example is ambiguous as it could also refer to the healthy condition of the hair, rather than its colour, and the second example is a creative use of the term. A colour that is "bright and pure" and "not sullied or tarnished" can be called *fresh*, and so relates to both saturation and tone (OED, *fresh*, adjective 9a). Though the OED marks the last recorded use in 1860, examples can be found in both corpora showing it is still in use today, for example:

All the trees were in full leaf but the oaks and beeches had not long so been, so that their foliage was still a *fresh*, bright colour and the lime trees were hung with pale, yellow-green, dangling flowers. (BNC)

I frequently clean the mixing surface of my palette and wash off the surface of the pigments in the wells of the palette in order to keep my colors clean and *fresh*. (COCA)

The first example indicates how the metaphor could have developed by referring to plants that are themselves *fresh* and alive in addition to being *fresh* in colour. In the second example, *fresh* refers to the clarity of paint and resulting colours, which can be spoilt when colours mix and relates to the relationship between D34 "Colour" and B80 "Dirtiness" discussed in more detail in Section 4.2.7.

Just as colours can be full of life, they can also be *dead*, meaning they are "without brightness, dull, lustreless" (OED, *dead*, adjective 13b), for example:

I thought the *dead* whiteness of the dress made me more of a corpse than a bride but hadn't enough energy to infuriate my mother by telling her so. (BNC)

Bartlett's third approach is to begin by painting "*dead* color," muted colors made from combinations of white, yellow ochre, Mars red, and black. (COCA)

In the first example, both the colour of the dress and the complexion of the person wearing it are described in terms of death. The second example specifies that *dead* colours are "muted", suggesting that they are low in saturation.

4.2.4 Order and Sequence

Neighbouring categories F15 "Disorder" and F16 "Sequence" reveal evidence of metaphor with D34 "Colour"; however, the first category is the source category whereas the latter category is the target.

Table 4.2.4.a Order to Colour connection

Source category	Lexemes	Dates of metaphorical
		transfer
E28 Behaviour and	rory-tory	a1794-
conduct		
F15 Disorder	muddle	1596-
	riot	1713-
	clashing	1895
	clash	1935-

Table 4.2.4.b Colour to Sequence connection

Target category	Lexemes	Dates of metaphorical
		transfer
F16 Sequence	spectrum	1936-

To *muddle* a colour is to "mar the clearness or sharpness" of it or to mix it together with another colour (OED, *muddle*, verb 4). The OED lists the colour use under the senses relating to mixing rather than under those relating to mud, and so the Source of the metaphor lies in the F15 "Disorder" category as opposed to the B80 "Dirtiness" category. An interesting metaphor is *riot*, most often used in the phrase a *riot of colour*, meaning "a vivid display of colour" (OED, *riot*, noun 8). For example:

In this quiet lane there was an extravagance of wild flowers, a *riot* of colour. (BNC)

Mr. and Mrs. Stoutenberg have made Oscar's room into a small, cheerful *riot* of playful primary colors. (COCA)

Woolard's costumes contrasted the officious blues and grays of Mao's era with the *riotous* colors of the Chinese opera troupe. (COCA)

According to the OED, this initially developed from the sense "noisy, wanton revelry" but has more recently become "the violent disturbance of the peace" (OED, *riot*, noun 3 and 4a). A similar example from E28 "Behaviour and conduct" is *rory-tory* which described something or someone who was "noisy or boisterous" before a regional variation of "loud or gaudy" colours was adopted in the South West of England. According to the OED this

use has outlived the former by surviving into the modern day (OED, *rory-tory*, adjective 1 and 2), but this is not borne out by the corpora, where neither meaning was found. Colours can *clash* with one another, meaning they "go badly together" or "kill each other" (OED, *clash*, verb 4c), such as:

Strong pink is not the easiest colour to handle, as it can *clash* terribly. (BNC)

Some may find the site's *clashing* color scheme a bit jarring. (COCA)

According to the OED, this is most likely derived from the chief current use of the verb "to conflict, be at variance; to interfere, be incompatible; to disagree (*with*)" (OED, *clash*, 4b).

Within D34 "Colour", a *spectrum* is the coloured band created when light is diffracted in a prism (OED, *spectrum*, noun 3a) and this gives rise to the metaphorical meaning, within F16 "Sequence", of "The entire range or extent of something" (OED, *spectrum*, noun 3d). For example:

His knowledge of Scottish politics is unrivalled on any side of the political spectrum. (BNC)

Social-science research can be used to better identify appropriate stakeholders who represent the *spectrum* of interests. (COCA)

Though not contained in the D34 "Colour" MM category, *rainbow* is another similar example. A *rainbow* is an arch of coloured bands formed when sun shines through rain (OED, *rainbow*, 1a), dating back to OE, and is grouped in the MM categories A28 "Atmosphere and weather" and D24 "Electromagnetism and atomic physics". A metaphorical meaning is first recorded in 1662 as "Something which consists of many elements" or "a wide variety or range of related things" (OED, *rainbow*, noun 3) and is grouped in F16 "Sequence".

De Lagarde wanted to restore Germany to 'unity'. The unity he had in mind was, ironically, that which had existed before Germany became a nation-state, the unity of the disunited *rainbow* of German states and principalities. (BNC)

"If you compare it to 10 years ago, there's a whole *rainbow* of options for first-time buyers now," says Grose. (COCA)

Rainbow does appear in D36 "Variegation" as a verb meaning "To colour or illuminate (an object) with many colours, esp. those of a rainbow", which can itself be used figuratively, but this sense is not recorded until 1807, around a hundred and fifty years after the metaphor from F16 "Sequence". In spite of this, I argue that this metaphorical meaning still derives from the notion of colour. The "many elements" or "variety of related things" are transferred from the many colours contained within the rainbow. While colour occurs on a continuum, it is broken down according to various properties, most often hue. The resulting scale lends itself to the metaphorical meaning of variety and choice.

4.2.5 Emotion

While the overall association that LIGHT IS POSITIVE and DARKNESS IS BAD holds, Apresjan (1997: 186-187) found exceptions to this within emotions, based on the physiology of facial colour. The categories within Level 2 "Emotion" reveal many bi-directional metaphorical links with D34 "Colour".

Table 4.2.5a Colour to Emotion connection

Target category	Lexemes	Dates of metaphorical
		transfer
I01 Emotion	colour	1938-
	change colour	1523-1860
I03 Excitement	colourful	1905-
I06 Emotional suffering	colourless	c1425-
I16 Fear	lurid	1850-
	bleach	c1760

Table 4.2.5.b Emotion to Colour connection

Source category	Lexemes	Dates of metaphorical
		transfer
I04 Composure	sober	1603-
	soberly	1820
	sedate	1924-
I06 Emotional	sad	1415-
suffering	sadly	1616-

	saddish	a1678
	sadden	1787-
	sullen	a1586-
I17 Courage	generous	1710-

Durkin (2014: 248-249) notes that the word *colour* shows borrowing from either French or Latin and both source languages have a variety of literal and figurative meanings (hue, complexion of the face, colouring matter, stylistic ornament, etc.), which are also shown by the English word. Within the top I01 "Emotion" category is *colour*, meaning to "lend a particularly interesting quality to something" (OED, *colour*, noun¹ 17). A similar sense for *colourful* can be found in I03 "Excitement". Within the OED it is defined in metaphorical terms as something "full of or characterized by colour" (OED, *colourful*, adjective 1). The HT categorisation, however, is more revealing as within I03 "Excitement" it is subcategorised as "piquantly exciting". For example:

Indeed his sanguine response to his discovery lent *colour* to the story when it reached the evening news. (BNC)

While scrounging for supplies, they met *colorful* characters, most of whom were friendly. (COCA)

Sedate colours are defined as "not unduly striking" and, in equally metaphorical terms, "restful in tone" (OED, *sedate*, adjective 1e), for example:

Three colours: saturated powder blue, *sedate* grey and matt white. (BNC)

As he trotted down the stairs, he stripped off the green windbreaker and reversed it so that it was a more *sedate* and less memorable blue. (COCA)

Sober colours are "subdued in tone" or "neutral-tinted" (OED, *sober*, adjective 9a). For example:

Prim suits for the races in *sober* colours open to reveal linings and blouses in vivid Indian bright silks. (BNC)

His color palette had become increasingly *sober* and monochromatic, his patterns increasingly abstract. (COCA)

I06 "Emotional suffering" and D34 "Colour" transfer lexis in both directions. Something *colourless* has "no distinctive character" and is "bland" (OED, *colourless*, adjective 2a). Furthermore, colours can be described as *sullen* if they are of "sombre hue" (OED, *sullen*, adjective 4a), or *sad* if they are "dark", "neutral" or "dull" (OED, *sad*, adjective 10a).

Adrian Henri ponders on what life would be like without his loved one - how *colourless*, dull and ordinary it would seem. (BNC)

The passionate reds of the room's interior were exchanged for blue, *sullen* and grayed. (COCA)

The room was decorated in sad shades of brown. (COCA)

The OED notes that *sadly* referring to dark colours later merged with the sense of mourning (OED, *sadly*, adverb 8 and 9a). These examples support the more direct metaphorical connection between I06 "Emotional suffering" and D33 "Darkness". Word senses that are shared by D33 "Darkness" and D34 "Colour" and evidence a metaphorical link with I06 "Emotional suffering" include: *dark*, *dull*, *dusky*, *gloomy*, *shadow* and *sombre*.

The word *lurid* has developed several contrasting meanings. Originally referring to a pale colour that is "wan and sallow", especially that of the sickly pallor of the skin, it could also signal something shining with a red glow (OED, *lurid*, adjective 1 and 2a). From either of these senses arose the metaphorical connotations of "terrible", "ominous", "ghastly", "sensational", categorised in the I16 "Fear" category (OED, *lurid*, adjective 3). Examples of the figurative meaning in the corpora include:

Although the driver ant colony is an "animal" weighing in excess of 20 kg and possessing on the order of 20 million mouths and stings [...] it still does not match up to the *lurid* stories told about it. (BNC)

But he did create the referral with its *lurid* details, igniting that firestorm of controversy and criticism. (COCA)

In the final development of meaning, the current colour sense of *lurid* has gone full circle and now refers to shades that are "unpleasantly bright" (OED, *lurid*, draft additions). For example:

Alas, smarts drinks prove to be non-alcoholic cocktails of fruit juice, lemonade and *lurid* food colourings. (BNC)

By 5:30 P.M. on Saturday the conga line already snakes up San Francisco's Columbus Avenue: thirtysomethings and Generation Xers queuing under a *lurid* neon sign. (COCA)

Also in the I16 "Fear" category is *bleach* in the sense of becoming pale with fear (OED, *bleach*, verb¹ 2b), though this use only has one attestation.

This domain has shown that dark and dull colours are linked with negative emotions, and vivid colours and brightness are linked with positive emotions or traits. The only exception to this is *lurid*, which fits into the pattern outlined above in terms of its motivation and development, as the metaphorical sense of fear derived from the original colour sense of paleness, but not in terms of its current use, denoting vivid colours. This may not be a problem; however, as other sections show that it is not only the presence or absence of colour that affects metaphors for positive or negative traits. Colours with very high saturation or luminosity, for example, can also be viewed negatively.

4.2.6 Truth

The category H22 "Truth" shows evidence of being the target domain in a strong metaphorical connection with D34 "Colour", displayed in Table 4.2.6.

Table 4.2.6 Colour to Truth connection

Target category	Lexemes	Dates of metaphorical
		transfer
H22 Truth and falsity	colour	c1325-
	colourable	c1400-
	coloured	c1425-
	colouring	?1435-
	colourer	1554-1687
	uncoloured	1585-1868
	paint	c1390-a1849
	painted	c1390-
	overpaint	1749-

A figurative use of *colour* in H22 "Truth and falsity" relates to outward appearance as some "show, aspect, or semblance of something" and in later use comes with the "implication that the appearance is false and used as a pretext" (OED, *colour*, noun¹ 7). The OED states this use is now restricted to legal contexts, which was found to be the case in COCA, for example:

In essence, this case is an allegation of murder under *color of law*, inseparably entwined with a broad-scale political controversy. (COCA)

Various other forms of *colour* also appear in H22 "Truth and falsity". Something *colourable* has "an appearance of truth or trustworthiness" (OED, *colourable*, adjective 1a). Slightly later is a sense of *colourable* with a much graver meaning: "Intended to deceive or to conceal a true purpose; fraudulent; feigned, pretended, spurious" (OED, *colourable*, adjective 2a). Both senses are also used within a legal context in the corpora, with only one example in the BNC and 9 examples in COCA, for example:

The Division Court thought it 'clear to everyone [...] that any suggestion of peaceful picketing was a *colourable* pretence and that it was a question of picketing by intimidation and threat'.

(BNC)

And the campaign facts only have to be colorable. (COCA)

Similarly, that which has been *coloured* has been "presented or manipulated so as to appear true or trustworthy" (OED, *coloured*, adjective 4a). For example:

We hope the branches and members w- w- will believe those reports because they will be the truth, and not some of the more highly *coloured* statements which I'm sure will be put around from time to time. (BNC)

It seemed to Snow that her mother's words were *colored* by Julian's presence, as if she were putting on a certain kind of show for him. (COCA)

The reverse is also recorded, as to be *uncoloured* is to be "open, undisguised; not influenced or affected by something" (OED, *uncoloured*, adjective 2a).

An objective view is free from the values, moral judgments and ideology of the observer: it provides facts and explanatory frameworks which are *uncoloured* by the observer's feelings and opinions. (BNC)

Why do you think, for example, the "Wall Street Journal" chose to do its copy about this story on the editorial page [...] rather than in the hard news pages, which are assumed to be *uncolored* by any political belief? (COCA)

To *paint* is "to embellish, esp. with a view to deception" (OED, *paint*, verb¹ 5) and to *overpaint* is to depict in an exaggerated manner. This sense is metaphorically used "to describe in extravagant terms" or "to overstate" (OED, *overpaint*, verb 2). Only one example was found in COCA:

Robin Hood's story romanticises, but does not exaggerate, the anger of the common people. Nevertheless, one must not *overpaint* the picture. (COCA)

The meaning of deceit by covering with a color or by painting over something was also common in older Czech, and has been preserved in a few idioms (Vaňková 2007: 443). A relevant example from D35 "Individual colours" is *whitewash*, meaning "to give a fair appearance to; to free, or attempt to free, from blame or taint; to cover up, conceal, or gloss over the faults or blemishes of", and the OED notes that this use is now usually somewhat contemptuous through implying a false appearance of something good (OED, *whitewash*, verb 2a). Not only does this metaphor involve the idea of concealing the truth with a colour or paint, but it also draws on the positive connotations of *white* for the outward show. Another relevant example, though one that relates to appearance generally rather than to colour, is to *paper over the cracks* in order "to use a temporary expedient; to create a mere semblance of order" (OED, *crack*, noun 7f).

A pair of relevant examples come from D32 "Transparency", and fit in to the INTELLIGENCE IS LIGHT metaphor. *Opaque* maps on to H18 "Intelligibility" and is "not clear or lucid" (OED, *opaque*, adjective 3a); whereas *transparent* maps on to E28 "Behaviour and conduct" and describes someone who is "Frank, open, candid, ingenuous" (OED, *transparent*, adjective 2a). Barcelona (2002: 212) compares an object that is not transparent, and so the inside of which remains unknown, to an idea that has not been clearly expressed. While this metaphor is based on the knowledge that an increase in light brings an increased understanding, there are counter examples. Too much light can result in a dazzling effect, and something which has a *gloss* has "a deceptive appearance" or "fair semblance" (OED, *gloss*, noun² 1b). In this metaphor, the lustre metaphorically deflects light concealing the inward truth once again. Also, see the current use of *sheen* as found in the corpora in Section 4.2.7.

4.2.7 Morality

Very closely related to the domain of truth discussed above is the domain of morality. According to Lakoff and Johnson (1999: 290) "virtually all of our abstract moral concepts are structured metaphorically", and so it is no surprise that moral concepts are found to be highly metaphorical in the MM data. Morality is represented by MM categories H31 "Contempt", E28 "Behaviour and conduct", T01 "Morality and immorality", T04 "Virtue", and T05 "Moral evil". Evidence of a metaphorical connection is revealed by the shared lexis between these categories and D34 "Colour" and is displayed in Tables 4.2.8a and 4.2.8b.

Table 4.2.7.a Colour to Morality connection

Target category	Lexemes	Dates of metaphorical
		transfer
H31 Contempt	dark	c1374-1818
	black	c1425-
	stain	c1450-1691
	taint	a1616-
T01 Morality and	colour	c1400-
immorality	colouring	?1435-
	colourable	c1443-
T04 Virtue	white	OE-
	light	c1400
	sheen	c1430-1460
	unstained	1573-1863
	unstainable	1864-
	clearness	1526-1701
	bleach	1868
T05 Moral evil	black	OE-
	swart	OE-
	stain	1446-1847
	taint	1573-1861
	discolour	1598-
	discolorate	1651

decolour	1630
sable	1726-1749
off-colour	1875-
darksome	1880

Table 4.2.7.b Morality to Colour connection

Source category	Lexemes	Dates of metaphorical
		transfer
E28 Behaviour and	savage	1706
conduct		
T05 Moral evil	wanton	1583-

Terminology from the domain of colour is also transferred to other areas of meaning. To *decolour* means to figuratively "stain" someone (OED, *decolour*, verb 1) and similarly to *discolour* is "To cause (a thing) to be less attractive; to stain, to tarnish" (OED, *discolour*, verb 2). This use is not frequent in the corpora with only one example in the BNC and 2 in COCA:

Europe's underclass is threatening, if not to wreck, at least to *discolour* the modernised, modish Spain that the country's prime minster, Felipe González, intends to present to the world in 1992. (BNC)

She even has expressed concern that the controversies surrounding brother Michael's life might *discolor* her own. (COCA)

He speaks quietly, carefully, choosing his words as if each might break or *discolor* his true thoughts.

The first two examples are concerned with a damaged reputation, whereas the last is a little different. Here, the subject is worried that his thoughts might be *discoloured*, meaning that they might be misrepresented, or even influenced, by his words.

The following examples overlap considerably in metaphorical meaning with B80 "Dirtiness". The first attestation of *stain* used within the "Contempt" category means "To vilify in words, abuse" (OED, *stain*, verb 5f). More common is the sense categorised in H31 "Contempt" to "inflict a permanent reproach to or stigma upon" someone, thereby blemishing their reputation or honour (OED, *stain*, verb 5c), such as:

The toll was considerable -- as many as 6,000 priests, for example, may have died within Republican Spain -- and a *stain* upon the Republic's reputation. (BNC)

Those years I worked for Granny Kate with the *stain* on my name, most people showed kindness. (COCA)

There are two distinct origins of the word *taint*, which share an identical form; the first relates to touching or hitting and the second to colour and dyeing. According to the OED, in later uses, these two meanings have more or less blended together and one such example is recorded in the T05 "Moral evil" category. Here, *taint* may mean "To infect with pernicious, noxious, corrupting or deleterious qualities; to touch with putrefaction" (OED, *taint*, verb¹ 9a). The definition of the noun form, also within T05 "Moral evil", reveals a clearer link with D34 "Colour" and B80 "Dirtiness": "A stain, a blemish; a sullying spot; a touch, trace, shade, tinge, or tincture of some bad or undesirable quality" (OED, *taint*, noun 5a).

Hiding the thousands of volumes in the cellar [...] in the words of a letter to the Earl, 'no longer *taint* with unchristian ambition the minds of good men like our dear friends.' (BNC)

The Dutch, you might recall, were in charge in Srebrenica and saw their national honor *tainted* by the massacres that took place there. (COCA)

An undesirable quality is described as a stain or blemish giving it a physical mark that is clear to see.

Examples from T05 "Morality and duty" also relate to H22 "Truth and falsity" and S07 "Law". For instance, *colourable* was discussed in 4.2.7. *Off-colour* can indicate that something is vulgar, and is categorised in K02 "Tastelessness" and T05 "Moral evil". According to the OED, things "Of questionable taste, disreputable; improper, vulgar" have been described as *off-colour* since 1875, and language and jokes specifically which are *off-colour* are "slightly indecent or obscene" (OED, *off-colour*, adjective 3). A comparable, and more established, metaphor is *dirty* meaning "morally unclean or impure" (OED, *dirty*, adjective 2a). This is another instance where the metaphorical link between B80 "Dirtiness" and T05 "Moral evil is revealed through D34 "Colour". Only 3 examples of *off-colour* in this sense were found in the BNC, and one in COCA:

Then you followed that up with some fairly *off-colour* remarks about Lapland, and what you referred to, I believe, as 'the old earth-moving equipment.' (BNC)

Bines glanced over at Lucy and then at Alvin as Rils told a joke that was not so much *off colour* as childish. (COCA)

Colour metaphors for obscene language were also found under *blue* and occasionally *purple*, but draw on different aspects of the two related colour domains. Something that is literally *off-coloured* is not "considered natural, proper, or acceptable" (OED, *off-colour*, adjective 2a) and the phrase is extended to include things that are metaphorically *coloured* and not considered "proper, or acceptable".

To be *darksome* is to be "morally of dark character" (OED, *darksome*, adjective 3c), *swart* to be "wicked, iniquitous" (OED, *swart*, adjective 3a) and *sable* refers to a personification of evil (OED, *sable*, adjective 2c). No examples of these were found in the corpora.

The VIRTUE IS LIGHT metaphor is well established, and numerous connections between the T04 "Virtue" MM category are found with several Level 2 "Matter" categories relating to light and, to some degree, colour. The examples with the Source category D34 "Colour" are discussed here, though most can arguably relate to some form of light category.

Light is recorded in T04 "Virtue" meaning "clean, pure", although it has only two citations c1400 and is marked as obsolete in the OED (OED, light, adjective ² 1c). Another minor, or rare, example is bleach meaning "To free from stain, purify, sanctify" (OED, bleach, verb¹ 1b). The next example is unstainable, which is found in only two MM categories; D34 "Colour", the Source category, and T04 "Virtue", the target category. Although the form unstained is not categorised in D34 "Colour", its connection to the colour domain is clear from the literal definition within B79 "Cleanness" as "Not stained or (dis)coloured; spotless, clean, pure" (OED, unstained, adjective 1). Metaphorically, something can be "Not morally stained or sullied" (OED, unstained, adjective 2), mapping onto the T04 "Virtue" and H30 "Esteem" categories. Unstainable was not found in either corpus, though unstained was found 4 times in the BNC and 13 times in COCA, including:

Whereas science had been *unstained* by cruelty, hands in the Vatican had been steeped in blood. (BNC)

The roar of liquor amplified conversation, the clink and clatter of glasses, the thunderous jukebox [...], the stink of cigarettes and stale beer, the moist heat of college boys on the make - none of that touched her. She sat in the bar but existed apart from it, *unstained* by it. (COCA)

In the midst of this sense of disorientation and demoralization, the refusal of Canada's Prime Minister, Jean Chrétien, to join in the invasion of Iraq outside the sanction of the United Nations, strengthened Canada's *unstained* reputation in the Middle East. (COCA)

These examples show that to be *unstained* one remains unaffected by something negative. *Clearness* is transferred to the T04 "Virtue" category meaning "Purity; innocence; openness" and is first recorded in 1526 (OED, *clearness*, noun 4).

The final example of metaphor within the T04 "Virtue" category is *sheen*. The OED cites *sheen* used in connection with non-material senses, including "pure, clean (from sin)". The source domain is tricky to pin down in this metaphor. The adjective *sheen* is divided into two main senses in the OED; the first relates to beauty and the second relates to brightness. The OED notes that in early use, *sheen* may have developed the meaning "bright, shining, resplendent" as objects such as heavenly bodies, jewels and metals are beautiful due to their brightness, leading to the sense of brightness becoming primary. The metaphorical meaning of *sheen*, contained within T04 "Virtue", is given under the first sense relating to K04 "Beauty", resulting in the metaphor PHYSICAL BEAUTY IS VIRTUE. Again a large part of the transfer comes from Source domains relating to light. Examples from the corpora indicate a slightly different use, for example:

There was virtually no relationship between the size of a company's assets and the *sheen* on its reputation. (COCA)

The miniseries The Kennedys of Massachusetts gave a sanitized *sheen* to our most scandalous political clan. (COCA)

My job was to create a glossy *sheen* which would, like the language, make the rotten apple look delicious. (COCA)

At first glance, a *sheen* on something may appear attractive, but it also has the potential to deflect attention away from what is underneath. The corpus examples suggest that a *sheen* is used negatively as its purpose is to deflect attention away from something bad.

Colours are described with terminology originally meaning evil or corruption. *Wanton* is recorded within D34 "Colour" as shades that are "cheerful, lively; exuberant" (OED, *wanton*, adjective 4d), although no examples were found in the corpora. Also, from E28 "Behaviour and conduct" comes *savage*, which denotes colours that are "harsh, crude, bright" (OED, *savage*, adjective 7b). The only example found is from COCA:

Her compact mirror shows me in *savage* colors, desiccated peachskin base, woad-blue shadow, a lipstick orange, enough to turn my teeth yellow. (COCA)

These definitions are metaphorical themselves, but suggest colour denotations that are of hue and highly saturated. Although no one hue is specified, this sense is comparable with *scarlet*, a highly saturated shade of red, which also metaphorically means "wickedness" with "allusions to the glaring effect of the colour" (OED, *scarlet*, adjective 2b). Though different aspects of colour are profiled in this metaphor compared to EVIL IS DARK/BLACK and GOOD IS LIGHT/WHITE, they all demonstrate the systematic nature of the metaphorical link between COLOUR and MORALITY.

The metaphor MORALITY IS CLEANNESS is based on the conceptualisation that morality is pure, which in turn is conceptualised as cleanness (Lakoff and Johnson 1999: 307). Lizardo (2012) builds upon Lakoff and Johnson, suggesting that the MORALITY IS CLEANNESS metaphor is grounded in the idealized cognitive model in which dirt is conceptualised as something out of place and clean is conceptualised as ordered arrangement. The link between morality and cleanliness was analysed alongside "an unstudied, and underappreciated, aspect of this metaphor—its grounding in the colors black and white" by Sherman and Clore (2009: 1024) through the use of a Stroop task. The Stroop effect shows that when a colour term is printed in a different colour to its denotation, for example green printed in blue, naming the colour of the text is slower and less accurate than when the word and colour are congruent, for example green printed in green. One hundred words relating to morality, for example sin, were shown to subjects randomly in either black or white font on a computer screen and revealed an automatic association between immorality and blackness and morality and whiteness. They suggest that this is not due to the fact that immoral things tend to be black, but because immorality behaves in a similar way as the colour black does as "a potent impurity that can contaminate whiteness" (ibid.: 1019). Conversely, a white object is easily stained, but if it is to remain pure it must be unblemished. It could be interpreted that Sherman and Clore

are suggesting that because the figurative meaning reacts in the same way as literal colour mixing, *black* and *white* have a metaphorical relationship with morality.

Considering the role of dirtiness, however, may suggest an alternative, metonymic interpretation. The present study reveals strong evidence that light colours are associated with virtue (for example *white* and *light*) and dark colours are associated with moral evil (for example *black, swart, sable* and *darksome*), in addition to highly saturated colours being associated with immorality (for example *wanton, savage* and *scarlet*). The domain of morality has a complex connection with colour, and is part of the wider link between moral EVIL IS DARK/VIRTUE IS LIGHT. In the context of the analysis presented in this chapter, based on the D34 "Colour" chapter, light serves as a fundamental part of colour. D34 "Colour" holds a metonymic relationship with B80 "Dirtiness", as the appearance of a dark colour is the visual sign (part) of dirt (whole) and so colour serves as a middle stage for the metaphor. Blackness serves as "representative" of negative contagion, or dirt. While black and white are not directly involved in the metaphor for moral purity; the colours do serve as central parts of this metaphor.

4.3 Qualities of Colour Conclusion

This chapter has sought to examine the ways that the general concept of colour lends itself to metaphor and metonymy. The data has revealed the various ways we *describe* colour itself through metaphor and metonymy. The Western view that hue is of primary importance to colour meaning belies the fact that there is also a sizeable, but understudied, set of colour terminology that functions alongside hue terms as modifiers. Just as hue is the most prototypical element of colour, in a metaphorical transfer colour is most often associated with being the source rather than the target. This may be one of the reasons why previous work on colour and metaphor has overlooked the language used as colour modifiers. This chapter has revealed that dimensions of saturation, tone, and brightness all have vocabulary with which to describe them and many of these terms are borrowed into the colour domain through processes of metaphor and metonymy, such as *sickly, lively, clashing, sober* and *savage*. Many more colour qualifiers relating to the senses are discussed in Chapter 5.

The MM procedure revealed that figurative transfers in this semantic area involve colour as the source and/or target. Colour is used to think about and express other domains of experience, acting as the source domain in many transfers. For example, the metaphors

spectrum and rainbow illustrate how we see the colour space as a unit that is divided up into chunks. This literal meaning is extended so that collectively the colours represent a variety or range of possible options. The data provides strong evidence for the overarching metaphor that colour is used to indicate if something is good or bad. Various figurative senses are recorded for the lexeme *colour* and its derivatives. A surprising finding is that colour can be either a positive or negative thing; colour can indicate excitement (I03 "Excitement"), or it can allude to deceit (H22 "Truth and falsity") and immorality (T01 "Morality and immorality). Likewise, a lack of colour can mean blandness (I06 "Emotional suffering") or truth (H22 "Truth and falsity"). It was not just the superordinate of the category that evidenced this link. The positive and negative aspects of this metaphor are also revealed through the lexemes bleach, paint, stain and taint, which all relate back to various aspects of colour. Similarly, the opposition between light and dark is equated with good and bad. In the discussion of morality it was suggested that the presence of colour (or darkness) metonymically stands for dirtiness, which in turn is metaphorically linked to immorality. These transfers can all be explained by the presence or absence of colour being linked to the presence or absence of a good or bad quality.

Whereas some examples, such as a link with morality can be characterised as metonymy, others can be explained by a metonymic motivation that has later developed into metaphor. For example, the terms discussed within the semantic area of ill-health have a metonymic motivation through the change in complexion caused by sickness. The corpus data revealed that the meanings of terms transferred in and out of ill-health have extended further into metaphor; *off-colour* can describe a general deficiency, not necessarily one that has physical symptoms, and *sickly* is applied to non-living referents.

5 Cross-Modal Metaphors

Chapter 4 made a systematic study of the MM categories which formed a figurative link with the D34 "Colour" category. A number of categories that held figurative connections with D34 "Colour" were reserved for analysis in the present chapter, which presents a case study on *cross-modal metaphors*, commonly referred to as *synaesthetic metaphors*.

Previous research has focussed on the neurological condition of synaesthesia, rather than the metaphorical language that involves the senses. This study will address this need with regards to the figurative mappings involving the perception of colour. A large body of work within cognitive linguistics suggests that perceptual grounding underlies a lot of metaphorical thinking (for example Johnson 1987; Lakoff 1987; Cacciari 1998 and Gibbs 2003). Yet, others have argued for a metonymic basis behind the connections between colour with temperature and sound, rather than an extension of synaesthetic perception. Cross-modal metaphors are unique examples with which to directly evidence this mode of thought.

The HT offers a new resource with which to the study cross-modal language. In order to carry out this analysis the unique classificatory system of the HT is used to identify the language recorded for each sense. This chapter begins by outlining the MM categories selected to represent each sense. Each sensory domain with metaphorical links to colour is discussed, using the evidence recorded in the OED to demonstrate that colour is highly metaphorical in several of these areas. Illustrative examples of each sense in context are given from the BNC and COCA, showing how the terminology is used.

5.1 Cross-Modal Analysis

In comparison to Ullmann's (1957) set of five senses, Williams (1976) divided sight into colour and dimension, giving: colour, taste, smell, sound, touch and dimension. Each sense was matched with corresponding MM categories for the study and these are displayed in Table 5.1.

Table 5.1 MM categories representing the senses

Sense	MM Category	
Colour	D34 Colour	
Taste	C10 Taste	
Smell	C11 Smell	
Sound	C13 Hearing and noise	
	Z04 Music	
Touch	D03 Weight, heat and cold	
	D08 Strength	
	D09 Weakness	
	D10 Hardness	
	D11 Softness	
Dimension	E43 Shape	
	E45 Relative position	
	E26 Energy, violence and speed of action	
	E48 Types of movement	

The category under investigation in this chapter is the D34 "Colour" category, which is analysed both as a source or target domain of any potential metaphors. Only metaphorical overlaps involving the sense of colour are made (i.e. not between sound and taste, for example).

MM categories C10 "Taste" and C11 "Smell" map directly onto the corresponding sense, however, no evidence of a metaphorical transfer between either and D34 "Colour" was found. This is perhaps not surprising given how well documented the lack of vocabulary with which to describe taste and smell has been, with reasons ranging from a lack of scientific understanding of taste (Backhouse 1994: 6) to the difficulty in divorcing an odour from its physical source (Wilson and Stevenson 2006: 7). The majority of research into the lexicon of taste and smell has had an overwhelming bias towards Western languages, although recent research has shown other languages have very rich terminologies (Wnuk and Majid 2014).

The meanings of touch and dimension can be represented by numerous MM categories.

Out of the MM categories that were identified as containing lexemes relating to touch and dimension several were excluded. There were two reasons for excluding such categories

from the present study; the first was due to repetition of senses amongst related categories, and the second was if the category showed no evidence of metaphor. For example, D04 "Solidity and density" also holds a metaphorical connection with D34 "Colour" through the lexemes *stark* and *solid*, yet it was decided that these were more accurately represented by the categories D08 "Strength" and D10 "Hardness" respectively. Also, while the MM categories D06 "Granular texture and D07 "Fine and coarse texture" relate to the sense of Touch, neither shares a metaphorical link with D34 "Colour".

All of the senses were taken from the first primary division of the HT: the External World. A metaphorical connection was found between D34 "Colour" and touch categories: D03 "Weight, heat and cold", D08 "Strength", D09 "Weakness", D10 "Hardness" and D11 "Softness". A metaphorical connection was found between D34 "Colour" and dimension categories: E43 "Shape", E45 "Relative position", E26 "Energy, violence and speed of action" and E48 "Types of movement".

5.2 Sound

One of the examples Barcelona (2003) uses to argue his case that all metaphor presupposes a prior metonymic mapping is the DEVIANT SOUNDS ARE DEVIANT COLOURS metaphor, arguing against Taylor's (1995) interpretation of a *loud colour* as an exception to this. Barcelona suggests that, in addition to classifying colours by hue, saturation or tone, for example, people also categorise them according to their reactions to them. The same is also true for sounds. This leads him to suggest that the mapping in *loud colour* is between a shared sub-domain of the effect or attention caused by the stimulus (ibid.: 38).

In the present study, the sense of sound is represented by only two closely related domains: C13 "Hearing and noise" and Z04 "Music". Both are strongly metaphorically linked with D34 "Colour", and several metaphorical examples in this section appear in both categories. Therefore, the results from each category are discussed together according to specific meanings of metaphorical transfer. The majority of metaphors in this section transfer lexis from C13 "Hearing and noise" and Z04 "Music" (sources) to D34 "Colour" (target), though there are also examples in the opposite direction.

Table 5.2.a Sound to Colour figurative connections

Sense	Lexemes	Dates of metaphorical
		transfer
Range	key	1713-
	tone	1821-
	toneless	1843-
	half-tone	1867-
	untoned	1897-
	tonal	1910-
Volume	blaring	1866
	blare	1880-
	screaming	1883-
	screamy	1885-
	shoutingly	1894-
	noisy	1900-
	muted	1974-
	shrieking	1958-
	shrill	1973-
	jazzy	1924-
Agreement	symphony	1874-
	resonant	1887-
	resonance	1894-
	harmonization	1897-

Table 5.2.b Colour to Sound figurative connections

Sense	Lexemes	Dates of metaphorical
		transfer
Volume	bright	a1000
	dim	1393-1821
	fade	1879
	criard	1889-
Range	colour	1597-
	nuance	1873-

5.2.1 Range

The term *key* may be applied in Art to the "range of tones in a painting" or "relative intensity of a particular colour scheme" (OED, *key*, noun¹ 18c). Although *key* is extended in various figurative ways, the colour sense is listed in the section "relating to pitch or tone" in the OED, indicating that the Source of this metaphor is C13 "Hearing and noise". Examples of its use within the domain of colour include:

These pigments are more stable and give a brighter *key* when mixed with the gum or size solution. (BNC)

I decide whether or not any of the color shapes need to be redefined, whether they hold their position in terms of the illusion of depth, and if the light *key* is in harmony. (COCA)

An example that is so widespread it is likely not noticed as a metaphor at all is the word *tone*. Originally used to describe the qualities of a musical or vocal sound (OED, *tone*, noun 1), *tone* has been transferred to describe the qualities of colour, or more specifically "the degree of luminosity of a colour; shade" (OED, *tone*, noun 10b). Z04 "Music" also acts as a target within this metaphor. Examples from the corpora include:

Around 150 works, [...] will be hung in galleries whose pre-war Germanic museum style has been replaced by modern *tones* of grey. (BNC)

Earlier, on my drive to work, the sky had a purple *tone* I hadn't noticed before, and I thought about replicating the crushed-grape color on an abandoned urn. (COCA)

An *undertone* is described a "low or subdued tone", first of an utterance and then of sound, generally, before figuratively extending its meaning to the domains of feelings and colours (OED, *undertone*, noun 1a and b, 2a and b), such as in:

Cobalt blue is a pure blue, lacking the greenish *undertone* of previous artists' blues like azurite, Prussian blue and indigo. (BNC)

This gem ranges from light to dark, rich green. It can have *undertones* of yellow, blue, brown or gray. (COCA)

The corpus evidence suggests that when a colour borders two hues it will be named after the dominant one and have *undertones* of the second. Within C13 "Hearing and noise", *toneless* refers to something mute (OED, *toneless*, adjective 1). It then becomes extended

to describe something with "no distinctive quality", such as a sound without expression or a colour in a dull shade (OED, *toneless*, adjective 2a and b). The only example found is from COCA:

And the colors did have the blear look of a dream, the dull plasma blush of the alternating pinks, the *toneless* mattes of the blues and grays, a few muddy clots of sluggish brown. (COCA)

Untoned may mean either an inaudible sound or a lack of colour (OED, *untoned*, adjective²). Examples were only found in COCA and all relate to the uncoloured paper or canvas used for painting, for example:

He then draws shapes in monochrome on an *untoned* canvas, making adjustments as he works. (COCA)

A *half-tone* is a "tone intermediate between the extreme lights and extreme shades" (OED, *half-tone*, noun 2). Examples from the corpus include:

In each reproduction of this book there is at least one solid layer of ink, with no *half-tone* dot, running through most of the tones of the picture. (BNC)

If I'm satisfied with the lines I've painted up to this point, I begin filling in the darks and *half-tone* values on the figure. (COCA)

Finally in this group is *tonal*, which is something "characterized by shades of colour or effects of light and shade" (OED, *tonal*, adjective 3), such as:

To refine this even more, random strokes of Polychromos pastel No. 176, Van Dyke brown, were added to give a colour and *tonal* variation. (BNC)

She also found an understated palette and subtle *tonal* range. (COCA)

The *colour* of sound is the quality of individual voices or instruments, or the sound of a group of singers or musicians, which can often be altered to produce a range of tone or expression (OED, *colour*, noun¹ 12a). The OED states that in later use, this sense is used to refer to something which is "vividly expressive", overlapping in meaning with a "particularly interesting quality to something" (OED, *colour*, noun¹ 17). Examples include:

With the sad death of their bass player David Mankaba behind them, the band are promoting their third LP, Absolute Jit, and hope their *colourful music* can bring a ray of sunshine to Darlington. (BNC)

The wonderful *orchestral colors* make it a worthy alternative to Maurice Ravel's arrangement. (COCA)

Nuance is also transferred from the D34 "Colour" category to C13 "Hearing and noise" and Z04 "Music". Nuance was borrowed from French meaning "a shade of colour" (OED, nuance, etymology), but was first adopted into English in the more general sense of "A subtle or slight variation or difference in meaning, expression, feeling". Two specific meanings then developed in English, the first as "a subtle shade of a basic colour" in 1823 and then, half a century later in 1873, as "a delicate gradation" in a musical composition. Examples of its use in the music domain include:

With David Robertson conducting, and certainly helping Kenny at every *nuance*, the solo line sounded shaky [...] in contrast to the bold trumpet sounds. (BNC)

A Window in Time (Telarc) uses don't-even-ask technology to re-create Sergei Rachmaninoff's piano-roll performances from 1919 to 1929 with an astonishing degree of *nuance* and pristine sound. (COCA)

5.2.2 Volume

A sizable group of metaphors result in shared lexis between C13 "Hearing and noise" and D34 "Colour", and a cluster of these focus on volume. *Muted* can be metaphorically extended to describe colours, and other things, that are "reduced in intensity, strength, or vividness" (OED, *muted*, adjective² 2). For example:

Muted tones of powder blue, dusty pink and antique white, eau de nil and creamy yellow encourage a feeling of calm and relaxation. (BNC)

These figures animating the town scene are painted in bright colors and sharp strokes against the *muted colors* of the architecture. (COCA)

Although centred more firmly on D33 "Darkness", *dim* has moved in the opposite direction, making "Hearing and noise" the target, to describe a sound or voice that is indistinct or faint (OED, *dim*, adverb and adjective 5), such as:

From where we sat we could hear their occasional bursts of laughter and the *dim drone* of their voices, but the words themselves were lost to us. (BNC)

He dimly heard himself begging his brother. (COCA)

Similarly, sounds can *fade* down to silent or gradually up from an inaudible level (OED, *fade*, verb¹ 7), for example:

Her voice *faded* to a whisper. (BNC)

His shrieks finally fade to SILENCE. (COCA)

Just as quiet sounds can indicate subdued colours, and vice versa; even more often, loud sounds are equated with bright, gaudy colours. A *blaring* colour is defined with equally metaphorical language as "a 'loud' colour" in the OED (OED, *blaring*, adjective 2):

My new TV came with *blaring color* and brightness settings meant for a showroom floor. (COCA)

When there is no implication of audible sound, *noisy* is used in a range of metaphors for things that are "showy, ostentatious; conspicuous; overwhelming" and, according to the OED, in later use is often attached to things "gaudy, loud, or bright in colour" (OED, *noisy*, adjective 3).

There are a number of other examples which in addition to properties of volume also transfer other qualities of sound to the colour domain. An example which describes a bright, showy colour, that is unique to the Z04 "Music" category, is *jazzy*. This word has various extended applications meaning "Lively, exciting, spirited; bright, vivid, gaudy; showy, flashy, ostentatious" (OED, *jazzy*, adjective 2) and was first recorded in reference to colour in 1924.

Top nails with a *jazzy* splash of orange with Tommy Hilfiger's Front Row Nail Color in Hot Pants. (COCA)

Add a jolt of *jazzy* color by using it to hold cute hair clips. (COCA)

Other examples transfer a sense of harshness in sound to visual perception. The adverb *shoutingly* is defined as "vociferously" and has a figurative use marked in the OED along

with one example quotation describing garish colours (OED, *shoutingly*, adverb). Examples were only found in COCA in the form *shout*, for example:

TIP *Color* needn't *shout*. Here, Presley veers from the expected with a *slate-blue* leather jacket and a *pale pink-and-gray* striped sweater. (COCA)

Every fall, the dying leaves *shout* in my *colors*. *Cadmium orange*. *Cadmium red*. *Cadmium yellow*. (COCA)

Shrill can describe a "bright, glaring" colour (OED, *shrill*, adjective 4). Only one example was found in each corpus:

He is drinking soda pop out of a can the same *shrill dayglo orange colour* as emergency road markings. (BNC)

It was spring - bleak, flat, beige mostly, but the fields were edged with a shrill, cold green. (COCA)

A screaming colour is "Violent or startling in effect" (OED, screaming, adjective 2b).

The *screaming reds* and oranges symbolizing revolutionary outrages of the local school-master. (BNC)

"A neutral background will emphasize even subtle colors in the objects," she explains. "You don't have to say everything with *screaming colors*. Grays are the couch on which the color sits." (COCA)

This metaphor again is bi-directional as a "clear, shrill, ringing" noise can be called *bright* (OED, *bright*, adjective 5a), borrowing from D34 "Colour" and D25 "Light".

The sopranino has a pure, *bright tone*, whilst the treble gives a mellow sound in the mezzo-soprano range. (BNC)

In a bright voice the woman thanked the deputies for bringing her husband home. (COCA)

Although the OED describes a *bright* sound as "shrill", and the HT accordingly categorises it under an unpleasant quality of sound, *bright* sounds in the corpora are pleasant and happy. One possible reason is that the application of *bright* to sound is affected by the metaphorical transfer of being "Lit up with happiness, gladness, or hope" (OED, *bright*, adjective 1e). The OED conflates the D34 "Colour" and C13 "Hearing and noise" senses of the word *criard* into one entry, defined as "Shrill; 'loud'; garish' (OED, *criard*,

adjective). *Criard* is etymologically related to the adjective *criant*, itself derived from French *criant* "crying, loud". Despite this apparent literal meaning relating to hearing, the first recorded example of *criand* in the OED refers to a colour use:

1840 THACKERAY in *Fraser's Mag.* July 120/1 His pictures are chiefly effects of sunset and moonlight; of too *criarde* a colour as regards sun and moon. (OED)

This may suggest an anomaly in the dating of first citations, with an earlier, literal use yet to be discovered. Alternatively, a precedent may have been set by the metaphors discussed above, resulting in the first use of *criard* as a metaphorical one by slotting in to a pre-existing set of C13 "Hearing and noise" (source) to D34 "Colour" (target) metaphors. *Criard* was not found in use in either corpus.

5.2.3 Agreement

The interaction between different colours can be described with terminology from C13 "Hearing and noise" and Z04 "Music". *Resonance* involves the "reinforcement or prolongation of sound by reflection or by the synchronous vibration of a surrounding space or a neighbouring object" (OED, *resonance*, noun 1a). This term is also used within Art to describe a "richness of colours, *esp.* that produced by proximity to a contrasting colour or colours" (OED, *resonance*, noun 7), for example:

Through a continuing process of addition and subtraction, Melanie Bargh [...] has produced colour of a unique depth and *resonance*. (BNC)

I find that the paper's uneven surface best complements my transparent washes by lending a luminous beautiful *resonance* to the color. (COCA)

A *symphony* of colours is a composition of various colours which combine to produce a "pleasing or brilliant effect" (OED, *symphony*, noun 4c), for example:

Dutch chiaroscuro, dark and sombre, would hold him for a while yet, until he freed himself from Rembrandt, Millet, and Israels and turned to Delacroix's *symphonies* of *colour*. (BNC)

A visitor to his laboratory "was confronted with a *symphony* of *colors*... thousands upon thousands of glass bottles stood around, all filled with the brightest aniline dyes." (COCA)

Similarly, harmonization is an "agreement in colour" (OED, harmonization, noun 1b).

Torquay was a frequent winner, with its carefully designed beds of petunias, zinnias, and brilliant pink geraniums, designed to show off the *colour harmonies*. (BNC)

In the Kroller-Muller painting, however, all the hues are muted, creating a delicate *color harmony*. (COCA)

Symphony and harmonization appear in F14 "Order" which also represents the metaphorical meaning that has transferred. Just as Barcelona (2004) observed that the DEVIOUS SOUND IS A DEVIOUS COLOUR metaphor is based on our reactions to colour, the HT data provide an example in reverse; pleasant sounds and colours can also be mapped onto one another. In the case of *symphony* and *harmonization*, it is not just one colour or sound, but the combination of many (see Section 4.2.5).

5.2.4 Conclusion on Sound

The connections between colour and sound reveal a number of metaphors that are part of the conventional lexicon of the language, such as *nuance*, *tone* and *key*, which have developed highly polysemous senses. Other metaphors are more novel, such as *symphony* and *harmony* to describe a positive combination of colours, yet are still evidenced in few examples from the corpora. One term that is unique to Z04 "Music" is *jazzy*, which transfers the lively style of music to vivid colours. Loud, unpleasant noises (*blare*, *noisy*, *screaming*, *shrieking*, *shout* and *shrill*) are transferred to colour of high saturation and luminosity. This connection is the only example within the case study of senses that is bidirectional. The superordinate term *colour* is transferred to the domain of sound to describe the effects of a compositional piece that is particularly expressive and sounds can metaphorically *dim* or *fade*. Some of the terminology here could be said to be more firmly based in the domain of light than colour, though both light and colour are closely related.

5.3 Touch

According to Marks and Bornstein (1987: 59), out of the cross-modal mappings, *warm* and *cool* colours are "by far the best known of all". In spite of this, transfers between Temperature and Colour are recorded only from the end of the seventeenth century. Deignan (1999: 194-5) observed that the systematic transfer of the use of temperature terms is made not only to describe colour, but also scent and taste, and suggests that these fields are talked about by experts leading "to more exploitation of metaphor and lexical structure than is usual".

In the present study, the sense of touch is represented by a number of MM categories: D03 "Weight, heat and cold", D08 "Strength", D09 "Weakness", D10 "Hardness" and D11 "Softness".

Table 5.3 Touch to Colour figurative connections

Sense	Lexemes	Dates of metaphorical
		transfer
Temperature	ashy	?1541-1830
	ashied	1613
	ashen	1808-
	smoky	1576-
	hot	1673-
	cold	1706-
	coldness	1859
	coldish	1878-
	warmth	1716-1856
	warm	1764-
	cool	1758-
	cooling	?1790-
	burnt	1897-
Strength	stark	1547
	strong	1658-
Weakness	weak	1585-
	tender	a1771-
	delicate	1822-1860
Softness	mellow	1706-
	soft	1712-
	velvety	1819-
Hardness	solid	1883-

5.3.1 Temperature

Vocabulary originally from the D03 "Weight, heat and cold" category is used for aspects of colour. The earliest colour metonyms in this category involve members on the periphery of the concept of temperature; *ashy* and *smoky*, recorded from the sixteenth century, are the end products left after something has been heated. *Ash* is recorded as a type of *grey* in D35

"Individual colours", whereas in D34 "Colour" *ashy*, *ashied* and *ashen* describe things that are "deadly pale" from the mid sixteenth century (OED, *ashy*, adjective 3a). The corpus evidence suggests that *ashen* has highly restricted reference to skin colour, or more specifically to describe paleness as the result of some emotional trauma, for example:

Lucy's voice was a strangled whisper. She looked ashen, her skin shiny with sweat. (BNC)

She took the phone call in the hallway, and then returned to the dining room looking *ashen*. Her face crumpled as she relayed the news. (COCA)

Ashen is often applied in contexts where the subject is tired or unwell, and collocates with emotions including: anger, fear, panic, rage, sadness, shock, stress and worry. Furthermore, this sense is especially productive in the corpora as the pallor is described as ashen 63 times in the BNC and 311 times in COCA. Livid and puce are another two colour terms often applied with restricted reference to skin tone, as discussed in Section 7.6.3. When thought of as hues, livid, puce and ash denote dark blue, brownish purple and pale grey, none of which are accurate descriptions of the colour of skin. Apresjan (1997: 187-188) notes that when hues are applied to the face it is an example of metaphorical use as they do not describe the literal pallor of someone's skin. As such, their application may be said to be hyperbolic to capture the emotion causing the change in facial colour. An alternative explanation it that such descriptions are not in fact to do with hue, but signal a lightening or darkening as blood rises or drains from the face (discussed further in 7.6.3).

Smoky is used as a qualifier in colour descriptions from 1576 (OED, *smoky*, adjective 7) and modifies 17 colour terms in the BNC and 56 colour terms in COCA, for example:

Unlike the more southern fulmars I had been used to seeing, which are mainly white with grey backs, these northern birds were nearly all a dark *smoky* grey. (BNC)

The big 19th-century "Piano" dresses are in shiny fabrics of *smoky* brown or black with embroidered décolletages. (COCA)

Slightly prior to this, in 1555, *smoky* is recorded as a hue term, which appears in D35 "Individual colours", as a "dark, dusky" colour, especially a brownish or bluish shade of grey (OED, *smoky*, adjective 6a), such as the examples above. However, the corpora reveal that when used as a modifier, *smoky* collocates with every BCT, and a few non-BCTs, for example:

Perfectly calm water mirrored a sky which shaded from *smoky* orange through turquoise to night blue, reflecting nothing but the sheerness of space, unlit by stars. (BNC)

The principal's face looked as if it were recovering from old bruises, a *smoky* violet around his eyes and kind of a mottled sunburn on his cheeks. (COCA)

Such examples show that *smoky* is used and understood not only as a hue term but also as a qualifier. In a similar way, *smoky* is also used in the names of gemstones, such as *smoky quartz* and *smoky topaz* indicating the stone is clouded or opaque.

The term *burnt* is recorded much later, in 1897, as a colour which has "the appearance of darkening by scorching" (OED, *burnt*, adjective 7b), such as:

Marshalls' Heritage Antique paving in *Burnt* Brick colour looks like old handmade bricks. (BNC)

Changing *burnt*-orange velvet to monochromatic canvas is like getting a brand-new sofa for half the price. (COCA)

More often, however, *burnt* appears in the fixed phrases for the names of paint colours:

I then apply a very watery *burnt* sienna to the parts to maintain some warmth amongst the shadows. (BNC)

Usually he combines *burnt* sienna, black, and ultramarine blue, applied very thinly so it dries quickly. (COCA)

These examples are metonymically based on the appearance of something that has been burnt or the fumes emitted from it, but it is not only the element of hue that can be transferred but also tone and saturation.

Vivid colours are described as *hot* (OED, *hot*, adjective 12a) from 1673, and present-day examples from the corpora include:

This Sussex cottage garden is awash with *hot* colour yet remarkably fresh-looking in summer. (BNC)

The glazed black stems and wine-dark leaves [...] make a supportive background for this volcanic perennial, and its orange daisylike flowers increase the *heat* of the combination. An underplanting of *hot* reds and oranges will carry the color theme down to the ground. (COCA)

In the second example, the heat metaphor is extended through the choice of *heat, hot* and *volcanic*. By far the most frequent collocation in COCA is *hot pink* which has established itself as a fixed phrase. Only 4 examples were found in the BNC compared to 334 examples in COCA, such as:

Striking shades appeared everywhere, from the *hot*-pink lips at Jil Sander to the lacy acid ensembles at Christopher Kane. (COCA)

People are renting statement dresses, one shoulder, *hot* pink, that they're really going to wear once, have everyone give them tons of compliments and then they don't need to wear it again. (COCA)

Warm colours are "suggestive of warmth" particularly reds or yellows (OED, *warm*, adjective 15a). An example containing both *hot* and *warm* demonstrates how a distinction can be made between the terms:

Use *warm* colors, such as reds, yellows and oranges, for the walls of a formal dining room. They tend to stimulate the appetite. Muted or shaded tones are best, such as golden or creamy yellow, spiced orange, terracotta, wines, burgundies and dusty rose. Don't use *hot* shades of yellow and orange. These make people eat faster. (COCA)

Whereas *hot* shades are dependent on being vivid, *warm* shades can include "muted or shaded" tones, reflecting how the temperature scale has transferred to the use of colour. Such a pattern is also found in other corpus examples. Examples of *warm* qualifying a colour description, in the BNC and COCA include:

Textured wall coverings, wood finishes, and towels in *warm* shades can soften the room and make it more user-friendly and less clinical. (BNC)

Warm corals, peaches, reds and golden browns look glorious against a lightly tanned complexion. (BNC)

That this [...] canvas [...], executed with rich, *warm* colors and in excellent condition, is an authentic Tintoretto is not and has never been doubted. (COCA)

Autumn leaves, beautiful in their *warm* orange, magenta and yellow colorings, rustled beneath Jenna's feet. (COCA)

Even when an individual hue is named, it is often in the plural and in a list with other colours, suggesting that all shades of each hue are included.

Low temperatures are also recorded in the domain of colour. *Cold* is transferred to painting, and was '[a]pplied to tints or colouring which suggest a cold sunless day, or the colder effect of evening' (OED, *cold*, adjective 15) and *cool* is used especially for *blue*, *green* or *grey* (OED, *cool*, adjective 5b). Examples of *cold* describing the colours in a piece of Art or the colour name of a paint shade are found in the BNC and COCA, for example:

I started by reversing out a basic shape for the hedge (Figure 1). This was done by colouring in a pattern of small, irregular shapes using pastel No. 230, *cold grey* 1, on its narrow front edge. (BNC)

Colossus, with *cold blue* brushstrokes spread out before the orange-yellow haze of the sun, is the primordial, Homeric sea. (COCA)

The use of *cold* to describe colour has also extended outwith the context of painting, either to describe colour schemes or the quality of light in the natural environment, such as:

For winter, consider frosty cold colours like grey, ice blue and watery yellow. (BNC)

The sun was setting down the river, casting a *cold pink hue* along the white-capped mountains that framed both sides of the valley. (COCA)

Steer clear of "cold" colors such as white or mint green, which can put the brakes on passion, says Carter. (COCA)

In the last example the temperature metaphor is further extended as colours that are *cold*, such as *white* and *green*, are also said to lack passion, an emotion traditionally associated with *warm* shades, in particular *red* (see Section 6.3).

Although the majority of colours described as *warm* in the corpora fall within the red, orange and yellow area of the spectrum, it is interesting that in both corpora some colours that fall outwith this area are also described as *warm*. For example:

It comes in a large range of tints, but I only use three: a *warm grey*, a blue grey and a sand colour. (BNC)

He began deploying lots of *warm blues* and pinks to depict a late-summer trip to Wyoming. (COCA)

She chose a complementary-color scheme: *warm-green* apples contrasting with the *cool-red* fabric. (COCA)

In all of these examples, supposedly *cold* colours, *blue*, *grey* and *green*, are described as *warm*, and in the third example, *red* is also subverted and described as *cool*. A similar example can be found in Deignan's (1999) data:

A soft warm palette of sugar pinks, chalky pale pistachio greens and restful blue tones.

Deignan's example and those found in the present study suggest that *warm* is being used to contrast with *hot* rather than *cool*. The division between *warm* and *cool* colours cannot, therefore, be based on hue alone.

5.3.2 Strength

The MM category D08 "Strength" and surrounding categories form a strong metaphorical link with D34 "Colour". A "vivid, intense" colour can be described as *strong* (OED, *strong*, adjective 13g). The entry for the adjective *strong* has not been updated since the first edition of the OED in 1922, which means the last recorded use of a *strong colour* is from 1885. This date is after the 1870 cut off and so is still considered to be in current use, and several recent examples can also be found in the corpora:

The randomly coloured tiles on the wall and floor of the bathroom are accentuated by *strong blue* on walls and ceiling. (BNC)

Sieve it, pressing to extract all the colour from the saffron (or, for a good *strong colour*, put the lot in a food processor). (BNC)

Keep in mind your favorite colors, whether soft, romantic tones like pink, lavender, and pale apricot, or *strong hues* like purple and orange, then work your palette around those. (COCA)

Some bright orange or red pelargoniums give me the *strong color* that I feel is needed here. (COCA)

Another example from the D08 "Strength" category is *stark* to describe "strong, dark" colours (OED, *stark*, adjective 3h). Though this sense is marked as obsolete in the OED, many examples were found in the corpora. *Stark* modifies the superordinate *colour/s* in both the BNC and COCA, for example:

Blake found the continuous stark colours and the bare, uninhabited world disturbing. (BNC)

If you knew the music, you whistled it, as if all the backed-up melody in your head was forcing its way out through your mouth like steam from a kettle... respectable bankers and businessmen in *stark colors* and homburg hats whistling their way to work. (COCA)

By far the most frequent collocation was with *white*, with 9 examples in the BNC and 128 examples in COCA. For example:

Wall treatments vary from red or green with wood wainscotting for the Renaissance and Baroque pictures, to pale shades with chair rails for the Rococo, to lighter colours for the Impressionists, and *stark white* for modern and contemporary. (BNC)

They were passing a small churchyard and the *stark white* of the headstones was a shock to the soft green background. (COCA)

The next most frequent collocation of *stark* is with the fixed phrase *black and white*:

One of the beauties of the technique which is often overlooked is that the colours tend to show through and 'blur' a little. Don't try to achieve a design in *stark black and white*. (BNC)

Somehow his *stark black-and-white* images made the spectacular even more dramatic. (COCA)

In COCA only, *stark* modifies a range of CTs, including: *blue*, *green*, *grey*, *orange*, *pink*, *red*, *white* and *yellow* in low numbers (the highest being 6 examples). For example:

Hot colors found their place primarily in the lower garden but were also combined with softer shades. *Stark orange* seemed to be absent. (COCA)

At one time she used to wear *stark red* polish, but some of the sisters in the church told her to tone it down. (COCA)

Corpus evidence suggests that *stark* is being used in a different way to its definition in the OED; although *stark* colours are indeed "strong", it is clear that they can occupy the light

area of the spectrum as well as the dark, and cover a range of hues. Colours described as *stark* contrast with their surroundings; the most frequent collocation with *stark* in both the BNC and COCA is *contrast*, suggesting this sense is on its way to becoming part of the most current meaning of *stark*. *Stark* may be changing meaning with a new function as an intensifier.

5.3.3 Weakness

Conversely, colours can lack strength and metaphors can be found in the D09 "Weakness" category. First, colours can be *weak* meaning they are "not vivid" (OED, *weak*, adjective 18a). For example:

Most green-yellows are marketed as lemon yellow, the majority of which are rather *weak colours*. (BNC)

A42HD84 [model of HDTV] suffered from *weak colors*, with the reds and greens appearing especially feeble. Our test jurors called its picture "pale" and "washed out." (COCA)

Delicate colours are in shades that are "not strong or glaring; soft, tender, or subdued" (OED, *delicate*, adjective 6d). Although the OED cites the last recorded date for this use in 1862, examples can be found in both the BNC and COCA. For example:

The women wore paler colours; white or washed yellow or *delicate blue*. (BNC)

The rising sun turned the snow a delicate pink. (COCA)

A *tender* colour "soft, subdued; not deep, strong, or glaring" (OED, *tender*, adjective 5), such as:

Thickets of fawn papery stems, *tender green* as they unfurl in the spring (BNC)

It [A. linariifolius plant] will settle down to a very long life, producing a modest brood of offspring and coloring the more barren parts of the garden a *tender blue* in late autumn. (COCA)

Weak, delicate and tender in reference to colour do not occur in high numbers in the corpora, though in certain contexts it can be difficult to distinguish whether it is in fact the colour term that is being modified by the adjective.

A negative association is made with *weak* colours which is evident from the additional description of the colour as "washed out" in the example above. *Washed out* colours or dyes are those that have faded or lost their "freshness" and this is extended to describe a lack of colour or animation (OED, *washed*, adjective 2a and b). Most often this is used to describe a pale complexion that does not look healthy (see Section 4.2.2), but here it is applied to the picture quality of a TV. *Delicate* and *tender* colours, however, serve as a more positive description of pale and low saturated colours.

5.3.4 Softness

Closely linked to the D09 "Weakness" category is the D11 "Softness" category, which is also metaphorically linked to D34 "Colour". Mellow colours are "mild, soft, gentle, muted" and may derive from either the concept of softness or the concept of ripeness.

The *mellow orange* brick and creeper clad mill house has now been converted into a restaurant. (BNC)

The wood has a *mellow brown* patina and generally retains the gentle effects of age and authenticity. (COCA)

Although *mellow* does not occur in very high numbers, many examples describe some form of brick or stone, particularly those in the BNC. A *soft* colour is "pleasing to the eye" and "not crude or glaring" but rather "quiet, subdued" (OED, *soft*, adjective 1c)

She chose a *soft blue* colour scheme that contrasts well with the warm, earthy tones of the main house. (BNC)

I've been thinking about it, and the linens are a *soft white*, rather than a crisp white, and that really lends itself toward gold rather than silver. (COCA)

Soft is a modifier for paleness and so can be considered a tonal colour word. Velvety may be applied to colours (OED, velvety, adjective 1b) transferring surface elements such as soft texture and illumination. For example:

In a shaft of sunlight a pair of speckled wood butterflies pirouetted, *velvety brown* and cream. (BNC)

When I looked down at the river one last time, I saw only swirling water, a rich, *velvety black*. (COCA)

Velvety colours can be in any hue, but the reflection which velvet gives off may result in the appearance of a slightly paler colour and corresponding transfer of meaning.

5.3.5 Hardness

Stark appears in both D08 "Strength" and D10 "Hardness". A solid colour is one that is "the same tone or shade throughout; uniform, self" (OED, solid, adjective 10b). Examples of solid colours in the corpora include:

The trick of making eyes smoulder is to apply *solid colour* sparingly, then smudge and spread it by softening the edges. (BNC)

That means floral and op-art print dresses and breezy tops paired with neutral or bright *solid hues*. (COCA)

In the BNC, 8 out of 9 examples of *solid red* refer to the colour of cattle, and this is comparable with the example of *full red* below, suggesting that it belongs to a sub-set of cattle colours:

Solid red cattle dominated Devon, Sussex and Kent, and part-reds were preferred all along the east coast of England down to East Anglia, where there was a mixing of red-and-whites and duns. (BNC)

Solid also appears in the Source MM category E45 "Shape", which is discussed in 5.4.1. With a similar sense to a *solid* colour is a *full* colour, which is "deep, intense" (OED, *full*, adjective 9b). For example:

There had been two carefully maintained pure herds of this small, deceptively heavy breed [...] Its colour was described as '*full* red with smoky points': the red shaded to black on the face and tail. (BNC)

STRAWBERRIES: Look for a *full* red color (no white tips) and firm flesh. (COCA)

The only colour term *full* modifies in the corpora is *red*, with one example in the BNC and 3 in COCA, and each indicates that *full* means having a consistent colour throughout.

5.3.6 Conclusion on Touch

Temperature is closely tied to the domain of touch and several links with colour were found. First, connections between colour and less prototypical aspects of temperature revealed metonymies based on the appearance of residue or fumes emitted from something burning. *Ashen* has been extended to describe facial colour, fitting in with a pattern found in subsequent chapters. Colours are often linked to skin to indicate emotional states and so, while they are originally applied with hyperbole, the aspect of the colour terms drawn on relates to saturation, not hue. The descriptions are metonymically based on the associated change in facial colour, but are later extended to metaphor when used to refer to emotional states.

Next, words for temperature have been transferred to the colour domain. Colours fit onto the scale in temperature in descriptions of being *hot*, *warm*, *cool* or *cold*, although the corpus data showed that the division is not made on hue alone. How to treat these so-called metaphors has been debated. Morgan, Goodson and Jones (1975) discovered that young children are unreliable at identifying conventional colour associations, which only appear in later childhood and adolescence, leading them to suggest that these associations are learned gradually. One explanation is the strong cross-cultural agreement based on universal experiences of colour, such as heat from the sun or fire (Osgood, May and Miron 1975). Dirven (1985: 99) explains that:

[I]t is not the percept of touch itself which is transferred to sight, but some other experience that co-occurs with the touch of heat, for example the colours of the fire or something glowing that is transferred.

Consequently, he hypothesises that upon comparing metaphor, metonymy and synaesthesia (cross-modal metaphor) it is tempting to see the last as a middle ground between the other two processes. Marks and Bornstein (1987: 60), however, are unequivocal in their treatment of such examples: "These are metonymies, plain and simple. And they are metonymies, we argue, because the sensory pairings are informed by associations experienced between certain events". The physical sensation of temperature is not involved in the visual perception of colours; instead, associations with certain hues come from the temperature of their prototypes or highly salient objects of that colour. Other areas, however, such as emotions, were too complex to be metaphorically represented using a scalar set of terms, such as temperature.

The sensation of strength describes colours that are highly saturated, in contrast to softness and weakness, which describe colours that are pale and unsaturated. These figurative senses draw a comparison with a quality that is either present or lacking, and are thus more metaphorical in nature than the temperature terms. Hard and solid colours profile a different dimension of colour altogether: the uniformity of the colour in question.

5.4 Dimension

The MM categories E43 "Shape", E45 "Relative position", E26 "Energy, violence and speed of action" and E48 "Types of movement" were selected to represent the sense of dimension.

Table 5.4 Dimension to Colour figurative connections

Sense	Lexemes	Dates of metaphorical
		transfer
Shape	sharp	1398
	flat	1823-
	flatted	1851-1859
Position	deep	1555-
	rise	1594-
	raise	1601-
Movement	quick	c1425-1851
	violent	a1522-
	relent	1531-
	vigorously	1638
	vivid	a1821-1865
	vibrant	1971-

5.4.1 Shape

The MM category E43 "Shape" is highly metaphorical, and one of the many metaphorical links it holds is with D34 "Colour". *Sharp* is attested only once in the OED, at the very end of the fourteenth century, in reference to colour, meaning "to brighten" (OED, *sharp*, verb 5e). Though no examples of verbs were found, a few examples of *sharp* as an adjective were found in both corpora, such as:

It's not subtle, it's not delicate lavenders and pinks, it's bright sharp garish colours. (BNC)

She walks past an orange tree, then a tree with lemons that look distended and one with tangerines that are a *sharp* red. (COCA)

In house painting specifically, a *flat* colour is one without gloss (OED, *flat*, noun³ 12), whereas *flatted* describes pigments or painted surfaces as being "Dead, dull, without gloss" (OED, *flatted*, adjective¹ 5). Examples include:

Walls seem to have been painted in *flat* colour washes even earlier. (BNC)

She translates the scene into a mosaic of *flat* color spots, placing the big masses in different colors to indicate the changing planes in their forms. (COCA)

No examples of *flatted* in the colour sense were found.

5.4.2 Position

The *flat* metaphor also links to the Source category E45 "Relative position" category, which forms a strong metaphorical connection with D34 "Colour". Other examples from E45 include a *deep* colour; one that is "intense" and "highly chromatic" (OED, *deep*, adjective 13a). *Deep* is a particularly frequent qualifier in the corpora and relates to the saturation of a colour. Examples include:

My school uniform colour was a *deep* green. (BNC)

Amines react with copper (III) sulphate solution to produce a *deep* blue colour. (BNC)

The Governor's wife was presented with a spray of *deep* red roses. (COCA)

This veggie's curly green leaves turn *deep* purple when temperatures cool. (COCA)

Deignan (1999: 182) believes that the colour sense of *deep* is so well established that speakers are unlikely to perceive it as dependant on the "literal" sense of *deep*, and suggests that this may be in part due to the fact it describes a concrete rather than an abstract quality. For this reason, Deignan (ibid.: 183) regards the colour sense of *deep* as polysemous and non-metaphorical "despite its etymology". In strictly synchronic accounts of metaphor, a transfer between concrete and abstract is of more importance than

etymology. She acknowledges that it may be argued for the example *deep tan* in her data that *deep* refers to penetrating layers of skin. This argument can be applied in other colour contexts, especially painting, where the intensity of a colour can be built up with several coats, showing how problematic it can be to dismiss etymology.

Colour *rising* may describe the colour of a person's face becoming darker, especially as a result of embarrassment (OED, *rise*, verb 23e). Similarly, to *raise* a colour can describe the heightening of the complexion or to "brighten or lighten" a colour, especially in dyeing (OED, *raise*, verb¹ 35c). Again, this use is frequent in both the BNC and COCA, for example:

She felt the colour *rising* and couldn't control it (BNC)

The color *rose* vividly in Nina's face. (COCA)

This embodied metaphor has a metonymic basis as people experience blushing and redness of the face due to various emotions.

5.4.3 Movement

Evidence for the metaphor COLOUR IS MOVEMENT can be found in the categories E26 "Energy, violence and speed of action" and E48 "Types of movement". The only transfer mapping slow speed onto colour, which is now obsolete, is *relent*, describing the fading of colours (OED, *relent*, verb¹ 1b). The remaining connections within this section relate to fast speed. Obsolete metaphorical transfers are *quick*, which describes "vivid" and "dazzling" colours (OED, *quick*, adjective 15b), and *vigorously*, which describes intense and prominent colours (OED, *vigorously*, adverb b). A sense first attested at the start of the fourteenth century that is still in use today is the description of colours as *violent*, which are "extremely bright" and "intense". For example:

Make colour 1 any shade you like, but remember that this will be the colour of the design screen you will be working on, so try not to make the colour too *violent* a shade, as this can be tiring to the eyes. (BNC)

Lucy Walker is apt, for example, to show up wearing a shiny blouse in a *violent* shade of yellow-green. (COCA)

Brilliant, fresh, lively and bright colours are called *vivid* (OED, *vivid*, adjective 3a). For example:

Photographs taken with large telescopes are needed to bring out their *vivid* colours. (BNC)

The sun was still fairly low on the horizon, but the cloudless sky was already a *vivid* blue. (COCA)

From E48 is a very recent, but also well established, transfer to D34 "Colour": *vibrant*. Its oldest attestation in the OED is to be agitated with "anger or emotion", a case where an abstract sense predates the more physical sense, of "moving or quivering rapidly" (OED, *vibrant*, 1a and 3a). When applied to colours, *vibrant* describes shades that are "vivid" or "exotic" (OED, *vibrant*, draft additions b), for example:

American women, they learned, did not much care for murky colours but wanted bright yellows and apple greens, *vibrant colours* which were hardly used at all in Europe. (BNC)

You can buy forced hydrangeas from florists and garden centres almost any time of year these days, and sometimes in the most tempting, *vibrant* blues. (BNC)

Epson's Perfection 3170 Photo produced scans that had *vibrant* color and good detail without any image adjustment. (COCA)

When the chillies are allowed to ripen on the vine, they turn *vibrant red*. (COCA)

The most frequent collocation of *vibrant* in both the BNC and COCA is *colour*, and *vibrant* modifies every basic colour term across the two corpora. Apart from *relent*, all of these terms transfer fast speed onto colours that are eye-catching and highly saturated.

5.4.4 Conclusion on Dimension

Even though there is not a lot of lexis evidencing the colour to dimension metaphor, those that are recorded appear in high numbers in the corpora, suggesting they are highly conventionalised. The overlaps between D34 "Colour" with aspects of dimension, such as expressing colour in terms of height (*rise/raise*), depth (*deep*, *flat*, *full*), shape (*sharp*) and movement (*vibrant*), reveal a systematic metaphorical connection and an ingrained way of thinking about colour.

5.5 Cross-Modal Metaphor Conclusion

Chapter 5 has analysed the cross-modal connections held between colour and other senses. A comparison of the MM results with Williams' system reveals striking agreement. First of all, neither MM C10 "Taste" nor C11 "Smell" share any metaphorical links with D34 "Colour". The remaining three senses, sound, touch and dimension, were found to have a strong metaphorical connection with D34 "Colour". As the two areas that Williams used to replace the sense of sight, colour and dimension share the meaning of visual perception.

As predicted from Williams' study, the metaphorical link between colour and sound, represented by C13 "Hearing and noise" and Z04 "Music", is bi-directional, with vocabulary being transferred not only from sound to colour, but vice versa. The connection between sound and colour was grouped into three areas: range, volume and agreement, which all profile different aspects of the source domain. A systematic link with volume was found, where pale colours are described as muted in contrast to glaring, highly saturated colours that are loud. A personal reaction to whether the sound is considered to be pleasant or unpleasant is transferred to colour, and vice versa. Similarly, the combinations of colours that are thought to be pleasing to the eye are compared to musical arrangements in the Agreement group. The first transfer from sound to colour was *key* in 1713. The remaining metaphors date from the nineteenth and twentieth centuries, revealing how late this entered the language.

A number of MM categories were selected to represent the meaning of touch, but these can be divided into two main aspects: temperature and strength. Temperature is associated with particular hues through a metonymic connection with things that are hot or cold, such as the red colour of a flame. Like sound, temperature being used as a colour description is a relatively late development, first recorded at the start of the eighteenth century. Aspects relating to strength, however, are recorded earlier, first from the sixteenth century. Also in contrast to temperature, strength is more metaphorical as a lack of colour is considered weak or soft, in contrast to highly saturated colours that are strong.

The final cross-modal metaphor with colour is dimension. As aspects of dimension were found to hold the fewest links with colour, it can be argued that the connection is not as strong as with sound and touch. In spite of this, there is evidence that the connection is systematic. First, the dimension terms are the earliest cross-modal mappings into colour; the first transfer was as early as 1398 for *sharp*, although this is a one off example, and

many more are recorded in the sixteenth century. In addition, various aspects of dimension are metaphorically transferred: shape, position and movement, and include some very well established hue modifiers: *deep* and *vivid*.

The corpus analysis revealed instances where a change in meaning had occurred. A *bright* sound is used in a positive way in the corpora, in comparison to the negative definition in the OED, which I suggested could be influenced by the metaphorical meaning of happiness. According to the OED, *smoky* describes a dark brown or blue colour, yet the corpus analysis revealed that it is used as a modifier for every BCT, in addition to several non-BCTs. The corpus data also showed that *hot* and *warm*, and *cold* and *cool* can be in opposition with one another, in addition to the antonym pairs.

The separation of the HT Colour category into two for the MM project has allowed for a finer grained analysis of the overall domain, as the lexis contained in each category behaves very differently from one another. The colour category was broken down further in order to analyse the case of cross-modal metaphors. The HT offers a new approach to the study of cross-modal metaphors, without which identifying appropriate sense domains would be problematic.

It has been shown that D34 "Colour" is full of vocabulary that has been transferred into the domain in order to describe aspects of colour such as saturation and tone. This contrasts with the hue terms to be discussed in Chapters 6 and 7, where the figurative meanings of hue terms are exclusively the source of transfer.

6 Primary Basic Terms

Chapters 4 and 5 have discussed the lexis for saturation, brightness and tone. The next two chapters turn to the analysis of individual hue terms, with the aim of answering the second research question:

Which hue terms lend themselves to metaphor and metonymy and in what ways?

In order to do this, each BCT is discussed in turn. The primary BCTs are discussed in Chapter 6, and the secondary BCTs along with a selection of non-BCTs are discussed in the following chapter. The primary BCTs arguably form the most thoroughly researched area of colour. However, this research goes beyond a discussion of simplex terms to instead analyse phrases involving hue terms, in order to provide a fuller picture of metaphorical use of colour terms. As a result, these chapters follow a different methodology to the previous two as additional HT searches were required to retrieve this data (discussed in 3.1.3.4).

This chapter is structured by colour: *black, white, red, yellow, green* and finally *blue*. The various figurative senses of each colour have been grouped together into corresponding areas of meaning. For example: *black art, black magic, black-artist, black paternoster* and *black mass* all refer to the supernatural and so are grouped together. Sometimes these metaphorical extensions correlate to the MM categories, but not always (see Section 3.3). The definitions of each sense are given along with examples in context from the BNC and COCA.

6.1 Black

The figurative uses of *black* are overwhelmingly negative in meaning. Many of the metaphors' associations are metonymically motivated by the association of BLACK with darkness. Barcelona (2003: 40) identifies that:

There exists a (probably universal) experiential association between (relative) lack of light (for example, the dark experienced at night, or the relative dark experienced on an overcast day) and certain physiological and psychological reactions.

Darkness evokes fear as when people are unable to see they may feel threatened and the fear of the unknown can be metaphorically transferred to many negative states, actions and things. The connection between BLACK and EVIL is well-documented in cross-linguistic comparisons of unrelated languages (for example, see Derrig 1978; Kikuchi and Lichtenberk 1983) and can be identified across many of the MM categories and overarching themes have been identified to create an overall picture. Table 6.1 summarizes the *black* metaphors by theme and gives start and end dates of their occurrence (based on those from the third edition of the OED) along with an indication of whether they were found in either the BNC or COCA.

Table 6.1 Figurative meanings of *black* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples
Extensions		use	in Corpora
Legality	black rent	1423/4-	Y
		1530-	Y
	black market	1727-	Y
	Black Museum	1877-	Y
	in the black	1923-	Y
	put the black on	1923-	N
	black money	1939-	Y
	black economy	1974-	Y
Slander	black babbling	1624-1647	N
	blackmouth	1642-	N
	blackwash	1762-	О
	black propaganda	1856-	Y
Depression	black sanctus	?1533/4-	N
	Black Monday	Easter 1389-/School	Y
		1735-/Stock market	
		1987-	
	black dog	1776-	Y
	black depressed	1938-	Y
Disfavour	black book	1548-	N
	black sheep	1640-	Y

	black and blue	1568-	Y
	black eye	1622-	Y
	blacklist	1624-	Y
	black mark	1624-	Y
	black-dress	1875-	N
Supernatural	black art	1572-	Y
	black magic	1590-	Y
	black-artist	1593-	Y
	black paternoster	1851	N
	black mass	1857-	Y
Anger	to look black	1590-	N
	black-browed	1792-	N
	black angry	1894-	Y
Moral Evil	black-hearted	1638-	Y
	black-souled	1648-	Y
	blackguard	1732-	Y
	black as sin	1827	Y
	Black September	1971-	Y
Absence	blackout	1850-	Y
Secrecy	black bag	1966-	Y

6.1.1 Legality

Black is used in reference to several meaning extensions in connection with illegal and fraudulent transactions. By far the most frequent metaphorical phrase containing the colour term black in both corpora is blackmail. Originally referring to a "tribute levied on farmers in Scotland and the border counties of England by freebooting Scottish chiefs in return for protection or immunity from plunder" (OED, blackmail, noun 1a), the meaning of the phrase has extended to mean any payment or benefit extorted, especially in order to contain an incriminating secret (OED, blackmail, noun 1b). With 521 occurrences in the BNC and 1170 in COCA, a large variety of qualifiers for blackmail are found, for example:

Less likely that you will feel guilty or succumb to any future pressure or emotional *blackmail*. (BNC)

The hunger strike was an act of political blackmail. (COCA)

It comes down to feeding your children. It's economic blackmail. (COCA)

The high frequency of *blackmail* in the corpora, along with its compounded form, suggests that the phrase is highly metaphorical.

Synonyms for *blackmail* include *put the black on* and *black rent*, which is a payment made in return for protection (OED, *black*, S5a). No examples of *to put the black on* were found and only one example of *black rent* was found in the BNC. In this example, the meaning of the phrase is explained, supporting the OED's claim the sense is now historical:

Of cliques of racketeers who brought into the language the term 'blackmail', meaning 'black meal' or 'black rent' -- in other words, protection money. (BNC)

Illegal trading on the *black market* involves trading in controlled goods, currencies or items in short supply (OED, *black market*, noun).

Even for some government cars, diesel is only available on the *black market*. (BNC)

My monthly salary would buy me just four bottles of Johnny Walker whisky on the *black market*. (BNC)

The *black market* was going wild. There was a great demand for cigarettes and coffee. (COCA)

Occasionally, the items being traded illegally are humans or their body parts, for example:

Already I believe there's a *black market* in human organs. (BNC)

One of the biggest problems this week is the thousands of orphans that relief organizations can't even identify. Some [...] want to sell them on the *black market*. (COCA)

The phrase *black economy* (OED, S5a) has two separately defined meanings in the OED, one of which is metaphorical, and refers to the "part of a country's economic activity which is not officially declared or reported to its government, esp. in order to avoid

taxation". All 43 examples of *black economy* in the BNC hold this sense, whereas in COCA only 8 do, for example:

Bribery, familial influence, the *black economy* are endemic in Asia. (BNC)

What the government calls "private individuals" or unregistered companies, an enormous *black economy* worth several billion dollars a year. (COCA)

In one example the *black economy* is cast in contrast to the *cappuccino economy*:

MARGARET-WARNER: What is the cappuccino economy? TITO-BOERI: The cappuccino is with some milk. No, it is a color that is less black. MARGARET-WARNER: So a restaurant might declare some of its receipts, but not all? TITO-BOERI: Exactly. This would be a cappuccino type of situation. (COCA)

As the example explains, the *cappuccino economy* is a weaker version of the *black economy*. A parallel is drawn between a cappuccino and a black coffee, which is stronger in both taste and colour. The reference to *cappuccino* as "a color that is less than black" draws attention to the fact a diluted version of the colour represents a weaker version of the metaphorical meaning. The *cappuccino economy* is less fraudulent than one which is completely *black* as it partially adheres to the law rather than completely ignoring it.

The second definition of *black economy* in the OED refers to the economy of the black population and originated in the US, which explains why this sense is found in COCA 5 times, and many more times in the phrases *black economic* and *black economist*.

Black money appears in the HT to refer to a base silver coin, or counterfeit money, and is marked as obsolete. No examples were found with this meaning in the corpora. The third edition of the OED has added two additional senses of the phrase black money. The first describes money which has been acquired through illegal means, originally an American use and first recorded in 1939 (OED, black money, noun, 2). The second use also draws on a metaphorical meaning of black as something illegal referring to money which has not been declared for tax purposes, which according to the OED is used chiefly in India and is first recorded in 1972 (OED, black money, noun, 3). However, these meanings overlap with one another as money that has been acquired illegally will not have been made known for taxation purposes, so the following examples could be interpreted either way:

Dandavate promised a "sustained and multipronged drive against proliferation of *black money*." (BNC)

And the aim of Abedi was to set up a multinational third world bank which could cross frontiers with ease and which could help transfer *black money* and illegal money and criminal money from one part of the world to another. (COCA)

Much of it, however, is used to purchase gold, arms, drugs, electronic goods and gems, which are smuggled into the country and purchased by others flush with *black money*. (COCA)

One of the few positive uses of the colour *black* (as has also been observed by Allan 2009: 627) is to be *in the black*, which means to be in credit, as traditionally balances recorded in ledgers were written in black ink (OED, *black*, P7). Losses were recorded in red ink, giving rise to the phrase *in the red*, meaning to be in debt, overdrawn or losing money (OED, *red*, B noun, 16). *In the black* was first used in 1923, 16 years later than its counterpart *in the red*, which was first recorded in 1907.

He said it remained *in the black* but he refused to rule out job cuts at the factory. (BNC)

Yet the founder and CEO of JetBlue Airlines doesn't quite act like a typical CEO he helps clean his airplanes, he hands out snacks, he carries luggage, a very literal version of the handson manager all in the quest to get his airline back *in the black*. (COCA)

In the black is frequent in both corpora, with 47 occurrences in the BNC and 213 in COCA. The fact that *in the black* is one of the only positive meanings of *black* can be explained by the fact it has a different motivation than most of the other *black* phrases, being metonymically based on the colour of the ink, not darkness.

6.1.2 Slander

A *blackmouth* is a foul-mouthed person, or one who slanders (OED, *blackmouth*, noun). First recorded in 1642, there are no examples in the corpora. Similarly, *black babbling* is malicious and slanderous babbling (OED, *black*, S4b) which is marked as obsolete in the OED and has no occurrences in the BNC or COCA.

To "cast aspersions" or speak ill of someone's character is to *blackwash* them (OED, *blackwash*, verb). While many of the metaphorical phrases involving *black* have initiated a contrasting phrase with *white* to be coined, *blackwash* is one of the few examples in which the *white* phrase came first. There are no examples of *blackwash* in COCA and only 5

examples in the BNC, all from the same source, but they are not used with the meaning of slander. For example:

At least defeat by a mere 172 runs represented something of an improvement on earlier games [...] it might be raining but a 'blackwash' is not far away. (BNC)

Blackwash is being used as a sporting metaphor in which a team gets beaten by a large margin. Black propaganda is information that is falsified, especially that purporting to come from an enemy's own sources, and designed to lower morale (OED, black, S5a). First recorded in 1856, 6 examples were found in the BNC and only one in COCA, for example:

The programme was dismissed by McGuinness as both 'rubbish' and 'sleaze' invented by paid liars and informers making *black propaganda* on behalf of MI5. (BNC)

In China, McIntosh, a "*black propaganda*" specialist, whipped up fake news stories to undermine the morale of the enemy. (COCA)

These examples suggest a meaning extension of *black* as something which is deliberately misleading and untruthful.

6.1.3 Depression

The MM category I07 "Anger" neighbours I06 "Emotional suffering" in which several more connections between *black* and depression are found. *Black depressed* is first recorded in the OED in 1938, and appears in both corpora exclusively in the noun form *black depression*. For example:

Her pent-up feelings collapsed into cold black depression. (BNC)

It was shock and despair talking. Beneath it, rage and hatred. The *black depression* following. (COCA)

There are 4 citations of *black depression* in the BNC and 11 in COCA. The *black dog* is a personification of melancholy or depression (OED, *black dog*, noun 2).

But sometimes it gets pretty depressing doesn't it? The *black dog* of melancholy follows the footsteps of any pilgrim. (BNC)

Most depressives suffer their symptoms for no apparent reason. [...] Winston Churchill called it the "black dog." (COCA)

Also in the I06 "Emotional suffering" category is a *black sanctus*, a parody of a hymn and often one which expresses contempt or dislike (OED, *black sanctus*, noun). This use is marked as rare in the OED and, as expected, was not found in either the BNC or COCA. Though not contained in the I06 "Emotional suffering" category, two senses of *Black Monday* also draw on the meaning of *black* as something which is bleak, gloomy or depressing. The sense which appears in U01 "Education" refers to the first day back at school after a vacation (OED, *Black Monday*, noun 2) though no citations were found in either corpus despite being marked as in current use. One possible reason for this is that it has been superseded by a different sense. The updated OED also contains an entry for *Black Monday* as the name given to the day the world stock market crashed, on Monday 19th October 1987.

Mexico or Brazil could set off financial shock-waves that would make the *Black Monday* stock market crash of October 1987 look like a hiccup. (BNC)

The Cairo market also took losses, and the London traders are bracing for a possible *black Monday*. (COCA)

Most citations of *Black Monday* refer to the specific event of *Black Monday*, though a few compare similarly bleak situations to it, such as the above examples, with a total of 18 occurrences in the BNC and 49 in COCA.

Not in the HT data, is a description of the future or outlook *looking black*, such as:

In a stressed frame of mind, things *look blacker*, opportunities smaller, risks greater and burdens heavier, than they really are. (BNC)

Polls show fans of the tax are in a clear majority, while for those who oppose it, the future *looks black*. (COCA)

Two examples were found in the BNC and 4 in COCA. This meaning draws on the metaphorical link between *black* and pessimism or depression.

6.1.4 Disfavour

A *black sheep* is a disreputable or unsatisfactory member of a family or other group (OED, *black sheep*, noun). Black sheep are not characteristically misbehaved and so the metaphorical meaning is drawn from the use of *black* as something bad. An analysis of the full phrase involves *sheep* as a metaphor for a member of a group and, as *black sheep* in particular are less frequent than white sheep, *black sheep* signals the odd one out.

There are 69 examples of *black sheep* in the BNC and 132 in COCA. The OED states that this idiomatic use is frequently found in the constructions *the black sheep of the family* and *there are black sheep in every flock*. The first, *the black sheep of the family*, was the most frequent with 17 examples in the BNC and 37 examples in COCA, for example:

Circumstances which made someone, perhaps fifty years ago, considered to be the *black sheep* of the family, wouldn't necessarily be the same now. (BNC)

When a powerful relative dies, the *black sheep of the family* can usually be expected to be left out of the will. (COCA)

The daddy is always the *black sheep of a divorce*. (COCA)

The final example does not explicitly state the family, but it is framed through reference to divorce, and claims the father is the member of the family who most often becomes marginalised after divorce.

A further few examples fit the mould of this construction, but extend the metaphor outside of the family unit:

Physical education of today is seen as a *black sheep of the education family*, and society in general concurs. (COCA)

That Fimbra has reached this impasse comes as no surprise to anyone with a knowledge of the chequered history of this organisation responsible for policing many of the *black sheep of the financial world*. (BNC)

We often feel like one of the *black sheep of the independent sector*. (BNC)

The first example closely echoes the construction mentioned above through the use of the word 'family', possibly because it does not allude to a human subject. The next two examples are not as explicit in reference to 'family' and instead indicate odd ones out

within a work setting, where particular industries become disreputable members. This pattern of *black sheep* of 'non-standard "families" is observed by Philip (2011: 149-150) in both English and Italian, and she claims that the canonical form *black sheep* must remain in order for the full idiom to convey the metaphorical meaning of a misfit.

One may earn a *black mark* through a misdemeanour, bad behaviour or poor performance (OED, *black mark*, noun). A metaphorical interpretation of the phrase results in a mental or hypothetical censure rather than an official record. *Black mark* has 33 citations in the BNC and 90 in COCA and frequently collocates with *against*, highlighting the negative implications of receiving a metaphorical *black mark*. For example:

He suspects that a *black mark* went firmly down against his name for turning down the job. (BNC)

But critics seized on this episode as another *black mark* against Alberto Gonzales, who some continue to insist should resign. (COCA)

One third of citations of *black mark* collocate with *against* (11) in the BNC and almost one fifth (17) in COCA.

The concept of censure lends itself to many other uses of *black*, for instance, *black-dress* marks a convict for misconduct. A *black book* can hold the names of people "liable to censure or punishment" (OED, *black book*, noun 2a) and this has led to the phrase *to be in the black book*(s) meaning to be in disgrace or out of favour with someone (OED, *black book*, noun 2b). No examples were found of this phrase in the corpora. A possible explanation for no evidence of its use is that an alternative phrase is also available: *to be in (a person's) bad books* occurs 4 times in the BNC and once in COCA. The substitution of *black* with *bad* suggests they are near-synonyms in this context.

Being placed on a *blacklist* is a clear indication of being in disfavour. Those on the list may have "incurred suspicion, censure, or displeasure and are typically therefore subject to a ban or other punishment" (OED, *blacklist*, noun 1a). As one of the most productive BLACK metaphors in the corpus analysis, there are 95 citations of *blacklist* in the BNC and 483 in COCA, for example:

The existing *blacklist* of substances not to be dumped at sea would be superseded by the blanket ban. (BNC)

Along with many others in the Reagan era, including prominent opposition politicians, I was apparently *blacklisted*. (COCA)

According to the OED, a *black spot* is "a place or area of anxiety or danger" or more specifically in later use, a dangerous area of a road or area with a high crime rate (OED, *black spot*, noun 1). These meanings are reflected in the MM categories E24 "Adversity" and X02 "Transport". *Black spot* is found with various nuances of metaphorical meaning in the corpora examined; a total of 87 times in the BNC and 12 in COCA.

The breakdown of these closely linked meanings of *black spot* includes references to dangerous areas, particularly those with high crime rates. There are 11 examples of this use in the BNC and 2 in COCA:

Northern's contract to refurbish homes on the estate -- a notorious inner city *blackspot*. (BNC)

I mean, the whole country knows it's a pit and everything that's wrong with it. So it's good that it's gone. It's definitely a *black spot* on the city. (COCA)

In these examples *black* draws on the meaning of danger. Several more examples use the phrase *black spot* to refer to an area which is in some way bad due to specific problems, such as phone signal, the environment or the economy:

He revealed there were *blackspots* where reception was often poor. (BNC)

The problem is that a large number of environmental *black spots* inevitably fall within the public sector. (BNC)

If your skills are not in demand or if you live in an economic *blackspot*, you may find that your chances of finding a suitable job elsewhere are poor. (BNC)

Black spots referring to a dangerous section of road may draw on numerous meaning extensions of the colour black. In addition to *black* representing the danger of accidents which occur on the road, *black* can also stand for a blind spot, or lack of visibility, in such areas. The phrase was found 24 times with this sense in the BNC and only once in COCA, for example:

The Government has unveiled a multi-million pound contract to build a bypass around an accident *blackspot*. (BNC)

The collision was on a town centre route that is fast becoming an accident *blackspot*. (BNC)

In addition to the definitions given in the OED, another use of *black spot* was found in the corpora; a *black spot* may refer specifically to an area with high unemployment. This was the most common metaphorical use of *black spot* in the BNC, with 27 examples, though again only one in COCA, including:

To paint Darlington as a jobs *blackspot* is not just factually wrong, it is also very damaging to the work the council and I are doing to attract new investment. (BNC)

Cornwall has one of the worst *black spots* in the country for unemployment, poverty and further economic difficulties. (BNC)

Extended uses of this meaning are a blemish on the reputation of someone or something, for example:

Not all the French are like Dufour, and not all of them will be embracing the celebration of a period that remains a *black spot* on French history. (COCA)

It would be a black spot on the honor of German insurance companies. (COCA)

Here a *black spot* refers to a stain on someone's reputation, group of people or a point in history.

Other, non-metaphorical, meanings of *black spot* given in the OED were found in the corpora, such as the fungal disease on plants, which was common in both corpora. A *black spot* can also refer to an area of land occupied by black people which is under threat due to being surrounded by areas of predominantly white settlement. According to the OED this meaning is historical, yet it appears 13 times in COCA from five different texts, with the most recent in 2001, indicating it still has some currency. References to *black spots* in vision were also found in the corpora.

A *black eye* is one surrounded by a dark bruise. The first figurative use of a *black eye* is recorded in the OED in 1712 and is defined as a "severe setback: a rebuff, a snub" or a "mark of a damaged reputation" (OED, *black eye* 2a). Every occurrence of *black eye* in the

BNC referred to a bruised eye, without a single metaphorical use. This fact leads Gieroń-Czepczor (2011: 72) to suggest this figurative meaning is obsolete, or extremely rare. In COCA, however, there are 172 examples of *black eye* used metaphorically. Fifteen of these refer to the damaged reputation of an individual. For example:

Could this be another *black eye* for the once Golden Boy golfer? (COCA)

Not only can individuals receive a metaphorical *black eye*, so too can places; from towns to cities to whole countries.

That situation may be used by Castro and his agents just to give a *black eye* to the community. (COCA)

There was a series of scuffles and political scandals that left the city with a big *black eye*. (COCA)

"If Google leaves China, I think the impact of that is China gets a *black eye*," said Haim Mendelson, a professor of electronic business at the Stanford Graduate School of Business. (COCA)

There are 40 such examples in COCA in which the collective identity of a place is damaged. Furthermore, the reputation of organisations or industries can be given a *black eye*:

This latest flaw (now fixed) is a major *black eye* for Microsoft; along with two other critical security patches issued for Vista in its first three months on shelves, the problem has tarnished Vista's security sheen. (COCA)

The whole profession of journalism is getting such a *black eye* with this, reports literally every day that are trumpeted and turn out to be false. (COCA)

There are 76 examples of companies or industries whose reputations have metaphorically suffered a beating.

Black and blue appears in B07 "Ill-health" and E55 "Impact", representing the cause and effect of bruised skin. Although this is metonymically motivated, bruised skin will go a variety of shades when bruised; from black and blue to yellow and purple. The majority of examples of black and blue in both corpora refer to a description of skin colour as the

result of a bad beating. It is also applied to a less extreme physical injury in the following example:

No matter how beautiful a chair is, "if it is not comfortable, it is not a good chair." [...] Frank Lloyd Wright, who admitted he had become *black and blue* from sitting in his own chairs. (COCA)

Sitting in the chair resulted in discomfort, rather than injury and any real bruising, and so the meaning is extended through hyperbole. No physical bruise is present in the following examples either:

While the Democrats continue to beat each other *black and blue*, Republicans are sitting on the sidelines all smiles. (COCA)

IBM's reputation is looking black and blue these days. (COCA)

A verbal argument is compared to a physical one, in the first example, and the reputation of the company is said to have taken a metaphorical beating, in the second example. Just as *black eye* is used to signal a damaged reputation, *black and blue* can also be used in this way.

Black and blue can be used to describe emotional injuries. For example:

No matter what you do she won't quit until your feelings are black and blue all over. (COCA)

They shuffled their feet uneasily, hugged each other, and wiped each other's *black and blue* tears. (COCA)

These examples lie firmly in the metaphorical category as "feelings" and "tears" are described as *black and blue*. Both *black eye* and *black and blue* are metonymically motivated, but have been extended into metaphor through a comparison between the physical injuries of bruising to emotional damage.

6.1.5 Supernatural

The MM category G01 "Supernatural" yields a number of phrases containing *black* linked to magical or paranormal aspects of EVIL. First recorded in 1572, the *black art* of "performing supernatural or magical acts" is said to be made possible by communicating

with the devil, or with the spirits of the dead (OED, *black art*, noun 1a). This use of *black art* is found 15 times in the BNC and 30 times in COCA, for example:

Had he been immersed in his *Black Arts*, calling up a demon from hell in some lonely wood or deserted copse? (BNC)

From the beginning, the populace associated gunpowder with the black arts. (COCA)

A *black-artist* is one who communicates with the dead and does not appear in COCA and only 4 times in the BNC, and all from a single source. For example:

The *black artist* appeared on the threshold, wrapped in a swirling black cloak, smiling most ferociously. (BNC)

The meaning of *black art* has been extended which Gieroń-Czepczor (2011: 67) explains as "clever, ingenious solutions" to "intricate or challenging matters". This sense was found 14 times in the BNC, and 19 times in COCA. Examples include:

All the rotaries, as with any noise gate, take a little time to get into using and effective gating comes about through practice, although it can at times appear something of a *black art*. (BNC)

Unfortunately, the whole process of making planes out of this stuff is sort of a *black art*. We basically experiment, see what works and what doesn't. (COCA)

As is indicated from the examples given above, the majority of citations in both corpora were found in plural form (*black arts*) when used in reference to witchcraft and the devil, but in single form (*black art*) when in extended use.

With a similar meaning, *black magic* involves the "invocation of evil spirits; harmful or malevolent magic" and is first recorded slightly later than *black art*, in 1590 (OED, *black*, noun S4). Examples include:

All that *black magic* foolishness of theirs stops here. (BNC)

"I didn't think you believed in witches, the evil eye, black magic, and such." (COCA)

Black magic appears in the BNC 59 times and in COCA 198 times. *Black magic* has also extended in meaning to refer to mysterious forces used to solve problems but to a lesser extent than *black art*, for example:

Opportunity to observe the way that the Fuhrer's powerful personality and rhetoric worked like *black magic* on so many of his fellow students. (COCA)

There is a direct opposition between *black magic* and *white magic*, which is "beneficent, innocent, harmless" (OED, *white*, adjective 7b) discussed in Section 6.2.1. Another example from the G01 "Supernatural" category which also has a *white* partner is *black paternoster*; a night spell sung to conjure up evil spirits or devils (OED, *paternoster*, noun 2a). There were no examples in either corpus.

In Satanism, a *black mass* is one which parodies the ceremony of the Roman Catholic Eucharist (OED, *black mass*, noun 1) and appears in the MM categories B16 "Death rites" and V04 "Worship". *Black mass* occurs 5 times in the BNC and 10 times in COCA, for example:

This type of witch is the most likely to desecrate 'sacred' property such as graveyards and churches, and to celebrate the *black mass*, which pokes fun at high church religion. (BNC)

They accuse her of making a pact with the devil and flying through the air to attend a *Black Mass*. (COCA)

These phrases reveal a link between *black* and a specific branch of evil; that of supernatural powers of witchcraft and the devil, possibly reinforced due to the personification of such figures always being clothed in black.

6.1.6 Anger

I07 "Anger" reveals a connection with *black* in a number of phrases. Many of these involve *black* being used as an intensifier; where *black* means an extreme example of something, which is in keeping with Barcelona's (2003: 40) metaphor A NEGATIVE EMOTION IS DARK (and an EXTREMELY NEGATIVE EMOTION IS BLACK). *Black angry* was first recorded in 1894, but there were no examples in COCA and only 2 in the BNC, including:

He was facing Silvia in the enormous hallway, a fulminating tower of bristling *black anger*. (BNC)

Someone who is *black-browed* may be frowning or scowling, which in part derives its meaning from the fact a person's brow will be crumpled and lowered when they are vexed,

and the use of *black* adds the metaphorical sense. This was not found in either corpus. Similarly, the phrase *to look black* means to "frown, to look angrily or threateningly (at, on, or upon a person)" (OED, *black*, adjective 14c). No examples with this sense were found.

6.1.7 Moral Evil

The simile *black as sin* is categorised in D33 "Darkness" and yet two citations in COCA refer to something evil, for example:

So I hated Granny for Bobby's sake and I knew that her soul were already lost and *black as sin*. (COCA)

T05 "Moral evil" reveals a systematic link between *black* and evil. A *blackguard* is said to be a person, most frequently a man, who behaves in a dishonourable or contemptible way (OED, *black guard*, noun 6). First recorded in 1732, according to the OED this metaphorical use of *blackguard* is somewhat archaic, but although it does not appear in COCA, it has 14 citations in the BNC, for example:

Suddenly the dark eyes were flashing. 'Your brother's an irresponsible, thieving *blackguard*. I'll never forgive him'. (BNC)

The *Black September* movement was a Palestinian terror group in the 1970s and there are 6 references to the group in the BNC and 47 references in COCA. Two phrases which draw on the metaphor BLACK IS EVIL are *black-hearted* and *black-souled*, meaning to have evil intentions (OED, *black-hearted*, adjective; *black-souled*, adjective). *Black-hearted* was first recorded in 1638 and *black-souled* 10 years later in 1648. Both phrases are still in use; *black-heart* with 6 citations in the BNC and 44 in COCA, such as:

Good old de Warenne, he thought, with his bluff red face and treacherous black heart. (BNC)

We all denied any understanding of his actions, and if in our *black hearts* we had been thinking of a similar deed, we abandoned such evil schemes. (COCA)

Black-souled does not appear in the BNC, but has 17 citations in COCA, for example:

Somewhere in a forgotten corner of his *black soul* there had once glimmered a tiny flame of romance. (COCA)

It is not only individual people who can have a *black heart* or *black soul*, so too can cities, governments and mountains:

After his second glass of rum Aschemann shadowed them into the warm air and *black heart* of the city. (COCA)

Anybody who claims to know what lies in the *black heart* of the Israeli government knows more than I do. (COCA)

The mountain seemed to wake up, struggle, and surrender its *black soul*. (COCA)

These examples reveal how the phrase has extended its meaning as it is not only *black* that is to be interpreted metaphorically, but also *heart* and *soul*.

6.1.8 Absence

Blackout, as a noun and phrasal verb, has developed several senses which shade from the literal to the metaphorical. A fairly literal sense is when lights are extinguished or obstructed in the context of a stage performance, a precaution against air raids or a power cut (OED, *to black out*, phrasal verbs 2). Examples include:

And after each scene, you go on stage in a blackout and change the set. (COCA)

Now during the war when we had to have all the windows sealed and *blacked out* that place became very warm and very uncomfortable to work in. (BNC)

A nine-hour *blackout* ensued, suspending power to 6 million people in Canada and the United States. (COCA)

To black out text means to obscure sensitive information. While this sense derives from a literal use of black ink to cover up sections of text, it can be extended to refer to censorship in a more abstract way. An example of each is given below:

There is an FBI report on the incident with over 200 pages *blacked out* for national security reasons. (BNC)

"Ironically, they are attempting to *black out* the truth by using the same abusive, corrupt technique of checkoff without consent that this initiative would stop," Wilson said in an interview. (COCA)

Related to this extended sense is the "deliberate suppression of news or information", frequently in *news blackout* (OED, *blackout*, noun 3c). For example:

Other demands included the resignation of television director-general Pavel Pisarev, whom the students accused of maintaining a *news blackout* over the election irregularities. (BNC)

Here, surely, is a clear example of when a TV media blackout is fully justified. (COCA)

The corpus data revealed *media blackout* is also common.

A temporary loss of vision caused by strong accelerative forces is called *blackout* (OED, *blackout*, noun 2a), for example:

Further considerations included [...] cockpit instrumentation and the pilot, who could be in danger of *blacking out* as speed and 'g' loading increased. (BNC)

Losing sight can be likened to being plunged into darkness, or blackness. Also motivated by this loss of sensation is the momentary loss of consciousness and consequently memory (OED, *blackout*, noun 2a and b). This meaning was common in both corpora, for example:

Pain hit him in one intolerable wave and he blacked out. (BNC)

Brooke *blacked out* for a second. "I honestly don't remember much of what happened after I slammed into the thing," she says. (COCA)

These two senses, though related, draw on different stages of losing consciousness. In the first, *blackout* metonymically alludes to the moments prior to losing consciousness, when vision starts to fade out leaving the sensation of seeing black. In the second, *blackout* refers to the memory loss that occurs due to passing out, metaphorically representing the missing memory. An equivalent term for white (*whiteout*) also holds similar senses. *Green's Dictionary of Slang* (2010) also records *blackout* meaning to murder or assassinate someone.

6.1.9 Secrecy

In S07 "Law", the phrase *black bag* refers to an intelligence operation in which illegal access to premises is made by a government agency, in particular the Federal Bureau of Investigation (OED, *black bag*, special uses 5a). Only 11 examples were found in COCA and none in the BNC, for example:

He defended the FBI's top specialist against charges of having performed *black-bag jobs*. (COCA)

It would allow law-enforcement agencies such as the FBI to conduct *black-bag* "sneak and peek" searches of homes and offices, without informing the people. (COCA)

The OED notes that the United States declared these operations to be unconstitutional in the early 1970s, which helps to explain the low numbers. The name was given after the black bags that were used to carry equipment needed for these operations, with black chosen as the least conspicuous colour.

6.2 White

As polar opposites, *black* and *white* enter into opposing metaphorical meanings. The most fundamental contrast is between BAD and GOOD and the vast majority of metaphors involving the colour white draw on this association to describe moral and physical purity. However, not all of the white phrases are positive. Other figurative meanings are derived through the process of metonymy. For example, fear is alluded to through the paleness induced when frightened, as blood drains away from the face, and intense or extreme situations are alluded to through the bright white colour metal glows when heated to high temperatures. Results are displayed in Table 6.2.

Table 6.2 Figurative meanings of *white* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Supernatural	white paternoster	c1390-	N
	white witch	1613-	Y
	white magic	1614-	Y
	white knight	1628-	Y
Legality	white money	1423-1820	N
	whitemail	1861-	Y
	white market	1943-	Y
Fear	white-livered	1546 ¹ -1888	Y
	white hearted	1598-	N

¹ The first attested date for *white-livered* in the OED is 1549, but this is antedated by three years, according to *Green's Dictionary of Slang*.

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	bleed white	1898-	Y
	white-knuckled	1872-	Y
	white-knuckle	1968	Y
Moral Purity	whiter than white	1593-	Y
	white lie	1741-	Y
	white hearted	1865-	Y
	lily-white	1961-	Y
	white wedding	1949-	Y
Blankness	whitewash	1703-	Y
	white out	1942-	Y
Intensity	white heat/hot	1839-	Y
	white night	1872-	Y
War	white terror	1805-	Y
	white war	1932-	N

6.2.1 Supernatural

Within G01 "Supernatural" are several references to *white* with the meaning of innocence and free from evil. *White magic* is performed with harmless intent (OED, *white magic*, S6) and draws on the figurative sense of the colour meaning innocence or harmlessness, in contrast to something that is black (OED, *white*, adjective 7b). Only one example of *white magic* was found in the BNC compared to 25 examples in COCA, including:

Another tale featured a man driven to madness when a demonic serpent crawled down his throat into his belly; only a wise priest's *white magic* could force it to leave. (COCA)

White witches are practitioners of white magic who use their magic for beneficent purposes (OED, white witch, noun). One example of white witch was found in the BNC and 19 citations in COCA, for example:

Today the couple, who claim they're *white witches*, cast a spell to try to stop the attacks. (BNC)

Everyone in the small town knew her as the harmless white witch. (COCA)

A further 2 examples of *white witch* in the BNC and 20 in COCA refer to the name of the character, the White Witch, in C. S. Lewis' *The Chronicles of Narnia*. The character's

name inverts the usual meaning of *white*, as something good, as it is bestowed on someone evil. Also in G01 "Supernatural" is "a prayer or charm recited for protection against evil spirits at night" called a *white paternoster* (OED, *paternoster*, *noun* 2a), which is a benevolent and harmless song. First recorded c1390, *white paternoster* was not found in either corpus. Once again, there is both a *white* and a *black* paternoster; the latter being a song to the devil.

A *white knight* is a person, usually a man, who "comes to the assistance or defence of another person" (OED, *white knight*, noun 1a). There are 16 examples with this sense in the BNC and 104 in COCA. For example:

Peter had to be cast as the *white knight*, saving her from the dreaded dragon! (BNC)

Every election cycle we go through the same process again and again, where there's always someone searching for somebody different, for some *white knight* to step in and save the party from sheer ruin. (COCA)

In a few cases, such as the second example, *white knight* is used within a political context as an unknown or new candidate someone who can solve the problems of the political party. The OED also gives an extended use of the phrase within the stock market, where a *white knight* is an individual or organisation that "makes an acceptable counter-offer for a company facing an unwelcome takeover bid" (OED, *white knight*, noun 1b). Examples from the corpora include:

Morgan has been looking for a *white knight* for the last two weeks since insurance broker Willis Faber announced it was selling its 20 per cent stake. (BNC)

It was underscored by a half-dozen bids, clandestine talks, *white knights*, 11th-hour stock sales to secure proxy votes and, finally, a brokered deal. (COCA)

This extended sense was the most frequent in the BNC, with a further 18 examples, and made up a fifth of examples in COCA, with a further 47 examples.

6.2.2 Legality

The *white market*, complementary to the *black market*, describes "authorized dealings in things that are rationed or of which supply is otherwise restricted" (OED, *white*, S1e). Unlike the source metaphor *black market*, which occurs in the corpora in high numbers,

white market is not found in either the BNC or COCA. It is a relatively recent addition to the language, being first recorded in 1943, compared to *black market*, which was first recorded in 1727, and even *grey market*, which was first recorded in 1934. Similarly, whitemail means to seize or appropriate like *blackmail*, but for a good purpose, only appears once in the BNC and not at all in COCA:

Even though I [...] can offer neither blackmail nor *whitemail*, I hope that there will be a firm commitment [...] that the law needs to be amended [...] to prevent the vile calumny which we are discussing from being perpetrated again. (BNC)

The only citation of *whitemail* also refers to *blackmail* suggesting that it was needed to provide context. The phrase was first recorded in 1861, which is significantly later than *blackmail* in 1530. *White money* appears in Y09 "Money" where *white* metonymically stands for silver coloured coins. Gieroń-Czepczor (2011: 109) lists a further meaning of *white money* "earned and taxed honestly". No examples of either sense of *white money* were found in the BNC and those in COCA use *white* to refer to people with white skin.

6.2.3 Fear

A physical sign of being tensed is to clench the fist tightly, cutting off the blood supply to the fingers resulting in white knuckles. *White-knuckle(d)* is therefore used to stand for being "tense from barely contained emotion", particularly fear or suspense (OED, *white-knuckled*, special uses 6), and it occurs frequently in both corpora with 41 examples in the BNC and 155 examples in COCA, for example:

There's *white knuckle* excitement a-plenty plus other themed rides for everyone to enjoy. (BNC)

It was some white-knuckled driving at its finest. (COCA)

These examples often describe dangerous drives or fairground rides. Though the phrase appears within I16 "Fear", the corpus examples, such as those above, often suggest a mixture of fear and excitement in equal measure. Other emotions are occasionally depicted by *white knuckles*, for example:

Hearing confirmation that a trusted employee had indeed turned thief, she had gripped the chair-arms in *white knuckled* rage. (BNC)

Their fingers intertwined in white-knuckled sympathy. (COCA)

The metonymic motivation of this sense is clear, and yet it is often applied to situations where there are no literal hands clenched. Instead it describes types of emotions, emphasising their strength, and so becomes metaphorical. According to both *Green's Dictionary of Slang* (2010) and *The New Partridge Dictionary of Slang and Unconventional English* (2006) *white-knuckles* are in fact a sign of bravery or courage, rather than fear.

Other body parts can also suggest fear; to be *white-livered* means to be feeble-spirited, cowardly or dastardly (OED, *white-livered*, adjective). This metaphor is based on the notion that the liver represents courage and spirit, and if the liver is damaged or deficient of bile or "choler", it becomes pale. Only one citation was found in each of the BNC and COCA, suggesting the association is being lost:

"Unhand me, you white-livered sons of goats!" he shouted, struggling. (COCA)

As well as meaning pure-hearted, *white-hearted* can have a more negative sense of being "faint-hearted, timid, cowardly" (OED, *white-hearted*, special uses 6), drawing on the use of white as being pale through fear. No corpus examples were found.

To bleed white draws on two metaphorical connections. In the first, the loss of blood is equated to the loss of money (OED, bleed, verb 5b) and in the second, white alludes to the fact that skin turns pale when someone is frightened as blood drains away from the face. The phrase to bleed white therefore means to drain completely of resources (OED, to bleed white, phrase 8) or extort money from (OED, bleed, verb 10), or rarely to shed colourless blood, where white is used hyperbolically. Two citations were found in the BNC and 5 citations in COCA, including:

Although the business is being *bled white* by its debts, the shops themselves still have the potential to thrive. (BNC)

Their country was *bled white*, weakened to a dangerous extent. They were burdened by a very large war indemnity to be paid to the Soviet Union. (COCA)

Philip describes the phrase as a more emphatic form of *to bleed dry*, as the implication in *to bleed white* is that "one's blood is being siphoned off, leaving a white corpse behind" (2006: 80).

6.2.4 Moral Purity

White is connected to the idea of truth, most likely as an extension of goodness. In "Truth and falsity" white appears with the obsolete meaning of "fair-seeming, specious, plausible", which was recorded c1374 (OED, white, adjective 10).

While lying is considered deceitful and wrong, a lie described as *white* is a "falsehood rendered venial or praiseworthy by its motive" (OED, *lie*, noun¹ 1b). *White lie* has 22 citations in the BNC and 167 citations in COCA, making it one of the most frequently found phrases involving a metaphorical use of *white*. Over a third of examples of *white lie* in both corpora are quantified by size adjectives which emphasise that the lie is only a small one. Most often *little* is used, for example:

What did it matter, a little white lie like that? (BNC)

Perhaps some of his evasions can be dismissed as a politician's typical little *white lies* -- and I do mean *white*. (COCA)

The seriousness of the lie is downplayed by describing them as harmless (*white*) and small in size, and two examples highlight this further:

I've told the teeniest weeniest white lie and said that I will only be staying with you for a week or so. (BNC)

From little teeny, tiny *white lies* to the real whoppers. How far are you willing to bend the truth? (COCA)

In contrast, *white lie* is also used to give the opposite meaning. A few examples of *white lie* are used ironically, in order to contradict the innocence of the lie.

House agents tell *white lies* ESTATE agents have come under fire for misleading advertisements. Many are 'blatant untruths' that are only revealed when potential buyers visit a house.

"Denny hardly ever takes her calls," I said. This was utterly untrue, but for some reason, I enjoyed the thought of the little *white lie* that was involved. (BNC)

In biblical language a *whited sepulchre* was used figuratively to refer to someone whose fair outwards semblance concealed an inner corruption (OED, *sepulchre*, noun 1b). The phrase only appears 4 times in the BNC and 4 times in COCA, for example:

This 'outward-sainted deputy', as Isabella calls him (in words that recall Christ's 'whited sepulchres.' (BNC)

They are thus utterly protected from guilt or responsibility, *whited sepulchres* who can never have any possibility of penetrating to the truth. (COCA)

Whiter than white is categorised in D35 "Individual colours" as a shade which is "extremely white" (OED, white, adjective 1e), and the majority of citations of this phrase refer to a colour description in both corpora. In particular, someone whose facial colour has drained away, whether through illness, surprise, or other emotion, is often described as looking whiter than white, for example:

He was whiter than white, totally colourless, maybe a touch green round the mouth. (BNC)

The OED marks this phrase as being frequently figurative as it can also describe the purity of someone's moral character. In the BNC, 8 out of 19 citations of *whiter than white* were metaphorical, for example:

It was a very, very strict approach [...] you've got to be cleaner than clean, *whiter than white*, so remove every possible restriction. (BNC)

This example draws the connection between a literal and moral stain by describing the need to be "cleaner than clean". The idea of physical purity is transferred to the domain of moral value. Out of 12 citations of *whiter than white* in COCA only one was metaphorical:

Buckingham Palace, behind me, have issued a statement saying that there will be no further comment, they maintain the line that Andrew is *whiter than white* and has had no involvement in this sting, whatsoever. (COCA)

Lily-white can be used in a similar way to metaphorically describe people or things that are "irreproachable, lacking faults or imperfections" (OED, *lily-white*, adjective 2b) and there are 10 citations in each of the BNC and COCA. For example:

Since Rosie came along I've been *lily-white*. (BNC)

"My sense of integrity is still *lily-white* and pure." (COCA)

Another sense of *lily-white* pertains to a policy of racial segregation (OED, *lily-white*, adjective 2a). This seemingly negative use conflicts with Allan's assertion that to be described as *lily-white* is perceived as complimentary due to the positive association with the pale skin colour of the refined, pale gentry (2009: 628). Though no examples in the corpora directly concern the issue of segregation, several are used to describe pale skin tones or in the context of race, for example:

Estate agents, anxious to protect property prices, still steer even rich blacks away from the nicest, *lily-white* suburbs. (BNC)

Almost every nationality between *lily white* and African black was guessed-Mexican, Lebanese, Arab, Israeli, Native American, Japanese, Thai, Portuguese, and on and on.

In these examples *lily-white* is being used for the most white colour; in this case the whitest racial skin colour.

Someone who is *white-hearted* may be described as pure-hearted or saintly (OED, *white-hearted*, S2 b). Only two examples were found in COCA:

For Moroccans, white represents moral qualities and good fortune, believing that a goodnatured, agreeable person has a "white heart." (COCA)

Physical purity can be described as *white*, for example in the phrase *white wedding*. Here, chastity represents a moral value. Philip (2003: 297) cites the pair *white wedding* and *matrimonio bianco* as an example of false friends in English and Italian. In English, a *white wedding* carries the meaning of a "traditional" wedding, where the bride's white dress is a symbol of sexual purity. On the other hand, *matrimonio bianco* means an unconsummated marriage in Italian. While both expressions relate to sexual purity, as Philip notes, "the meanings are palpably different" (2003: 154). Gieroń-Czepczor (2011: 105) cites a *white marriage*, implying a celibate relationship, in English, but the phrase is not attested in the OED or corpora.

6.2.5 Blankness

The process of *whitewashing* started out with a literal sense of making fabric or buildings lighter or whiter using bleach or a powdered white mineral substance of the same name (OED, *whitewash*, verb 1 and 2a). This has been extended to mean the concealment of faults or errors in order to give an outward appearance of honesty (OED, *whitewash*, 3a). The phrase was frequent in both corpora, and around a fifth of all examples of *whitewash* in the BNC (65) and a quarter of all examples in COCA (257) were of this metaphorical sense. For example:

And so he will be involved in political controversy and, in circumstances like those prevailing in Northern Ireland, inevitably accused of bias, of *whitewashing*, of serving certain political masters. (BNC)

In reality, the system fears innovation and only rewards those who play along by *whitewashing* their alternative cultural values. (COCA)

The year of the military dictatorship filled us with a fear that chewed away at our guts that forced us to obey and promise to forget, and to *whitewash* our memories. (COCA)

It is clear that this metaphor is used with negative connotations. Despite WHITE's association with goodness, in contrast to BLACK, in *whitewash* the colour is deceptive, covering up corruption underneath.

Other extended uses include a sporting victory when the losing team fails to score (OED, *whitewash*, verb 4; noun 5) leaving the scoreboard clear and blank, such as:

Lanfairpwll top the Anglesey Bowls League with six wins in a row the latest a 12-0 *whitewash* of visitors Bennllech. (BNC)

Despite originating from baseball, this sense was more frequent in the BNC than COCA, with 43 examples to 5. Applied to financial situations, *whitewashing* is when a person is cleared from the liability of their debts (OED, *whitewash*, verb 3b). This metaphorical sense is marked as rare in the OED and was not found in the corpora.

Whiteout is recorded as both a noun and as a phrasal verb in the OED with various related meanings that range from literal to metaphorical senses, similar to *blackout* discussed in 6.1.8. There are 41 examples of *whiteout* in the BNC and 192 in COCA. The earliest sense

recorded for *whiteout* from 1939 describes a blizzard or snowstorm that reduces visibility (OED, *whiteout*, noun), such as:

Gale-force winds and whiteout conditions make the roads treacherous. (COCA)

Impaired visibility can also be caused by a bright light (OED, *to white out*, phrasal verbs 4):

But the worst is when you walk outside into bright sunshine. "What happens in sunlight?" "Whiteout," she said. "Everything goes blank. It's like the world disappears right in front of you." (COCA)

Not attested in the OED, but found in the corpora is the specialised use of the term *whiteout* describing the effect caused by over-exposed photographs:

This procedure computes the blackout and *whiteout* levels and stores them. (BNC)

Also revealed by the corpus data is when the signal to a TV or computer screen is lost, but there is still power lighting the screen, resulting in *whiteout*:

FireSight system allows operators to see exactly what is happening inside the boiler without screen *whiteout*. (COCA)

In one extended example, the *whiteout* of a signal describes not vision but sound cutting out:

Watty snapped on the radio and Voice of Oklahoma came in clear, the music swirling out into the plains, [...] until a rush of static *whited out* the signal and I turned it off and quiet fell around us as we hurtled toward the town lights up ahead. (COCA)

Reminiscent of *blackout* blinds or curtains, the following example describes windows that have been obscured to avoid seeing out of them:

Every morning civilian contractors, test pilots and others board unmarked planes with *whited-out* windows. (COCA)

The OED joins two related meanings in the definition "to see nothing but white, esp. as a prelude to losing consciousness. Also of the mind: to go blank." (OED, *to white out*, phrasal verbs 3). For example:

I remembered going up in a gilt elevator. And then -- white-out. (BNC)

I see an animated Bozo on a scooter against a de Chirico backdrop, then my memory *whites out*. (COCA)

In both examples, *whiteout* describes the loss of memory, but only in the first is this a result of passing out. When *whiteout* is extended to the period of unconsciousness or memory loss, *white* stands for something that is missing.

Whiteout can also refer to correction fluid used to cover mistakes (OED, whiteout, noun 2), and the corpus data, from COCA only, suggests that it is being extended to the censure of information that had been covered up. For example:

The North Kingstown High yearbook staff had to *white-out* obscenities directed at teachers and students in the senior messages section of 275 yearbooks. (COCA)

"If we bar criminals from ever having their names attached to public buildings, there'd be many buildings in many cities in this country that would have tomorrow everything *whited out*." (COCA)

What we don't do is *white out* the religious elements of their cultures as if it doesn't exist. (COCA)

These three examples show how *whiteout* goes from physically obstructing text, to hypothetical situations, then forgetting or dissociating historically sensitive information, moving from a concrete to an abstract sense. To *white it out* is recorded in *Green's Dictionary of Slang* (2010) referring to serving out a jail sentence, and thus erasing a period of one's life.

6.2.6 Intensity

A *white night* is transferred from French *nuit blanche*, meaning a sleepless night and is first recorded in English in 1872 (OED, *white night* S1, noun a). Only one example of *white night* meaning a sleepless night appears in the BNC and 8 examples in COCA, for example:

She snapped, 'I'm not tired, I'm not,' glaring at him like an enemy, and he felt a sour weariness at the prospect of the long, *white night* ahead of them. (BNC)

He then took his flashlight (the loyal companion of his *white nights*), a pencil, notepaper, and Ianvar. (COCA)

According to Philip (2006: 76), the equivalent phrase in Italian meaning a sleepless night is *passare una notte insonne* ("to have a sleepless night"), which has become broadly synonymous with *passare una notte in bianco* ("to have a blank/white night"). The latter

phrase originally referred to the medieval ritual for a man to spend the night prior to his knighting ceremony in quiet reflection and prayer, dressed in white as a symbol of his purity and moral integrity. The polysemous nature of *bianco*, meaning both "white" and "blank", along with the loss of cultural relevance has resulted in the original connotative meaning being lost. Philip also notes that although no equivalent expression is found in English, the practice was carried out in Britain.

Another sense of *white night* that is recorded in English from 1960 with the meaning of a night which is never properly dark, as in high latitudes in summer (OED, *white night* S1, noun b). This meaning is the most common in the corpora, with 2 citations in the BNC and 18 citations in COCA, for example:

That was the only trouble with the *white nights* -- you never wanted to go to bed. (BNC)

In the summer it is known for the *white nights* with more than 20 hours of daylight and just the opposite in winter with darkness. (COCA)

All examples of long summer nights refer to *white nights* in the plural, whereas nights without sleep are usually singular (7 out of a total of 9 examples across both corpora).

White heat is said to be the degree of temperature at which some metals and other substances radiate white light (OED, white heat, noun 1). The metaphorical meaning of white heat relates to a "state of intense or extreme emotion" (OED, white heat, noun 2). In many examples in the corpora, white heat is used to describe something very hot, often with hyperbolic effect. The first metaphorical use of white hot is to describe intense situations, for example:

A prickling sensation between my eyes made my nose run and *white-hot* adrenalin scalded the subcutaneous layer beneath my skin. (BNC)

All she has to do is tap into the adrenal gland of [...] Lance Armstrong, and examine a *white-hot* intensity the Tour de France never has seen before. (COCA)

Next, white hot can describe passion, for example:

And it's more fun now than when we were consumed by white-hot passion. (BNC)

I'd invited Mick Dunne, my neighbor and a man with whom I'd had a *white-hot* affair last spring, to dinner. (COCA)

White hot also frequently collocates with: anger, fury, indignation, hate, hostility, outrage, resentment, rage and temper. For example:

White-hot rage that was all the more potent because it originated from humiliation. (BNC)

I'd been harboring a secret reservoir of guilt, but in that moment it all vanished, leaving me with just my *white hot* fury. (COCA)

According to the OED, white heat is hotter than red heat, placing white heat at the extreme end of the scale of associated emotions. Philip (2003: 206) found that different degrees of anger are expressed with different colours in Italian. She contrasts mad anger, associated with shouting and throwing things, represented by the phrase viola di rabbia ("purple with anger") with the cold, controlled anger of bianco di rabbia ("white with anger"). Body heat and redness are the basis for many metaphors across a number of languages (English, Japanese, Hungarian and Wolof) (Kövecses 1995: 190). Therefore, anger which is white hot is very different from anger that is simply white, which is motivated by blood draining away from the face.

White heat is also used to describe things which are popular or successful. Verosub (1994: 30) discusses how the phrases red hot scandal and red hot band employ the metaphorical use of FIRE IS RED, and highlights how when things come out of the fire they are red hot but they eventually cool down and lose their red colour. As a result, to describe something as red hot it must be "newly emerged from its source". Similar uses of white hot include descriptions of special offers, trends and celebrities, for example:

Book your summer '90 holiday with this White Hot Deal section and save yourself! (BNC)

The rejuvenation of 1930s-style big-band swing dancing - a *white-hot* fad on the coasts in recent years. (COCA)

What Bivouac have is what bands forged in the *white heat* of the Brit music biz hype machine invariably lack, and that's soul. (BNC)

But her *white-hot* celebrity -- and the romantic turmoil that accompanied it -- are long past. (COCA)

Several examples describe being in the *white-hot* spotlight, such as:

By now the media glare was white hot. (COCA)

All of the Middletons felt the *white heat*, and especially on the few occasions when things went wrong. (COCA)

Since his wife's death, Prince Rainier has had to guide his children through a series of romantic hardships, usually in the *white-hot* glare of the press. (COCA)

An additional source of the metaphor is brought in as in addition to its heat, bright light also metaphorically stands for something which is new and popular.

6.2.7 War

White has been associated with several royalist, counter-revolutionary or anti-communist political groups (OED, *white*, adjective 6). The name *White Terror* was first given to describe the period of violent repression in reaction to the First French Revolution, but can also describe any such period (OED, *White Terror*, noun 1 and 2). Seven examples occur in COCA, including:

Some 13,000 Reds died in what would become known as the *White Terror*, many of them summarily shot. (COCA)

An entirely different sense of white is drawn upon for white war, which is defined as an economic war without bloodshed (OED, white war S1) and is thus represented in R01 "War and armed hostility" and Y09 "Money". Gieroń-Czepczor (2011: 109-110) found that Polish bialy ("white") was frequently attested in contexts implying the need to refrain from violence, but in English white has not been attested in this sense. In Polish, the concept of anti-violence is lexicalised in the phrases: bialy policjanci ("white police"), biale szkoly ("white schools") and biale wojsko ("white army"), bialy marsz ("white march"), biala flota ("white fleet"). The OED does not indicate the origin of white war, but I suggest it is possibly related to the symbolic message conveyed by a white flag, which is displayed to show peaceful intention or surrender (OED, white flag, S1e). An alternative explanation is that white metonymically stands for silver money, and so draws on the economic element of the war; alternatively, white could metaphorically stand for the absence of violence and bloodshed. In line with Gieroń-Czepczor's findings for English, there were no citations of white war in the BNC or COCA, suggesting it is not

conventionalised. A possible reason for this is that the use of *white* in the context of war is too closely bound to the notion of race.

6.3 Red

Numerous extensions in meaning can be found in the HT and corpus data for *red*, confirming it is a highly figurative term. Given the status of red in the UE model, and its perception as "the color of colors, color par excellence" (Vaňková 2007: 444), it is hardly surprising that red carries so many figurative senses. The salience of red lends itself to many metonymies, where the colour easily draws attention and a theme of importance is found throughout. The figurative meanings of *red*, however, are also very extremely diverse, from ANGER to WARNINGS to LICENTIOUSNESS. These are shown in Table 6.3.

Table 6.3 Figurative meanings of red in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Intensity	red hot	1593-	Y
Blood	red rain	?1660-	Y
Importance	red-letter day	1663-	Y
	red carpet	1934*-	Y
Anger	redden	1678*-	Y
	to see red	1900-	Y
Bureaucracy	red tape	1736-	Y
Warning	red light (warning)	1790-	Y
	red-pencil	1922-	Y
	red warning	1940-	Y
	red alert	1941-	Y
	red line	1956-	Y
	red card	1980-	Y
Relevance	red herring	1807-	Y
Virility	red-blooded	1836-	Y
Licentiousness	red lamp	1846*-	N
	red light (district)	1880²-	Y

 $^{^2}$ The first attested date in the OED for *red light* is 1894, but *Green's Dictionary of Slang* (2010) antedates this slightly to 1880.

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	red lantern	1909-	N
Politics	red republic	1848-	Y
	red terror	1864-	Y
	red peril	1897-	Y
	Red Army	1918-	Y
	red menace	1919-	Y
	red star	1920-	Y
	red-baiting	1927-	Y
Guilt	red-handed	1857*-	Y
Enjoyment	paint the town red	1882-	Y
Debt	in the red	1907-	Y
Blindness	red-out	1942-	Y

6.3.1 Intensity

When subjected to high temperatures, wood or metal will glow *red hot* (OED, *red-hot*, adjective 1). Many examples in the corpora emphasise how hot something is by describing it as *red-hot*, sometimes with an element of hyperbole. The phrase is used in various extended meanings, such as to describe spicy food, in B73 "Food and eating". This is based in physical experience, as spicy food often results in an increase of body temperature and a slight burning sensation on the palate. Examples include:

They eat *red hot* stuff, and they drink (pause) cool things to cool their mouth down after! (BNC)

The active ingredient in the spray is the extract of *red hot* cayenne chili peppers. (COCA)

Another use of *red-hot* is based on the physical experience of touching something which is extremely hot resulting in an injury. *Red-hot* can therefore be used to describe a type of pain:

I was as stiff as a poker, and as red-hot with pain. (BNC)

I gasped as a million red hot pins and needles jabbed at my unaccountably naked legs. (COCA)

Other extensions of the phrase move further away from the physical temperature. The OED describes *red-hot* actions or feelings as "burning, urgent, violent, furious; fervent,

passionate" and *red-hot* people as "highly inflamed or excited; fiery; violently enthusiastic, extreme" (OED, *red-hot*, noun 2a and b). Even in the definitions, human characteristics are described in terms of heat and fire: *burning*, *fervent*, *inflamed* and *fiery*. Examples of emotions described as being *red-hot* include:

Justice Bhagwati's leading opinion burns with *red-hot* anger. (BNC)

She kept her hatred burning *red-hot* with a litany of her grievances. (BNC)

Marius felt *red-hot* anger building inside him. (COCA)

I want him to know how it feels, this *red-hot* tightness in the chest threatening to explode and take everything with it. (COCA)

Red-hot is also categorised in I03 "Excitement", describing something that is popular or busy:

The big bookies' credit office phone lines were *red hot*. (BNC)

Comic book art and almost anything to do with the movies, from props to posters, are already *red hot*. (COCA)

Success is also described as *red-hot*:

Meanwhile the Dodgers are *red hot* and have the division clinched after winning twelve of their last fourteen. (COCA)

Dada, as it turned out, wanted to get into the *red-hot* athletic shoe market. (COCA)

Topics which are particularly current, and sometimes contentious, can be red-hot:

I think it's going to be a real *red hot* issue, and there is- this term, we saw the Supreme Courtthere virtually was no center left. (COCA)

Yeah, this *red-hot* immigration debate is coming at a bad time for Mr. Bush. (COCA) Will a cold case finally get *red-hot* answers? (COCA)

In order for something to be *red-hot* it must have come straight from the fire, as after time it will cool down and lose its red colour. Verosub explains that to describe something as *red hot* it must be "newly emerged from its source" (1994: 30). The final example contrasts

the use of *cold* to describe a case which has reached a dead end with a case which is *red-hot* and has new leads and results.

6.3.2 Blood

Red can metonymically stand for blood and is used in metaphors connected to the flowing of liquid (OED, *red*, adjective 8b). Drawing on this use, the phrase *red rain* was used figuratively as a synonym for blood in early use (OED, *red*, special uses 2d(a)). Figurative uses of *red rain* in the OED suggest the phrase is being used as a synonym for bloodshed:

?1660 T. Jordan Divinity & Morality sig. §3°, May the *red Rain* which our rude wrath let fall In num'rous showres of vengeance National, Be all wash'd out. (OED)

1854 G. Massey *Poems & Ballads* (N. Y. ed.) 136, His Hungary billows o'er with graves Of Martyrs not in vain: See what a ripening harvest waves Its fruit of that *red rain*! (OED)

Only one example was found in COCA:

Drops of snake's blood dribbled down on us, a *red rain*. (COCA)

Here, the blood refers to that of one individual, the snake, in contrast to a collective shedding of blood in the examples from the OED.

6.3.3 Importance

Important religious festivals, such as major Saints' days, were once marked in the calendar with red ink and so called *red-letter days*. This use then extended to mean any significant or memorable day. Similarly, *red-letter nights* are significant or happy evenings, comparable to the figurative use of *red-letter days* (OED, *red*, C2a). Twenty examples of *red-letter day* are found in the BNC and 47 examples in COCA. Examples include:

Next Thursday's elections will mark a *red letter day* for tens of thousands of Chileans who have been exiled by Pinochet's harsh rule. (BNC)

It was a *red-letter day* for me when I started studying art at the Drexel Institute in Philadelphia. (COCA)

None of the examples highlighted an important date in the Christian calendar, but rather memorable days for individuals or other groups of people. No examples of *red-letter night* were found in COCA and only one in the BNC:

Some evenings it would be a small group of half-a-dozen close friends, on *red-letter nights* a gathering of 100 or more to greet a visiting celebrity. (BNC)

To *roll out the red carpet* is a way to greet important visitors at formal occasions and the image of the *red carpet* symbolises importance and luxuriousness. According to Allan (2009: 631) the colour was probably chosen for its salience. Some examples refer to the physical carpet and others to situations where there is the suggestion of special treatment, yet it is unclear whether a physical carpet was present:

China rolled out the *red carpet* for him and his team. (BNC)

Furthermore *red carpet* is occasionally used as a modifier, for example:

A GROUP of Japanese customers were given the *red carpet treatment* when they visited. (BNC)

And as Lara just said, very *red carpet glamour*, jeweled neckline, don't add any additional beading to it. (COCA)

Thus, a hypothetical *red-carpet* evokes the special treatment experienced when the real *red-carpet* is laid out, pushing the metonymy into the realm of metaphor.

6.3.4 Anger

To see red is "to become very angry; to lose self-control" (OED, red, P8). Red can be understood as a metonymic reference to the colour of blood which rushes to the head when one is angry or highly emotional. Yet the overall phrase is metaphorical as vision is only figuratively clouded. There are 21 examples of see red in the BNC and 62 examples in COCA, including:

The mere thought of Piers with Nicole had made her *see red*, and her reaction had made her angrier still. (BNC)

Someone propositioned me, and I saw red. (COCA)

A few examples of this phrase are used as deliberate puns, alongside other colour terms. For example:

Tim Maguire *saw red* - or, rather, black and white - when his secret look at the admissions records of his law school showed that black students were being admitted with lower academic scores and less credentials than white applicants. (COCA)

These "green" ads made the FTC [Federal Trade Commission] see red, and earlier this year it issued guidelines defining such terms as biodegradable and recyclable. (COCA)

In the first example the subject becomes angry about a racial issue, as the colours *black* and *white* are suggested as substitutes for *red*. In the second example, aligning the figurative meanings of the complementary colours RED and GREEN is a rhetorical device aimed at bringing the metaphors to the readers' attention.

6.3.5 Bureaucracy

At one time red or pink ribbon was used to secure legal documents and official papers. The salient colour of the ribbon binding soon after came to stand for "Rigid adherence to official rules and formalities; (excessive) bureaucracy, esp. in public business" and is recorded from 1736 (OED, *red tape*, noun 2), hence its categorisation within S03 "Political office". The first mapping involves the tape of a salient colour (red) metonymically standing for the document it secures, and then the document stands for the bureaucratic process. It may be argued that the motivation for this idiom has been lost and has become opaque.

Red tape is by far the most frequent phrase involving the colour red with a total of 161 examples in the BNC and 795 examples in COCA. Some typical examples include:

Everything official here seems to be tied up in *red tape*. (BNC)

His comprehensive law to cut bureaucratic *red tape* was similarly backed. (BNC)

BETTY-ANN-BOWSER: Walter Leger is an official with the Louisiana Recovery Authority [...]. Leger says one of the stumbling blocks is federal bureaucracy. WALTER-LEGER-Loui: The money that they send is wrapped in *red tape*, and it's got strings that lead back to Washington. (COCA)

I mean, we have *red tape* coming out of our ears. (COCA)

Philip (2003: 183) points out how negative the imagery used with *red tape* in her study on the Bank of English is in contrast to the more neutral term *bureaucracy* which "does not

conjure up the images of bonds and ties that are inherent in "red tape". Some particularly expressive examples from the BNC and COCA include:

The bill is so important because it is the first major attempt by government to slay the *red tape* dragon. (BNC)

They don't want their wounds wrapped in red tape. (COCA)

The intrepid wilderness enthusiast found himself facing a mountain of *red tape* he couldn't climb. (COCA)

Training and assistance programs were offered for those who could keep sane long enough to wind their way through the endless tangled miles of bureaucratic *red tape* that all too often strangled the intended recipients before saving them. (COCA)

A similar overall picture of *red tape* was found in the present study to Philip's analysis of the BoE, where the phrase also appears with a high frequency and alongside an array of verbs. Examples from the BNC and COCA suggest that victims are *enmeshed*, *strangled*, *tied*, *shackled*, *ensnared*, *wrapped*, *drowned*, *stalled*, *eaten by*, *choked*, *snarled* and *tangled* in *red tape*; it is described as stretching on for *yards*, *miles* and *acres* forming *mazes*, *avalanches* and *quagmires*. *Red tape* therefore retains many features of physical tape, though both the *tape* and its effects are metaphorical.

6.3.6 Warning

Warnings are typically associated with *red*. One motivation for this is the fact that red is the most readily perceived of all the hues as it corresponds to the shortest wavelength on the chromatic spectrum. The salience of the colour makes it an effective way to catch people's attention. In addition, the prototypes of red, blood and fire, are linked to emergency situations. One of the most commonplace instances of a red warning is in traffic signals, where a *red light* serves as an instruction to traffic to stop, used first on railway lines. Within the MM category E24 "Adversity" are: a *red light*, *red warning* and *red alert*. A red alert is "an urgent warning of immediate danger; an instruction to prepare for an emergency" (OED, *red*, S2d), making it the most serious stage of warning, after an intermediate *yellow alert. Red alert* is found in high frequencies in the corpora with 40 examples in the BNC and 101 in COCA. These can be official declarations of emergency situations, involving war or public health, for example:

An artillery shell struck here at breakfast time, but by now the base was on *red alert*, its soldiers under cover. (BNC)

Health Minister Alan Milburn put the country's National Health Service, the NHS, on *red alert*. (COCA)

Or more extended uses, such as:

Her heart full of foreboding and with all her motherly instincts on *red alert*, Ashley sprang forward. She needed to get to Thomas. (BNC)

"That incident was a defining moment for me, it was a *red alert*," Krulak said in an interview. (COCA)

In contrast, no examples of *red warning* appear in the BNC and only 4 examples in COCA, for example:

The computer only produced incomprehensible symbols, and when he tried to retrieve its original state it began to issue *red warnings* of total breakdown. (COCA)

In a further 8 examples from the BNC and 29 examples from COCA, *red* and *warning* function as modifiers describing items such as lights, signs, signals and messages, but only one example is a metaphorical use:

Hey, if my girl asked me what I thought of our sex life, *red warning signs* would start flashing in my head and a booming voice in my brain would be shouting, "Do not enter!" (COCA)

In these extended uses, there are no physical lights or signs, only hypothetical ones.

Another example that draws on the eye-catching nature of RED is the use of the red-coloured pencil or pen to edit a document, as it is easily visible against the black text. Philip (2003: 232) found that two meanings of *red-ink* were employed in the BoE, within the contexts of economics and business reporting and describing the red ink used to record debts in banking ledgers. To *red-pencil* something is to mark it as "interesting or noteworthy", or "erroneous and unacceptable" (OED, *red-pencil*, special uses). Only one figurative use of *red-pencil* appears in the BNC in comparison with 41 examples in COCA. For example:

If the teacher had *red-pencilled* her way down this, she would have destroyed the boy's at least partially successful attempt to convey the speed and panic of the experience. (BNC)

Somebody should have taken a *red pencil* to the manuscript. (COCA)

A similar meaning is found for *red-line*, which means to mark, circle or cross-out in red in order to select for critical attention (OED, *red-line*, verb 1a). This meaning has been extended to mean disqualifying or banning, and is used within the context of banking where a loan or insurance is refused or offered at prohibitively high rates (OED, *red-line*, verb 1b and c).

The transition from literal to figurative can be seen in the examples:

They've just rehashed the old plan, and just drawn a *red line* round the bit they want us to look at, erm, this bit. (BNC)

If Duke is elected. Louisiana wouldn't just be *redlined* by business around the world; we'd be X-rated. (COCA)

People who lived in cities, and particularly minorities whose neighborhoods were what was called *red-lined* by the banks, didn't have the option of buying. (COCA)

A *red-line* can also refer to the mark on a dial indicating a safety point of a speedometer or temperature control for instance, and this can be extended to any safety limit, whether there is a formal control or not (OED, *red-line*, verb 2a and b). For example:

A second technique is to ban and punish preachers who receive permission to speak but cross the *red line* by criticizing state policy. (COCA)

This should be the most important *red-line* in all policy. (COCA)

A *red card* is used in football and other sports to send a player off for foul play (OED, *red card*, noun 1) and this meaning can be extended to mean a rejection of a person (OED, *red card*, noun 2). The OED marks the figurative use of the phrase as being chiefly British in use, which is supported by the corpus results as no metaphorical uses were found in COCA. Examples from the BNC include:

They are itching to hold up the *red card* to an establishment that doesn't believe that ex-pros [footballers] have the right pedigree to control top matches [as referees]. (BNC)

More than 1,000 budding footballers gave Dundee District Council the *red card* yesterday over plans to raise the cost of hiring pitches and dressing rooms. (BNC)

In these examples, a figurative *red card* is shown to someone in the wrong as a sign of disapproval. Compared to 71 instances of sporting *red cards* in the BNC, there were only 5 metaphorical *red cards*, which are all deliberate puns. It is worth noting that all metaphorical examples were in the context of sport, which has implications for the nature of domains and while the metaphor may extend further in the future, *red card* as a warning has not yet left the domain of sport.

6.3.7 Relevance

Within F02 "Relevance" is the metaphorical sense of *red herring*: information that is intentionally misleading or distracting from the truth (OED, *red herring*, noun 2). There are 83 examples in the BNC and 264 in COCA, such as:

I'd like to go through them with you to try to sift out the *red herrings* and give due precedence to the important facts. (BNC)

Anyone familiar with the nation's campus culture clashes knows that the call for diversity in education too often really is a *red herring* for a radical agenda. (COCA)

A literal *red herring* is a dried fish that was once used on a trail to exercise horses and the figurative sense derives from the fact that such trails were artificial in contrast to a real hunt with game (OED, *red herring*, etymology). The reddish brown colour that the fish turns in the curing process had no impact on the development of the figurative meaning, unlike many of the metonymically motivated figurative uses discussed here.

6.3.8 Virility

Someone described as *red-blooded* is "vigorous, virile, full of energy and strength" (OED, *red-blooded*, adjective 2). Out of the 35 examples in the BNC and 105 examples in COCA, various nuances of meaning are highlighted. *Red-blooded* can describe masculine characteristics, for example:

'I challenge any *red-blooded* Englishman who really feels. Who has passion. Not to do the same. When love dies, it dies.' Hang on. Was he a *red-blooded* Englishman or a cold-blooded psychopath? Or was he a bit of both? (BNC)

Ask any *red-blooded*, high-octane, adventure-loving male what his dream car is and chances are he will say an Aston Martin DBS Volante. (COCA)

Females are only described as *red-blooded* once in the BNC and twice in COCA. In the second example, *red* is again connected with heat, discussed in 6.3.1, even though these have different motivations. To be *red-blooded* is to have emotions, or a metaphorical warmth, in contrast to being *cold-blooded*.

"Strong heterosexual appetites" are also characteristic of male behaviour, as noted by the OED. This use is evident in the corpus data with almost half of all examples in the BNC (17) and over a fifth of the examples in COCA (22) describing sexual behaviour, such as:

I may be already spoken for, but I'm also a normal, *red-blooded* male. I'm no saint. (BNC)

Any normal, *red-blooded* man would be attracted to her. (COCA)

A few examples emphasise heterosexuality as a feature of a *red-blooded* man:

Neil Kinnock is a *red-blooded*, hard-drinking, fist-swinging family-man. There is no truth whatsoever to any suggestion that he is anything less than lustily heterosexual (and spousally loyal to boot). (BNC)

I do not parade my *red-blooded* heterosexuality to all and sundry, although it's self-evident. (COCA)

In these examples, heterosexuality is equated with "normal" behaviour for men. Another component of being *red-blooded*, as revealed by the corpora, is being proud of their nationality; either as an Englishman in the BNC or an American in COCA. For example:

It's flat out un-Am-ur-ican. What could possibly compel a *red-blooded*, male Baby Boomer to fire up a Singer instead of a Sony? (COCA)

There were three Catholics speaking over in Brooklyn [...] who pointed out how *red-blooded* and 100 percent American they were, how filled with intestinal integrity, and how some scum parasites of Europe had come over here and taken over the country. (COCA)

Along with the first quotation, these examples suggest *red-blooded* indicates patriotism, and in the American corpus this accounts for almost half of all examples (50) of the phrase.

6.3.9 Licentiousness

Red lanterns used to hang in the windows of brothels giving rise to the associations between *red* and prostitution, where the distinctive colour of the lights metonymically stands for the services provided. *Red lamp, red light* and *red lantern* appear in the MM category T07 "Licentiousness", for example:

There I await a beautiful lady in the glimmer of *red lamp light*. (COCA)

He walked rapidly, soon finding himself in an obscene quarter of Paris, [...] an unpaved district whose frozen mud puddles reflected the shine of *red lanterns*. From every doorway, the lewd breath of prostitutes rose like hooks of smoke. (COCA)

In-your-face and offensive, the work that results is typically experimental in form and preoccupied with the *red-light* subjects of sex and violence. (BNC)

In the first two examples the physical *red lamp* and *red lantern* of a brothel are being described, in contrast to the metaphorical use of *red-light* in the last example. *Red-light* is most often realised as part of the fuller phrase *red light district*, which appears in Q02 "Buildings and inhabited places", referring to an area where prostitution is concentrated (OED, *red light*, noun 2). There are 29 examples of *red-light district* in the BNC and 160 in COCA, including:

Prostitutes waiting their turn for treatment at the mobile Aids clinic in Plymouth's *red light district*. (BNC)

Her husband did stop beating Thao, but in place of that treatment began spending whole nights in the *red-light district*, leaving Thao at home by herself. (COCA)

Such places are also referred to as *red-light alleys, areas, quarters* or *zones*, giving an additional 14 examples from BNC and 2 from COCA. For example:

Owen had seen it done during his time in Alexandria, where hysterical prostitutes were quickly restored to life and reason by an experienced old Austrian police officer of the Labban *Red Light quarter*. (BNC)

They go out to these *red-light areas* and they get the virus, and then they come home, you know. So they obviously passed it to their wives. (COCA)

The non-basic term *scarlet* shares the metaphorical connection between RED and LICENTIOUSNESS, discussed in 6.3.1.2; however, the motivations underlying *red* places and *scarlet* people are very different.

6.3.10 Politics

The initial coding procedure revealed that several basic colours appear in S03 "Politics". While these associations are not metaphorical in the traditional sense, they do draw upon extended meanings of the colours in question. Philip (2003: 122) observes that:

Political parties adopt colours, choosing the colour that most aptly expresses their political ideals, and not because of any denotative link between party members and the colours.

In the case of RED, the OED suggests that the hue is used as a reference to the colour of blood, and consequently bloodshed and violence and as such, RED has traditionally been associated with revolutionary, republican and anarchistic politics, and later with communism and socialism, especially relating to the Soviet Union (OED, *red*, adjective 18). Communism is given several appellatives featuring the colour red, including: *Red Army, Red Republic* and *red star*.

A *red republic* is one based on socialist or communist principles (OED, *red republic*, noun), with a *red star* as a symbol (OED, *red star*, special uses). The first example draws out the connection between the use of RED in *Red Republic* and the colour of blood:

Throughout the texts of the series is the repeated use of the "*Red Republic*" and its *sanguinary* associative metaphors as the embodiment of all evil. (COCA)

A surplus military jet painted in camouflage colors [...] and proudly bore the restored *red star* of the Soviet Union on its tail. (COCA)

During the Russian Civil War, the army of the Bolsheviks was called the *Red Army*, a name later used for the army of the Soviet Union or any communist countries (OED, *Red Army*, noun 1a and b). For example:

He has sent the *Red Army* and KGB goon squads into Lithuania. (COCA)

The political or military threat posed by communist organisations or states is called *red peril*, *Red Terror* and *red menace* (OED, *red peril*, special uses; *red menace*, special uses; *Red Terror*, special uses). For instance:

Did you hear about the trouble the big Michelin plantation at Phu Rieng has been having with "red peril" agitators?" (BNC)

The government was accused with pursing a *red terror* campaign, arrest, torture and execution aimed at rooting out dissent. (COCA)

Melman's ideas don't have currency because they're right, but because they are suddenly popular now that the *Red Menace* is kaput. (COCA)

Red menace was also used as a nickname for the footballer Martin Russell and the American football player Warren Sapp, where red metonymically stands for their team's colour. Finally, red-baiting was the harassment of known or suspected communists. For example:

By 1955 the star of Senator Joe McCarthy, the *red baiter*, was waning. (BNC)

Bush had just started peppering Clinton with innuendoes about his trip to Moscow in 1970. It was so antique an exercise in *Red-baiting* that it puzzled Clinton as much as it offended him. (COCA)

Red is also associated with the Labour party in the UK and the Republican party in the US, which is discussed further in contrast to their opposing parties under 6.6.4 and 7.2.5.

6.3.11 Guilt

To be caught *red-handed* means to be caught in the "act of committing a crime or misdeed; that is still bearing the obvious evidence of guilt" (OED, *red-handed*, adjective c). It is a metonymically motivated phrase where *red* stands for the victim's blood on the hands of the perpetrator. Despite its original meaning and use, which is still semantically transparent, Philip (2003: 171) found *red-handed* was never used for violent crimes in the BoE. Only one example in the BNC suggests a crime that could have involved bloodshed, and 2 examples in COCA:

Thus, with the corpse of his dead love for an altar, did Leo Vincey plight his troth to her *red-handed* murderess. (BNC)

"A month later, the cops caught him *redhanded* hacking up the body of his latest victim." (COCA)

In total, there are 52 examples of *red-handed* in the BNC and 147 examples in COCA, including:

Other Hollywood stars caught *red-handed* by Heathrow's ever-vigilant Customs and Excise men include Tony Curtis. (BNC)

Another employee, caught red-handed, confessed to stealing \$30,000 over two years. (COCA)

As a result, Philip (2003: 168) suggests that the phrase has come to be associated with other types of crime such as theft or ownership of illegal drugs or weapons. This corresponds with both the corpora in the present study, where most crimes being committed are non-violent.

6.3.12 Enjoyment

To *paint the town red* means "to enjoy oneself flamboyantly; go on a boisterous or exuberant spree" (OED, *paint* verb¹ P1). Five examples were found in the BNC and 7 examples in COCA, for example:

You want to have a good time and *paint the town red* this weekend. (BNC)

Thanks to Parker's six-year stint as sex columnist Carrie Bradshaw on the hit show Sex and the City, many assume that the actress is, like that character, a flighty, flirty girl who likes to *paint the town red*. (COCA)

As noted in the OED's definition and found by Philip (2003), the phrase can be used with various colours as well as *red*. Examples from the BNC and COCA include: *pink*, *green*, *purple* and *beige*. The example below draws on the figurative use of colour:

She was having to use every ounce of effort to convince Andre that no, she didn't want to *paint the town red*, or *any other colour*, for that matter, and no, she didn't want to have any candlelit dinners with him. (BNC)

A *colourful* night might be described as "lively and spirited" (OED, *colourful*, adjective 3a) and the reluctance to *paint the town red*, *or any other colour* cancels the idea of fun associated with both metaphors. *Paint the town* can be used as a phrase itself with no

colour specified, as found in one example from BNC and 11 examples in COCA. The meaning of excitement was also discussed in 4.2.5.

6.3.13 Debt

Red ink was used to record debts and overdrafts on the debit side of accounts. The phrase, to be *in the red* therefore means to be losing money, whereas to be *out of the red* is to be making a profit. For example:

You will pay interest when you are *in the red*, plus a charge for cheques and an annual service fee. (BNC)

This is coming at a time when so many state budgets are in the red. (COCA)

Rover has officially unveiled a new luxury model which it hopes will help pull the company *out of the red*. (BNC)

Some sellers want to use the sale as an opportunity to get them *out of the red*, either commercially or personally. (COCA)

The use of prepositions *in* and *out* push these metonymies into metaphor, as the phrases no longer refer directly to the banking ledger but to a financial state. *In the black* was discussed in 6.1.2 and describes the state of being profitable, as does being *out of the red* only there is the implication in the latter that this has been achieved after a period of losses. The selection of red ink for this purpose was presumably to make these entries stand out on the page and act as a warning for unpaid debts.

6.3.14 Blindness

Within C01 "Physical sensation" is *red-out*, describing as "a temporary red vision (erythropsia), or obscuring of vision as if by a red curtain [...] experienced when a person is subjected to high negative g-forces, [...] and attributed to congestion of blood in the head" (OED, *red-out*, noun 1). No examples of *red-out* were found in the corpora, though a similar meaning is found once in COCA:

He kept going until his throat closed, he *saw red*, and in the ice of the air his lungs shut. (COCA)

This particular example describes someone losing consciousness after physically exerting himself. This use has corresponding phrases drawing on different colours: *blackout*, *whiteout*, *greyout* and *red-out*, which all link loss of vision and memory to colours. Whereas blood drains away from the brain during *blackout*, *whiteout* and *greyout*, blood rushes towards the brain during *red-out*.

6.4 Yellow

The associations with *yellow* are overwhelmingly negative, as has been observed by Allan (2009: 630), and none was found to draw upon the prototypes of yellow: the sun or ripe crops. Results from the HT and corpora are displayed in Table 6.4.

Table 6.4 Figurative meanings of yellow in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Age	foryellow	c1220	Y
	yellow beak	1865-1868	Y
	yellow neb	1899	N
Jealousy	yellow hammer	1602-1634	N
	wear yellow hose	1607-c1680*	N
	wear yellow breeches	1623	N
Low Rank	yellow dog	1881 ³ -	Y
	yellow union	1947-	Y
Sensationalism	yellow press	1898-	Y
	yellow journalism	1898-	Y
Warning	yellow peril	1900-	Y
	yellow warning	1963-	Y
	yellow alert	1968-	Y
	yellow light	19934-	Y
	yellow card	1996-	Y
Cowardice	yellow streak	1911-	Y
	yellow belly	1930-	Y

³ The first attested date for the figurative sense of *yellow dog* in the OED is 1881, but this is antedated to 1876 in *Green's Dictionary of Slang*.

⁴ No date for figurative sense is given in the OED. The earliest date for a metaphorical sense in the corpora is 1993.

6.4.1 Age

A *yellow beak* and *yellow neb* are both names for a *bejan*, a freshman at Scottish universities, where the term was adopted from the University of Paris (OED, *bejan*, noun). Only one example in COCA is of a metaphorical use:

Perhaps he heard it from some over-smart *yellow-beak*, and he thought to impress you the other night. (COCA)

This meaning overlaps with the more traditional association between *green* and youth and inexperience. At the other end of the scale, the obsolete verb *foryellow* means to fade and lose freshness (OED, *foryellow*, verb).

6.4.2 Jealousy

According to the OED, the traditional colour associated with jealousy in English was *yellow* (*green*, adjective 3), and so it remains for most of continental Europe (Philip 2006: 82). Possibly due to Shakespeare's allusion to the "*green-eyed* monster", *green* has succeeded *yellow* as the preferred colour reference for jealousy in English.

Yellowhammer appears in numerous MM categories. Within the I12 "Jealousy" category is a metaphorical use of the term, as a *yellowhammer* can refer to a contemptible person, particularly a jealous husband. This use was first recorded in 1602 but is marked as obsolete in the OED, with the latest citation from 1634, and so unsurprisingly no examples were found in either corpus. The phrase was only found in the corpora in reference to the name of a bird or variety of flower. The phrases *to wear yellow breeches/hose* also alluded to jealousy. None of the phrases involving yellow for jealousy was found in either corpus.

6.4.3 Low Rank

The OED defines a *yellow dog* as a mongrel and by extension it is applied to "a person or thing of no account or of a low type" (OED, *yellow dog*, noun 1 and 2a). Most references to a *yellow dog* in the corpora are simply descriptive of the colour of the dog's coat and not specifically to a mongrel. There are, however, two examples in COCA that use *yellow dog* to describe someone with low status:

"Are you saying she's not a lady?" "Son, she's common as a *yellow dog*." (COCA)

We kept exchanging insults in the manner of the books we'd been reading - calling each other *yellow dogs* and craven coyotes and names like that. (COCA)

An extension of *yellow dog* is its application to organisations who oppose trade unionism, first recorded in 1894 (OED, *yellow dog*, noun 2b). The connection with trade unions is also expressed by the colour term *yellow* alone, first recorded in 1913 and *yellow union*, first recorded in 1947. According to the OED, the last phrase *yellow union* is a translation of the French *syndicat jaune* (*yellow union*, C1e). However, this phrase is recorded the latest out of the three, suggesting the French term perhaps reinforced the existing connection with the colour yellow. Examples from the corpora include:

The book [...] attracted the attention of a number of film makers, who tried to wrest the rights from the author. "Dad was in part fascinated," his daughter says, "but he wanted some control over the film, and people kept sending him what he called a *yellow dog* contract." (COCA)

It was only in 1910 that "*yellow*" *union* members were prohibited from holding office in the Catholic Workingmen's Associations, and in principal workers who belonged to the *yellow unions* were no longer admitted to the association. (COCA)

This meaning of *yellow* is not frequently used as only one citation of *yellow union* was found in BNC and 3 citations found in COCA are all from the same source. The only example of *yellow dog* relating to trade unions describes a *yellow dog contract*, by the terms of which an employee agrees not to be a member of a union.

A draft addition of *yellow dog* in the OED, from March 2013, adds another specific use of the metaphor. Within politics, a Democrat described as a *yellow-dog* is one who will vote for the party regardless of who the individual candidate is, for example:

Richardson, a close family friend and a self-described "*yellow-dog*" Democrat, worked on the 1992 Clinton campaign. (COCA)

And there is one *Blue Dog* who says they are *Yellow Dogs* choked *blue* by the extremes of their leadership. (COCA)

The connection with politics is far more common than the general metaphorical use of *yellow dog*, with 31 examples in COCA. As it is a culturally specific use, there are no instances in BNC. In the second example, the metaphor *blue dog* is also used. Apparently

named by analogy with *yellow dog*, a *blue dog* is a conservative Democrat (OED, *Blue Dog*, noun).

6.4.4 Sensationalism

In W12 "Journalism", *yellow* suggests a style which is "recklessly or unscrupulously sensational" (OED, *yellow*, adjective 3). A number of explanations for the motivation of yellow have been put forward. Allan (2009: 630) suggests the use of cheap paper which yellows quickly with age may be responsible, whereas Philip (2006: 84) claims that the *yellow press*, along with the equivalent *red tops*, owe their names to the colour of the masthead on the front page. According to the OED, the link with yellow arose when a character's dress from a cartoon featured in the *New York World* was printed in colour to attract purchasers. Examples of *yellow press* include:

Dr Colin Blakemore, [...] known as 'Dr Frankenstein' to the *yellow press* for having experimented on animals' eyes. (BNC)

Let history record that Verse, the magazine, was started with the loot of a few of us entrepreneurs- capitalist thugs as the *yellow press* fondly called us-and the blessings of the madams of a ritzy brothel. (COCA)

Despite Philip's claim that *yellow press* is "virtually obsolete" (2006: 83), 3 citations appear in BNC and 14 citations appear in COCA. Furthermore, there are 3 examples of *yellow journalist* in COCA, and 52 examples of *yellow journalism*, for example:

What kind of muckraking yellow journalist are you!? (COCA)

We've seen similar cases of *yellow journalism* here done by Murdoch's, you know, affiliates and subsidiaries. (COCA)

Steinvall (2002: 205-206) suggests that, despite the original motivation being lost, and that it can be misconstrued as seen above, *yellow press* and *yellow journalism* have survived because of the other derogatory associations with the colour yellow. In cases where the original motivation has been lost, Steinvall describes the adoption of a new sense as being a "remotivation" (ibid.: 206). In light of the evidence presented in this chapter, the negative associations could have contributed to the continuance of *yellow press* and *yellow journalism*.

6.4.5 Warning

Yellow warnings and yellow alerts serve as instructions to be prepared for an emergency (OED, yellow alert, C1e). In the corpora, yellow and warning function as modifiers of signs, lights, beacons and tape, representing the symbolic use of yellow in warnings. There are only 2 metaphorical examples of yellow warning in BNC and none in COCA.

The National Rivers Authority has issued a *yellow warning* -- that means there is some danger of flooding here. (BNC)

Yellow alerts are more frequently metaphorical, with 5 examples in BNC and 9 examples in COCA, including:

In many areas hospitals have declared themselves on 'Yellow Alert'. (BNC)

The governors of Morelos and the state of Mexico interpreted it as a *yellow alert*, or a threat that merited initial preparations. (COCA)

A *yellow light* is a "cautionary light" in traffic signals and is also marked as being figurative. Twelve figurative examples of *yellow light* were found in COCA, but none in the BNC. For example:

Despite the flashing *yellow light* from the budget office, Congress pushed ahead Thursday. (COCA)

The more common collocation for traffic light colours is an *amber light* (see Section 7.6.7).

The sense of *yellow* meaning warning has extended into the world of football, where a *yellow card* is shown to a player by the referee as a caution (OED, *yellow*, C1e). Within the same sporting context is a *red card*, which results in a player being sent off the field for foul play (*red card*, noun 1) (see Section 6.3.6). The OED's definition of *red card* marks the phrase as being in extended use, usually in reference to the rejection of a person, such as in the phrase *to show someone the red card* (*red card*, noun 2). All citations of *yellow card* in COCA and the vast majority of citations in BNC refer to instances of the *yellow card* being shown during a football match, although 2 examples suggest an extension of the metaphor:

Yellow card: The Takeover Panel has rapped Michael Knighton on the knuckles for pulling out of his 20m bid for Manchester United. (BNC)

'Yellow card' for Tories over ticket touts law By David Rose Political Editor A NEW row erupted around the Government last night after it signalled it would go slow on new laws to outlaw ticket touts.

Both of these examples come from headlines from sporting news on the takeover of a football club or the ticket tout laws for football games. The phrase *yellow card* is clearly understood within football and so offers the right context in which to extend the metaphor. These examples represent the initial stage of this process, as *yellow card* is used to mean an individual or group who has been given into trouble, in a similar fashion to the extended use of *red card*. Other examples of *yellow card* in the corpora include a type of residency permit and, in BNC only, a report on adverse drug reactions. Both are metonymies named after the colour of the card they are printed on.

Yellow peril draws on a different use of yellow. Yellow can refer to people with a yellowish complexion, most often in a derogatory manner to Asiatic people, but also in America to people of mixed black and white race (OED, yellow, adjective 1d). Along with similar uses of black, white and red, yellow too can function as a type modifier to classify groups of people according to their race (Steinvall 2002: 126). Despite being such a recent development of a colour term being used in such a way, yellow has given rise to a metonymic extension in yellow peril, where the colour term stands for people of Asian ethnicity and overall referring to the supposed danger they pose to the rest of the world. Examples from the corpora include:

Wilson denied strongly that the reason for the campaign against the "Yellow Peril" was that seamen had little else to complain about. (BNC)

The forced immigration of slaves is also there, and the "yellow peril" exclusionary laws against the Chinese. (COCA)

A large number of the citations surround *yellow peril* with inverted commas (4 out of 10 in BNC and 26 out of 40 in COCA), perhaps to distance the author or speaker from the stigma over using such a loaded and derogatory phrase.

6.4.6 Cowardice

The shift in meaning of jealousy from *yellow* to *green* has allowed new meanings to be assigned to *yellow*, including cowardice (Philip 2006: 82). I16 "Fear" contains several references to the colour *yellow* most likely through a metonymic connection with the liver. This mapping invokes reference to the liver as the seat of courage as a weakened liver causes jaundice and turns the skin and eyes yellow. The *Bloomsbury Dictionary of Contemporary Slang* (1991) claims that this meaning of yellow is of obscure origin, whereas *A Concise Dictionary of Slang and Unconventional English* (1989) attributes it to journalists employed in the *yellow press*, discussed at 6.4.4. The first recorded use of the colour term in the sense of "craven, cowardly" was in 1856 and the OED marks this as originally being an American use. To have a *yellow-streak* is to have a trait of cowardice (OED, *yellow*, C1e). Only a few citations of this phrase were found in the corpora; 2 in BNC and 3 in COCA. For example:

Jock Lewes had a word with us. He told us we'd got a *yellow streak* a yard wide down our backs. (BNC)

Mussolini dared not admit his *yellow streak* about heights without risking ridicule and injury to his superman image, yet the prospect of orating from his one-man skybox high above the earth left him weak in the knees. (COCA)

The colour term is also used in the phrase *yellow-bellied*, first recorded in 1924. *Yellow-belly* and variants were found 4 times in BNC and 18 times in COCA, for example:

If Lewis wants to wear the WBC crown with pride, he must set himself aside from Riddick Bowe's *yellow-bellied* tactics. Bowe was stripped of his title for refusing to meet Lewis in the ring. (BNC)

What are you doing?! ATTACK!! (berating his army) Come on, you *yellow-bellies*! (turning on Carpenter) Don't just stand there, Carpenter! Make an example of yourself! (COCA)

This phrase is an example of how the English have shifted the focus from the liver to the gut as the part of the body which drives you to do something, in contrast to much of Europe (Philip 2006: 82). Another example from COCA brings in another body part:

Among his many secret and interchangeable selves lurked a *yellow-bellied* chicken heart. (COCA)

This example has two allusions to cowardice: *yellow-bellied* and *chicken heart*. To have a *chicken-heart* is to say they are "a timorous, cowardly person" (OED, *chicken-heart*, noun b). The fact that *yellow bellied* modifies *chicken heart* is perhaps unimportant because the motivation for the belly, or the original liver, as the seat of courage is no longer widely known.

6.5 Green

A number of figurative phrases are found for GREEN and the majority of these derive from the colour of vegetation. This prototype leads to meanings of INEXPERIENCE, ENVIRONMENTALISM and POLITICS. Other extensions in meaning are based on metonymy, such as a green light indicating PERMISSION. Table 6.5 outlines the figurative meanings of *green*.

Table 6.5 Figurative meanings of green in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Inexperience	give a woman a green	1509-	N
	gown		
	green-headed	1569-1736	N
	greenhorn	1650-	Y
	greenhornism	1831-	N
	green goose	c1595 ⁵ -	Y
	see something green in	1838-	N
	one's eye		
Jealousy	green-eyed	1600-	N
	green with envy	1863-	Y
Youth	green old age	1634-	Y
Money	greenback	1862-	Y
	Greenback Party	1863-	Y
	green goods	1887-	N
	long green	1896-	N
	greenmail	1983-	Y

⁵ The first attestation of the figurative sense of *green goose* in the OED is from 1768, but *Green's Dictionary of Slang* cites an example from Shakespeare's *Love's Labour's Lost* from c1595.

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Environmentalism	green gold	1911-	Y
	green pound	1974-	Y
	green marketing	1988-	Y
	ungreen	1988-	Y
	green audit	1989-	Y
Signal	green cross	1916-	N
	green light	1937*-	Y
	green man	1968-	Y
	Green Cross code	1971-	Y
Politics	Greenpeace	1971-	Y
	Green Party	1977-	Y
	green activist	1982-	Y

6.5.1 Inexperience

To give a woman a green gown is a euphemism for taking a woman's virginity, and alludes to a stained dress obtained rolling around on the grass (OED, green gown, noun). This phrase is recorded from 1509 but no examples were found in BNC or COCA. It appears in T07 "Licentiousness" category, yet could be more accurately described as profiling the loss of innocence and nature.

New growth is the motivation for inexperience. The metaphorical connection lies between new growth and inexperience, and GREEN serves as a metonymy for plants. To *green* someone is slang for making them "appear simple or gullible" or to "hoax, take in, swindle" (OED, *green*, verb¹). Diminutives are used to describe an inexperienced or naïve person. For example, a *greeny* (OED, *greeny*, noun 3) or *greene* are often foreigners who have recently arrived in a country (OED, *greener*, noun 2). *Greenness* refers to a person's inexperience along with their naivety and gullibility (OED, *greenness*, noun 4a). Coleman (2012) cites *green* to mean gullible, although this is now old fashioned.

The phrase *greenhorn* appears in several MM categories: E29 "Ability", H17 "Foolish person", H21 "Lack of knowledge", R02 "Military forces", U01 "Education" and Y03 "Workers and workplaces". According to the OED, *greenhorn* was initially used to refer to a recently enlisted soldier in 1650 (*greenhorn*, noun 1), reflecting its place in the R02 "Military forces" category. The meaning widened to include any inexperienced person, though often in reference to a novice in a trade or a recent immigrant (OED, *greenhorn*,

noun 2). Only 3 citations of *greenhorn* were found in BNC, compared to 128 citations in COCA. Examples include:

We were totally inexperienced -- greenhorns -- as far as this sort of experience went. (BNC)

And your father won't even pay the wages the best summer help ask. So every year I have stupid, lazy *greenhorns* to deal with. (COCA)

Many of the examples in COCA, such as the one above, use the term *greenhorn* in a pejorative manner. A *greenhornism* refers to the character or condition of a *greenhorn* (OED, *greenhorn*, derivatives). No examples were found in the corpora.

A simpleton may be called a *green goose* (OED, *green goose*, noun 2). A single example from COCA dates from 1991, showing that although this is a rare use it is still current:

Honestly, Mama, he takes you in like a green goose, over and over again. (COCA)

Someone who is *green-headed* is raw and inexperienced (OED, *green-headed*, adjective 1) and to *see something green in one's eye* is to detect signs of gullibility in a person (OED, *green*, P4a). No examples of either phrase were found.

6.5.2 Jealousy

Within I12 "Jealousy" is the phrase *green-eyed*, which was first recorded in 1600 in Shakespeare's *Merchant of Venice*, describing someone who is jealous (OED, *green-eyed*, adjective 2a). No metaphorical uses of *green eyed* were found in either corpus, only literal descriptions of eye colour. A related phrase is *green with envy*, which appears 12 times in the BNC and 63 times in COCA, for example:

Felton declines to comment on the cost of producing a magazine lavish enough to make many editors *green with envy*. (BNC)

The pensions these guys have will make you green with envy. (COCA)

One example from BNC alludes to the use of *green eyed*, by describing a person's eyes as turning *green with envy*, rather than describing their general complexion:

It's what you were born for -- to make men's heads turn and women's eyes grow *green with envy* for all that you have that they can never hope to achieve. (BNC)

When *green* describes a pale, sickly complexion with a greenish tinge it can indicate a range of emotions including: envy, fear or sickness (OED, *green*, adjective 3). Out of the examples of *green with envy*, colour term variation was found in one example in BNC and 4 examples in COCA, where a non-basic colour term was compounded with *green*:

In Rhodes he had seen a lot of her, right up to her thigh, and Nicholas was right: he was *peagreen with envy*. (BNC)

With help from their new friends, those plants get fertilizer out of thin air. It's enough to turn a person soybean-green with envy. (COCA)

Frankel had been *snot-green with envy* since learning that Dave had access to the supercomputer at the AL lab. (COCA)

His was a tall, athletic figure, dressed with unobtrusive elegance [...] his cravat was tied with an artistry calculated to turn any aspirant to fashion *pea-green with envy*. (COCA)

My parents outdid them all. Somehow, I still don't know how, they wangled me a one-year appointment as aide to Magnell Sutherlan, Convocant from New Ararat to the Supreme Convocation of the UnEthHu. My friends were all *kelly-green with envy*. (COCA)

Philip (2011: 175) calls this colour word expansion, which she defines as "an extension of the colour word by pre- or most-modification in order to specify the precise hue, shade, or saturation of the colour indicated". The variations found in her sample also included *peagreen* along with *emerald*, which she suggests makes reference to the focal point of the colour category thus lending emphatic weight to the meaning. The choice of *snot-green* and *kelly-green* cannot have been made for the same reason as they are not a prototypical shade of green, and the context does not clarify the motivation either. The relevance of the shade *soybean-green* is found from the context as the text discusses plants (including soybeans), fertilizers and green energy. In another example, *green* is substituted by another hue altogether:

Jeff Moore of Kinston was one of the lucky ones. He caught not one, but two bluefish, leaving his friend Randy Amerson of New Bern, well, *blue with envy*. (COCA)

Blue with envy is understandable as it recalls the more typical green with envy, but replaces the colour term with one which is relevant to the context, in this case the blue colour of the fish.

6.5.3 Youth

Similar to 6.5.2, youth is connected to *green* through the hue of vegetation and unripe plants. Many of these phrases are defined using the word *raw*, which brings to mind notions of freshness and innocence. *Green old age* is "full of vitality" (OED, *green*, P2) and just one example was found in COCA:

She is one of those rare people who buck up the rest of the human family by their exhilarating examples of *green old age*. (COCA)

Something that is metaphorically *greenly* is fresh, vigorous and youthful, through allusion to growing vegetation (OED, *greenly*, adverb 4). Via a similar link with green vegetation, something metaphorically *greeny* is said to be vigorous (OED, *greeny*, adjective 1).

6.5.4 Money

A monetary note not backed by either gold or silver is called a *greenback* and was issued by the United States during and after the civil war (OED, *greenback*, noun 3). First recorded in 1862, *greenbacks* earned their name from the distinctive green colour of the printed dollar bill. This specific meaning is marked as historical by the OED, but it states that in later use *greenback* was used to refer more generally to a dollar note or money in general. Only 9 citations of *greenback* were found in BNC compared to 206 citations in COCA, for example:

As incentive to confess, Bey pulled a role of *greenbacks* from his pocket and began to peel off 20s. (COCA)

This means better overseas profits for U.S. companies when they're translated into *greenbacks*. (COCA)

The discrepancy in how well represented *greenback* is in each corpus reflects the term's cultural relevance in the US. However, one citation in BNC uses *greenback* to mean money in Britain, rather than American dollars:

If the Government wanted to have an effective environmental policy, it would have to put up the money. 'It would be nice to know where the *greenbacks* are that will fulfil the Government's promises,' he said. (BNC)

Though it may be possible that the meaning of *greenback* could be extending to mean money of any currency, rather than specifically American dollars, from the wider context, an alternative suggestion may be made for the use of the term. The text discusses environmental issues and so the term may have been used to draw a parallel with this metaphorical sense of green. Another example of *greenback* from COCA also draws on an additional metaphorical meaning of green:

The mighty *greenback* looking green at the gills and the euro laughing all the way to the bank. (COCA)

Here, *greenback* is personified and the phrase *looking green around the gills* is used to suggest that the American dollars are nauseous at the strength of the euro.

The use of *green* is also found in other phrases originating from the United States. The term *greenback* leant itself to the name of an American political party, the *Greenback party*, who "opposed the shift back to gold-based currency and advocated the governmental control of the monetary system, with *greenbacks* as the sole currency" (OED, *greenback*, C2). Counterfeit *greenbacks* are called *green goods*, first recorded in 1887 (OED, *green*, S4) and dollar notes or money is also referred to in America as *long green* (OED, *long*, S5). The only *green goods* found in the corpora refer to environmentally friendly products. Finally, *green*, in both singular and plural, may be used to mean money in American slang.

Greenmail alludes to the "practice of buying enough shares in a company to threaten a takeover, forcing the owners to buy them back at a higher rate in order to retain control" (OED, greenmail, noun). First recorded in 1983, the term originated in America and was only found in COCA a total of 29 times, for example:

When friendly buyouts didn't work, Hurwitz engaged in greenmail. (COCA)

Others paid "*greenmail*" repurchasing shares at a premium to buy off a hostile takeover. (COCA)

Greenmail could be described as a specific type of *blackmail*, which is used in the corporate world. The term draws on the more common expression *blackmail*, a pattern

found with *whitemail* and *greymail*. However, the motivation behind *green* and the other terms are very different as the colour green alludes to the term *greenback*.

6.5.5 Environmentalism

A number of metaphorical connections with GREEN derive metonymically from the colour of plants and foliage. The meaning of environmentally friendly has emerged fairly recently and is one of the senses of *green* discussed by Warth-Szczyglowska (2014) in a corpus study. *Green gold* refers to any plant or plant-based product which has a high market value (OED, *green*, S4). For example:

Newman objects when enthusiasts call a rainforest *green gold* in honor of its potential for valuable pharmaceuticals. (COCA)

The *green pound* is a British phrase for the exchange rate for the pound applied to payments made for agricultural produce made under the Common Agricultural Policy of the European Union and its predecessors. On the introduction of the European Monetary Union in 1999, the green pound, and other similar green currencies were abolished (OED, *green*, S4). As predicted, no examples of *green pound* were found in COCA, but 10 examples were found in the BNC, for example:

In the United Kingdom, a devaluation of the "*green pound*" (helped by recent falls in the value of sterling) was expected to result in price rises of up to 11 per cent. (BNC)

Marketing which is "based on the (supposedly) environmentally beneficial qualities of a product, company, etc." is called *green marketing* (OED, *green*, S4e). This phrase was only found in COCA, a total of 50 times, such as:

We can't predict the course of *green marketing*. It may turn out to be a fad. (COCA)

Green marketing must satisfy two objectives: improved environmental quality and customer satisfaction. (COCA)

The word *green* is used as a synonym for *environmental* in the phrase *green audit*; an assessment of a business or organisation's efforts to minimise their impact on the environment (OED, *environmental*, special uses). Seven examples of *green audit* appear in BNC and 2 in COCA, for example:

It aims to co-ordinate best practice in areas such as *green audits*, packaging and waste minimization, water quality and alternatives to animal testing. (BNC)

It tells kids how to conduct a "Green audit" at home. (COCA)

If something is *ungreen* it is "harmful to the environment; not ecologically or environmentally acceptable" (OED, *ungreen*, adjective 2). Only 4 examples of *ungreen* were found in the BNC and one in COCA. For example:

The supermarket may hand out pretty green-and-white leaflets boasting its environmental concerns. But don't be fooled. The owners' real agenda is to boost the profits they get from customers, *green* and *ungreen*. (BNC)

It actually takes more fossil fuels and energy to create enough ethanol to displace a gallon of gasoline than the gasoline itself would have created. So it's environmentally *ungreen*. (COCA)

The examples in this section show that *green* is used to mean environmentally friendly. Coleman (2012) also cites *greenie* as a name for an environmentalist from 1973.

6.5.6 Signal

A green coloured signal, such as a light or flag, etc. is used to give permission to proceed (OED, *green light*, noun). Perhaps the most common use of such a signal is in traffic lights where green indicates 'go' and contrasts with the visually salient red meaning 'stop', and the intermediate colour amber meaning 'proceed with caution'. The OED notes that in earlier railway signals, green was used to signal 'proceed with caution' and white to mean 'go' (OED, *green light*, noun).

A green signal is often used metaphorically, such as in the phrase *to give the green light* and its variants (OED, *green*, adjective 4a). Examples in the corpora include:

'She should get the *green light* to go home.' She said doctors were pleased with Laura's progress, and it was thought she would be able to lead a normal life. (BNC)

Clinton said, "No timetable. We can't do that. That would give a *green light* to the terrorists." (COCA)

In these examples, *green light* can mean to give permission or approval to go ahead with something.

Connected to this meaning are the phrases: the *Green Cross Code*, a set of guidelines, intended for children, for crossing the road safely (OED, *green*, S4a) and the *green man*, a symbol of a walking man which indicates it is safe to cross at a pedestrian crossing (OED, *green man*, noun 4). For example:

PRACTISE the *Green Cross Code* and teach it to children. (BNC)

A bloody, a bloody car came through on red! The *green man* was flashing (pause) and we were crossing it. (BNC)

There she presses the button and waits while others simply cross. Only when the *green man* appears does she step out. (COCA)

In contrast to the predominant use of green as a colour indicating permission or safety, one use of green is more suggestive of a warning signal found in R03 "Weapons and armour". A *green cross* indicates an artillery shell, marked with a green cross, which releases poisonous gases and was used during the First World War (OED, *green*, S4a). No examples of this use were found in the corpora. However, *green cross* was found with the meaning of a symbol that indicates whether a product is environmentally friendly, revealing how strongly the sense of ecology is emerging.

6.5.7 Politics

Environmentalism as a political issue is also represented by the colour green. According to the OED, the colour green first came to be associated with environmental issues in politics in the early 1970s in West Germany, most notably *Grüne Aktion Zukunft* (Green Campaign for the Future) and the *grüne Listen* (green lists) of election candidates (OED, *green*, adjective 13a). One sense of the phrase *greening* is defined as a "rejuvenation or renewal, esp. after a period of stagnation or decay" (OED, *greening*, noun¹ 4). This meaning originates from the US and, according to the OED, was used in the context of political and social liberalism in its early days.

Various environmentalist political parties can be called *Green Party*, and the Green Party in the UK was founded in 1973 as the Ecology Party, changing its name in 1985 (OED, *Green Party*, special uses). A *green activist* is one who campaigns for the environment. There are 6 examples in the BNC and 12 in COCA. For example:

Green activists made some chilling discoveries when they went looking for environmentally friendly fridges. (BNC)

Bowen had failed to modernize its plant to reduce sulphur dioxide emissions, the *green activists* said. (COCA)

One citation of *ungreen* refers specifically to someone's political stance:

Mrs Thatcher had established her environmentalist credentials in several speeches and had replaced the *true-blue* but *ungreen* Nicholas Ridley with the practically *viridescent* Chris Patten as Environment Secretary. (BNC)

This example describes how the Environmental Secretary position was handed from a staunch Conservative (*true blue*, see Section 6.6.4) who was anti-environmental issues (*ungreen*) to a candidate highly in favour of them (practically *viridescent*).

The international organisation *Greenpeace*, which campaigns for the conservation of the environment and protection of endangered species, adopted the name from a ship used in an anti-nuclear protest (OED, *Greenpeace*, noun). The use of *green* in the organisation's name identifies itself with the protection of the environment and living things.

6.6 Blue

The last primary BCC is BLUE and the HT data reveal several figurative meanings in English. As Niemeier (2007) and Verspoor and de Bie-Kerékjártó (2006) have observed before, this study shows how many contradictory meanings can be assigned to just one hue; from the puritanical *blue stockings* and *blue noses* to the immoral *blue movie* and *blue language*. Table 6.6 displays the figurative meanings found in the present study, which include: MELANCHOLY, IMMORALITY, FAITHFULNESS, SURPRISE and OPTIMISM.

Table 6.6 Figurative meanings of *blue* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Melancholy	blue	a1450–	Y
	blues	1741–	Y
	blue devil	1756–	Y
	Blue Monday	1790–	0

Damage	black and blue	1568-	Y
Morality and	to burn blue	1597–	N
Immorality			
	blue law	1755–	Y
	blue-nosed	1844	Y
	turn/make the air blue	1867–	Y
	blue language	1896*-	Y
	blue streak	1947–	Y
	blue movie	1939–	Y
Faithfulness	true blue	?1636–	Y
	Prussian blue	1778–1858	N
Intellectual	bluestocking	1757–	Y
Award	blue ribbon	1770–	Y
Distance	into the blue	1786–	Y
Anger	blue in the face	1792–	Y
Aristocracy	blue blood	1811–	Y
Surprise	blue murder	1828–	Y
	bolt from/out of the	1837–	Y
	blue		
Censure	blue pencil	1845–	Y
Value	blue chip	1874–	Y
Optimism	blue-sky	1895–	Y
	blue-sky research	1959–	Y
Innocence	blue-eyed	1908-	Y
Working Class	blue collar	1929-	Y
Old age	blue rinse	1955–	Y

6.6.1 Melancholy

One of the earliest metaphorical uses of *blue*, which is still well established today, is its application to people feeling "depressed, low-spirited, sad, sorrowful; dismayed, downcast; (of a state or feeling) miserable, melancholy, dejected" (OED, *blue*, adjective 4a). A possible motivation for this sense relates back to the bluish tint skin turns when deprived of oxygen, discussed above (OED, *blue*, etymology). The OED notes that in early use *to look blue* was preferred, whereas now it is more frequent *to feel blue*. This is consistent with the

corpus data, as there were no examples of *look blue* in the BNC or COCA. To *feel blue* appears only twice in the BNC and 69 times in COCA, for example:

Is it just one a them days when you want a look out the winder and feel blue? (COCA)

Judy Downie talked to her family doctor about *feeling blue* during the early months of her son's life. (COCA)

Blue is pluralized into the blues from the middle of the eighteenth century, and the sense is categorized in I06 "Emotional suffering". The OED notes this usually occurs preceded by the, or another element, such as baby blues or new town blues. Examples from the corpora include:

She closed her eyes and concentrated for a second, shaking *the blues* from her thoughts. (BNC)

But what we do know is that women with a history of depression are more likely to develop this problem and we know that PPD is real. This isn't the so-called '*baby blues*' that women can just shake off in a couple of weeks. (COCA)

This sense of the *blues* began to be used in the titles of melancholic songs "leading to the adoption of the word as the name of the musical genre" (OED, *blues*, noun 2a). However, Allan (2009: 634) claims that Billie Holliday is on record referring to the "happy blues", and points out that many *blues* songs contain lyrics that are "strongly suggestive if not obscene". He suggests that an alternative interpretation of the *blues* may be via the sense of indecency or profanity, discussed in 6.6.3.

Depression is personified in *blue devils*, who are harmful demons that cause melancholy (OED, *blue devil*, noun 1 and 2a). Only one example was found in the BNC and 7 in COCA. For example:

He confides to his journal, 'I am so pursued by blue devils.' (COCA)

The *blue devils* can also refer to a hallucination experienced by a drunk person (OED, *blue devil*, noun 2b), with the *devils* being metaphorical and *blue* metonymic. According to Gierón-Czepczor (2011: 200), *blue* implies both the physical and emotional abnormality of a drunken person, with blue or blurred vision a characteristic of alcohol abuse along with the feeling of sadness. A drunken hallucination can also be called a *pink elephant* in English.

Several motivations for the original meaning of *Blue Monday* have been suggested. A *Blue Monday* was a day when people chose not to work, especially for a celebration or because they had overly indulged over the weekend (OED, *Blue Monday*, noun). Originally found in German, *blauer Montag* was used as a synonym to refer to the earlier *guter Montag* "good Monday". In German, *blau* is polysemous, meaning both the hue term and to be "drunk", and so may refer to the day of recuperation after an excess of alcohol the day before.

It has been argued that *blauer Montag* referred to a day of celebration before moving to the more specific meaning of the Monday before Lent (Tubach 1959: 332), a sense still current in languages other than English (Verspoor and de Bie-Kerékjártó 2006: 93). If the above order of development is correct, an alternative explanation is that it derives from the accepted custom in the fourteenth and fifteenth centuries to wear blue clothing on Sundays and holidays, and if Mondays were set aside as a day of celebration, people would have continued to wear their blue clothing (Tubach 1959: 332). This contrasts with the common interpretation of *blue* as a liturgical colour through the later connection with Lent.

Corpus results reveal that the current use of *blue Monday* has acquired the metaphorical sense of "melancholy" and "depression", which is not recorded in the OED. There are 7 examples in COCA in this sense. For example:

Each *blue Monday*, though it seems more often, I get a dispatch from an agency of my denomination informing me of the terrible things that have happened in the past week. (COCA)

"Blue Monday" lives up to its billing. Suicides are 10 percent higher on Monday than the weekly average. (COCA)

There is also one example in each of the BNC and COCA of *Monday blues*. Also, in reference to the stock market is the *Blue Monday* hypothesis that claims negative mood changes on a Monday cause investors to take fewer high risks.

6.6.2 Damage

The phrase *black and blue* was discussed in Section 6.1.4, where it was shown how the meaning has extended from a physical injury to an emotional one. A few examples draw on additional metaphorical senses of *blue*. For example:

Yeah, I was arguing *black and blue*, and I was the only one, sort of saying, oh no I don't think that's right. (BNC)

Here there may be interference from the phrase *blue in the face*, which is often used in reference to a heated argument (see Section 6.6.8). Other examples include:

They swear *black and blue*, they charge you for that meter as well! I'm being charged for two meters. (BNC)

For saying such heathen things to her innocent children, Mary cussed me for an idle worshipper, cussed her poor old husband *black and blue*. (COCA)

These examples may draw on *blue*'s metaphorical meaning of bad language (for example, *blue language*, *blue streak*). The last example again suggests that verbal abuse results in an injury that is likened to a bruise.

6.6.3 Morality and Immorality

Several *blue* phrases relate to immorality, but one describes a person who is overly concerned with moral standards: a *bluenose*. This was originally a derogatory name for a Presbyterian before being extended to include any "excessively moralistic person" who is "priggish or puritanical" (OED, *blue-nosed*, adjective 2 and *bluenose*, noun 3b). There is one example in the BNC and 21 examples in COCA. For example:

The show was called The Mary Whitehouse Experience (which I later learned was in honour of the *blue-nose* lady who's always sounding off about too much sex in the media). (BNC)

But Prince hasn't turned into a *bluenose*, he insists – he's just changed his outlook on how to present his still eros-heavy creations. (COCA)

Bluenose is a pejorative term, and the other examples relating to immorality are also very negative. One possible motivation for these connections is from the phrase to burn blue, as a blue flame was traditionally seen as "an evil omen, a portent of death, or a sign that a ghost or the Devil is present" (OED, to burn blue, P1). This is one possible origin for the phrase blue law: a "strict law motivated by religious belief" (OED, blue law, noun), although the motivation for this phrase has been contested. A common belief is that blue laws, which refer to drinking, gambling and sex, originated when these Puritanical laws were once recorded on blue paper. The OED, however, states that not only is there little evidence that early legislation was recorded but also that it is uncertain whether the

original coining was favorable, neutral or hostile. One example of *blue law* was found in the BNC and 33 examples in COCA. For example:

John's strict paternalism fascinated the New York newsmen who described it as 'Tiller's puritanical *blue laws*'. (BNC)

Much earlier she successfully argued in court against Texas' *blue laws*, which prevented many kinds of shopping on Sunday. (COCA)

Numerous other examples share a related meaning, from pornography in *blue movie*, to bad language in *blue language*, *blue joke*, and *to turn the air blue*". Examples from corpora include:

She handed him the reel. 'What's the big deal?' 'It's a blue movie.' So I gather. (BNC)

He cut loose with a blast of *blue language* in front of all the dignitaries who had been invited to witness the triumph. (COCA)

If they were telling *blue jokes* they stopped and looked like their mother had caught them at something. (COCA)

Upset he was too! And the names he called me turned the air blue! (BNC)

Something resembling a flash of lightning was once called a *blue streak* although this meaning is now obsolete. More common today is the narrowed sense of a "constant stream of words" (OED, *blue streak*, S4), for which there is one example in the BNC and 71 examples in COCA. For example:

Meg and I began to talk a *blue streak*, to catch up, to fill in the last eight, going on nine, years. (COCA)

In almost half of these examples, *blue streak* collocates with *cursing* (11), *cussing* (10) and *swearing* (11). For example:

Bullock [...] loves nothing more than tearing up the trail on her Honda off-road dirtbike and swearing **a** blue streak with the boys. (COCA)

Toby slows the car, thinking he'd better stop and help if the guy is injured, but when the man rolls to his feet and begins cursing a *blue streak*, Toby drives on by. (COCA)

Two separate conceptualizations of *blue* are accessed; *blue* represents both the fast pace of the conversation and also the bad language.

6.6.4 Faithfulness

Blue carries the meaning of being constant or steadfast, categorized under L05 "Decision-making". The earliest and now only surviving use is in *true blue* meaning to be "staunchly faithful to some person or cause" (OED, blue, adjective 6), for example:

I know there's hardly a husband who's more true blue than you. So I'm not worried. (COCA)

The motivation is of uncertain origin, but may be in allusion to the constancy of the blue sky (OED, *blue*, etymology). Another suggestion is that this sense of *blue* originated through folk etymology that continued through an association with the fastness or intense staining power of blue dyes (OED, *true blue*, etymology). The non-basic colour term *Prussian blue* is also recorded with this metaphorical meaning of a "faithful, principled, or unswerving person" (OED, *Prussian blue*, noun 2). The OED suggests that as the name of several deep blue pigments, *Prussian blue* was probably a variant or intensifier of *true blue* in reference to the strong colour of the pigment (OED, *Prussian blue*, etymology). The last recorded date of the metaphorical use of *Prussian blue* in the OED is 1858 and no examples were found in the corpora.

The metaphorical connection between *blue* and constancy has resulted in the application of the colour in politics. *True blue* can either refer to a "loyal supporter of a particular person, party, group, or cause" or can designate a particular political party; in Britain, *blue* is associated with the Conservative party, whereas in the US *blue* is associated with the Democratic Party (OED, *true blue*, noun and adjective 2b). Niemeier (2007: 149) states that *blue* is used to stand for "liberal-conservative politics and politicians" and suggests this arises from a connection between the idea of "freedom" and wide expanses of sky and sea. It seems that Niemeier has in fact identified the *difference* in motivations behind the shared political identity of conservative and liberals. While British conservatives have identified with blue through *true blue*, American democrats have identified with blue its associations of freedom via the prototype of the sky. Examples of *true blue* with a political meaning include:

Anywhere else this would be natural Conservative territory, the kind of constituency where they weigh rather than count the *true blue* votes, but the university changes all that. (BNC)

A lifelong Conservative [...] Margaret Flynn [...] cares deeply about environmental issues and is a *true blue* 'green'. (BNC)

The second example is a play on the political identities of parties, describing the candidate as *true blue* because of her membership with the Conservatives, but also as *green* because of identifying her with taking positive action in environmental issues. Allan (2009: 633) notes that *true blue* is sometimes used to describe nationalism in Britain and Australia. Examples of the colour in more general use include:

During the Press conference *Blue* Ken emphasised the Conservative's traditional 'Labour is soft on crime' argument. (BNC)

Well, this is a *blue state* referendum on Obamacare and it's going to be very interesting to see how this all plays out in Massachusetts, the bastion of liberalism. (COCA)

In these examples, *blue* describes the Conservative MP Kenneth Baker and a state with a Democratic stronghold. *True blue* is also recorded with a specific use in Scotland of designating the Scottish Presbyterian or Whig party and can be extended to relate to a "staunch Presbyterian" (OED, *true blue*, adjective 2a), drawing on both the sense of constancy and the blue of the St. Andrews flag.

6.6.5 Intellectual

Several variants of *bluestocking* appear in the HT. These refer to the worsted blue stockings worn by Benjamin Stillingfleet to meetings of a literary circle. These cheap stockings marked a distinction with those of silk worn by the upper class and meetings were characterized by informality as they encouraged female intellectuals. The stockings themselves became a characteristic of members of such groups through a metonymic mapping to refer to all people attending literary circles at this time in London. The meaning then narrowed to include only women, and finally only women with literary interests. Only at this final stage was a pejorative sense adopted. The connotations of learnedness and prudishness can be seen in the examples:

Nigel had often thought of stealing a girlfriend off his son, but didn't have quite the same tastes. Unfortunately Anthony usually chose college friends and Nigel didn't really take to *bluestocking* women. Eleanor was a bit of a trial to him at times. (BNC)

She excelled at appearing bookish. Prim. A *bluestocking* with no sense of humor. A woman to be avoided at all costs. (COCA)

Only in the final stage was a pejorative sense adopted, and has been retained as the corpus examples show.

6.6.6 Award

A *blue ribbon* can be worn as a badge of honour, especially the ribbon worn by members of the Order of the Garter, or it can more generally be "awarded to the winner of a contest or competition" (OED, *blue ribbon*, noun 1a and b). This use of the *blue ribbon* has extended into metaphor when used in the sense "[t]he greatest distinction available; the most distinguished place, position, etc." (OED, *blue ribbon*, noun 2a), such as in the following examples from COCA:

"I don't think he'd win any *blue ribbons* in most places," Mr. Dole said of Mr. Aristide. "I think he has a lot of shortcomings." (COCA)

The swami came down from the mountains in January 2006 to receive the prestigious honorary degree of "great ordained teacher" from a prominent Sanskrit university in India. It's considered "the *blue ribbon* of Oriental learning" and is usually given to older monks at the end of their career. (COCA)

The use becomes metaphorical when no real ribbon is presented as a prize.

6.6.7 Distance

Blue is used to metonymically stand for the sea or sky, and by metaphorical extension, to something far into the distance and unknown (OED, *into the blue*, phrases 3), appearing in A07 "Wild and cultivated land" and E25 "Failure". For example:

If he needed to leave suddenly that might be dangerous. 'Do you really think we can disappear *into the blue*?' Paula asked. (BNC)

"Instead of going to northern Michigan, we thought we'd look in France, on a lark," Catharine recalls. For the confirmed Francophiles, it was not such a leap *into the blue*. (COCA)

In these examples, *into the blue* means somewhere unknown or unfamiliar.

6.6.8 Anger

People are often described as *blue* referring to their physical appearance while also alluding to their character. Within B07 "Ill-health" contains references highlighting an illness or an assault. According to the OED, if someone is said to go *blue in the face* "they are blue-faced or livid with anger, excitement or effort" (*blue*, OED, P4). When someone is straining with effort, blood will rush to their face which will darken and possibly have a bluish tinge if there is not enough oxygen in the blood. This may be from physical effort, such as in the example:

But if you saw him running for the bus, he would go blue in the face and collapse. (BNC)

More common, however, is an argument or heated discussion resulting in facial discoloration from lack of breath or oxygen, such as:

In fact, you can argue and remonstrate until you are *blue in the face* but certain plans or arrangements cannot be progressed just yet. (BNC)

She can talk to the ex-hubby' till she's *blue in the face* and she ain't getting more child support. (COCA)

Although this has a metonymic motivation, the colour *blue* is used hyperbolically as the shade a person's skin turns is not a focal blue.

6.6.9 Aristocracy

One of the most frequent figurative uses of *blue* in the corpora is *blue blood*, within P09 "Social position". Aristocratic and upper class families were originally referred to as *blue bloods* due to the appearance of blue veins through their pale, translucent skin, and according to the OED, this originated in Spanish as *sangre azul*, recorded in 1778 or earlier, before appearing in English in 1811 (OED, *blue blood*, noun and etymology). Examples from the corpora include:

Every now and then, a man like this one needed a reminder that he could not control everything in this world, despite all his money and his terribly *blue blood*. (BNC)

Herrera dresses the likes of Kennedys, British royals and other blue bloods. (COCA)

It is perhaps relevant *blue bloods* can also be described as *old money*, in that their established wealth is inherited rather than earned in their own right. The reference to *blood* is particularly apt as, although it was originally used to refer to a literal description of a physical characteristic of upper class families, it also reinforces the idea that such privilege is passed on through the blood line, for example:

Most of the other 10 queens are on European thrones, but the thin *blue-blooded* line reaches as far as Queen Aishwarya of Nepal. (BNC)

One example in the BNC is further extended metaphorically:

This is a *blue-blood* organisation, very keen on people with style, contacts and a good record in industry usually working for prestige, high-quality organisations. (BNC)

In this example, an organization is described as *blue blooded* rather than an individual or family. Furthermore, a few novel corpus examples suggest that blood is also referred to as *blue* to indicate something other than aristocratic lineage, for example:

For those fans with *Royal Blue blood* in their veins, the pictures on the front of Guinness Books' Everton Player by Player are enough to bring tears to the eyes. (BNC)

"I bled *blue blood*," says one employee who was denied a chance to transfer to another IBM plant. (COCA)

In both puns, *blue* is used to highlight a group's strong association with the colour, either the colour of Everton's football strip or IBM's corporate branding. The close bond shared amongst football supporters is compared to a blood link and the second example evokes the phrase *blood*, *sweat and tears*, meaning "extremely hard work" especially "that involving a degree of pain or sacrifice" (OED, *blood*, P1r). A few corpus examples use *blue blood* in the titles of books, plays and television shows. One of these, found within COCA only, is the name of the American television series *Blue Bloods*, which revolves not around an aristocratic family, but on a New York family of which three generations have worked in the police force. *Blue* is associated with the police through the colour of their uniform, and *blood* can be regarded as an "inherited characteristic" and later "as the vehicle of hereditary characteristics" (OED, *blood*, noun 5).

6.6.10 Surprise

To *cry*, *yell* or *scream blue murder* is to make cries of terror or alarm that raise a commotion (OED, *blue murder*, noun). The metaphor is most likely transferred from French *morbleu*, an altered form of *mort Dieu*, a humorous expression for surprise or annoyance (OED, *mortbleu*, etymology). There are 23 examples of *blue murder* in the BNC and 9 examples in COCA, for example:

It might get into the papers, and then she'd be down here knocking on my door and screaming *blue murder*. (BNC)

Even from a small sample, the corpus evidence reveals much variation in the verb collocating with *blue murder*. In addition to being *cried*, *yelled* or *screamed*, *blue murder* is also *shouted*, *spat*, *squealed* and *sworn*, such as:

Don't you see, there could 'ave been five 'undred quid in fifty-quid notes in that letter, which was why he was spittin' *blue murder*. (BNC)

Also, it is possible to not only hear *blue murder*, but to look *blue murder*, for example:

I saw my mother moving slowly and silently past me, blue murder in her eyes. (COCA)

Furthermore, in two examples from the BNC and one example from COCA, *blue murder* is combined with another metaphor *get away with murder* (OED, *to get away with*, Phrasal verbs), such as:

"All these years, the Government has gotten away with blue murder," Mr. Nair said. (COCA)

The addition of *blue* in contexts such as the last two cases may simply be an accidental combination of separate metaphors, as the addition of *blue* does not appear to affect the meaning of the original two phrases.

Within H26 "Expectation" is *bolt from/out of the blue*, describing an unexpected event by comparing the "unlikelihood of a thunderbolt coming from a clear blue sky" in contrast to a dark grey sky (OED, *blue*, P5a). For example:

Dismissal should never come as a *bolt from the blue*, however exalted your place in the corporate hierarchy. (BNC)

Jon, this all seems so sudden. I must say, I follow the events pretty closely, but this came *out of the blue* for me. What happened? (COCA)

A slightly different interpretation is offered by both Allan (2009: 634) and Niemeier (2007: 147) although still based on the colour of the blue sky. They attribute this sense to an act of God that is unforeseeable as it comes out of the heavens, which are represented by blue sky. The same phrase exists in Italian, but draws on a different colour: *di punto in bianco*. In spite of this, a similar motivation for the phrase can be given as the word *bianco* is polysemous in Italian meaning both *white* and *blank*, and so events can happen unexpectedly as if out of nowhere.

6.6.11 Censure

Blue-pencil, which appears in the MM category "Memory and commemoration", is recorded from 1845 meaning "to mark, cross out, or obliterate with a blue pencil" and is originally and frequently used in figurative contexts meaning to censor or edit (OED, blue pencil). There are 7 examples in the BNC and 15 examples in COCA, such as:

There is no shortage of *blue pencils* in Uzbekistan. Censorship is alive and well. (BNC)

"There's more to it than just taking a *blue pencil* and getting rid of the obscure legalisms and stuffy inversions. Trying to translate a brief from Legal into English can produce some pretty strange results. (COCA)

It is possible that this use is drawing on the meaning of *blue laws*, with *blue* representing the written moral code that censors or edits what has been said or written, but it is more likely a separate coincidence. A similar phrase, *red-pencil*, is discussed in 6.3.6, and related meanings with the colours black and white are discussed in 6.1.8 and 6.2.5.

6.6.12 Value

A *blue chip* is a token used in gambling that typically denotes a high value, whereas a *red chip* is used for a low value and has a similar meaning in the stock market. Originally referring to a company or stock with a particularly high market value and so considered to be a reliable investment that is one of the safest on the stock market (OED, *blue chip*, adjective 2a). There are 114 examples in the BNC compared to 1,185 examples in COCA. The following phrases have become frequent: *blue chip company, blue chip stock* and *blue chip share*. For example:

Because of the uncertainties ahead, which are likely to cause more difficulties for smaller companies, the bulk of the trust's portfolio is, at present, mainly in the larger *blue chip* companies. (BNC)

This sense contrasts with *blue sky and hot air* shares that are worthless or empty, discussed above. And yet *blue chip* is not always used in a positive way in the corpora. For instance, one third of examples of *blue chip stock* in COCA (55 out of 147 examples) describe the negative performance of such investments:

Up next, *blue-chip* stocks, as we reported to you, suffering again. (COCA)

In spite of this, *blue chip* can be extended through its positive connotations to something that is particularly reliable, high quality or expensive, such as:

Publishers are concerned about dwindling hardback sales [...]. The *blue chip authors* are holding their own, but it is the new authors who are really struggling in the current climate. (BNC)

Balanchine is the *blue-chip* stock of ballet. (COCA)

One domain this extension is applied to is sport, when talented athletes are referred to as *blue chips* in American sport (OED, *blue chip*, noun 3):

In some instances, the process resembles the recruitment of *blue chip* athletes by American colleges. (COCA)

He's already one of the state's brightest *blue-chip* prospects in football and basketball. (COCA)

This sense of *blue chip* was found only in COCA, in keeping with an American usage.

6.6.13 Optimism

Blue-sky appears in a number of categories revealing both positive and negative associations. The earliest use, first recorded in 1895, compares something to a clear blue sky, and by extension as cheerful and optimistic (OED, blue-sky, adjective 1). In the MM categories H08 "Imagination" and E23 "Disadvantage and harm", blue sky refers to something in the distant future, either creative and visionary or fanciful and hypothetical without practical application. For example, blue sky research is not directed towards any

practical goal but may have applications in the future. Both sides of its meaning are reflected in the quotations:

Though she speaks wistfully of the luxury of 'blue sky research', Beverley sees advantages in having to adopt a commercial perspective as well as a purely scientific one. (BNC)

What had once been perceived as *bluesky research* of limited interest (or, in the view of several groups, science fiction, or even pseudoscience) was now being seen as a key technology of the 21st century. (COCA)

Similarly, investments described as *blue sky and hot air* are worthless shares, a metaphorical piece of blue sky, sold by fraudulent investors. Legislation to protect against these is called *blue sky laws*:

"We care about the public interest here." Rediker's partner, Thomas L. Krebs, is intimately familiar with Alabama's *blue sky laws*. He's a former state securities director who helped write many of them. (COCA)

This is the single example of *blue sky laws* in COCA and none was found in BNC.

6.6.14 Innocence

Blue eyes are considered a trait of someone who is innocent, possibly due to the colour of Caucasian babies' eyes, and according to the OED is found in the phrase *blue-eyed boy*, meaning a boy who is highly regarded and thus treated with special favour (OED, *blue-eyed*, adjective 2 and special uses). Although the majority of examples in the corpora are descriptions of a person with blue coloured irises, relevant examples include:

Arkansas Governor Bill Clinton, the Democrats' blue-eyed boy, is still in the lead. (BNC)

He looked like anyone's favorite grampa -- blue-eyed, red cheeked, innocent. (COCA)

The example from COCA shows a literal description of blue eyes that collocates with innocence, whereas the example from the BNC extends the metonymy in to metaphor.

6.6.15 Manual Labourers

Blue collar workers are manual labourers, often in industry and in contrast to white collar workers, often employed in office work (OED, blue-collar, adjective 2). For example:

They are not considered extraordinary because they are working class and they are *blue collar* and they're not rich, pampered, coddled, white kids from Boston. (COCA)

The metonymy refers only to part of the worker's outfit and is often used to refer to the group as a whole, which in turn signifies their social status. This use contrasts with the association between blue and ARISTOCRACY (6.6.9), which is derived through a different metonymic connection. The link with manual labourers can be traced back to an earlier piece of blue uniform; *blue bonnets* or *blue caps* were associated with the dress of servants and tradesmen in Scotland (OED, *blue bonnet*, noun 1b and *blue cap*, noun 1a).

6.6.16 Old Age

Blue is used to describe hair colour in blue rinse, which appears in K04 "Physical appearance" and B70 "Old person". Within K04 "Physical appearance" blue rinse is a literal description of the temporary blue tint applied to grey or white hair, whereas in B70 "Old person" blue rinse is a case of metonymy as the colour of hair, a trait of "elderly women" (OED, blue rinse, compound 1), stands for the whole person. A second step in the metonymic process occurs when it is applied to a group of which the hair tint is a common, but not exclusive, feature. For example:

In a corner of the London Museum of Financial History - *blue-rinsed* heads will remember it as the Bank of England - stands a glass case. (BNC)

Until last year, the Met seemed most eager to please *blue-rinse* dowagers (who funded its lavish, often brittle productions) and tourists visiting the Big Apple. (COCA)

The OED records the phrases *blue rinse brigade* and *blue rinse set*, used to describe a group, such as:

They picked the retirement capital of America, the Sunshine State of Florida, to hold the company's annual meeting next week, which suggests that the *blue rinse brigade* [...] will be able to turn out in force. (BNC)

But you know how much our numbers rely on the blue rinse set. (COCA)

The OED also notes that *blue rinse* is frequently used "with allusion to conservative views attributed to this group" (OED, *blue rinse*, compound 1), such as:

It is also a mark of the wavering course the Tories have pursued, hopping uncertainly from *blue-rinsed* stage set to mate bar stool to Mr Major's rediscovered soapbox, but seldom pausing long enough to get across the gravity of their message. (COCA)

This application represents a further stage in the metonymic process of *blue rinse*: the conservative views are a (generalized) part of the older demographic group that is referred to by a (generalized) salient physical feature part of an individual member in a part-for-part metonymy.

6.7 Primary Basic Colour Terms Conclusion

These extended meanings can be traced back to a metonymic connection with a saliently coloured object, and in cases where the original motivation is unclear, possible motivations have been discussed. Every BCT, with the exception of *orange*, was found to enter into several metonymies and metaphors. Perhaps the least figurative of the primary BCTs is *yellow*, which may be a consequence of its lower frequencies of general use (see Hays et al. 1972), rather than a feature unique to its figurative properties. The *yellow* phrases are mostly negative. Most of the limited number of meanings attached to *yellow* were found to be still in use, apart from the sense of jealousy, which has been overtaken by *green* in English. *Black* also holds predominantly negative meanings. The EVIL IS BLACK metaphor can be traced back to Old English via *sweart*. Metaphors involving *black* frequently have an antonymic relationship with those involving *white*. Although the metaphor VIRTUE IS WHITE is reflected in the data, there are also several examples that have a negative meaning, such as fear and blankness.

For some colour terms, one motivation can be extremely productive in forming several meaning extensions and associated phrases, whereas other colour terms draw on several different metonymic origins. Most of the figurative meanings involving *black*, for example, draw on the core meaning of the systematic, overarching metaphor EVIL IS BLACK, and many of the figurative meanings of *green* are linked to the colour of vegetation. *Blue*, however, has a great many motivations, from the colour of the sky, to physical features, such as eyes or hair, and clothing; as does *red*, drawing on the colour of blood, fire and clothing.

The analysis has revealed how some BCTs can function as intensifiers. In the case of emotions, *black* is used to modify *afraid*, *angry* and *depressed*. As the darkest possible colour with strong links with negativity, *black* indicates the intensity of the negative feeling. The earliest attested phrase discussed for red was *red hot*, recorded at the end of the sixteenth century. Its near synonym *white heat* was recorded several centuries later. The motivation for these phrases is based on the colour of an object when it reaches very high temperatures. Temperature itself is involved in various metaphorical extensions from spicy food to popularity, and emotions to pain, and the addition of a modifying colour acts as intensifier for the heat.

7 Secondary Basic Colour Terms and Non-Basic Colour Terms

Chapter 7 continues the focus on answering the second research question on which hue terms lend themselves to metaphor and metonymy and in what ways. Most previous research on colour metaphors has focussed on the more productive primary BCTs (covered in Chapter 6), and yet secondary BCTs also hold figurative meanings. Chapter 7 is dedicated to the secondary terms: *brown, purple, pink, orange* and *grey*. In addition, a selection of non-BCTs is discussed. It has been observed that non-BCTs do not readily develop figurative meanings, and so these terms have been analysed for their figurative use even less frequently than the secondary BCTs. Several of these extended meanings were not found in the OED, possibly due to their recent development. Additional terms that the author was aware held figurative meanings were added to the list for analysis in the corpora. On a few occasions where no examples were found in either the BNC or COCA, newspapers were also consulted as an up to date resource to find illustrative examples.

The complete list of non-BCTs discussed in this chapter is: *scarlet*, *gold*, *livid*, *puce*, *rosy*, *peachy*, *lavender*, *amber*, *drab*, *vanilla*, *beige*, *milky* and *lily livered*. Each colour term will be discussed in turn, with some of the non-BCTs that share a figurative sense grouped together for analysis, such as *livid* and *puce*, which share the meaning of anger. As the figurative uses of secondary BCTs and non-BCTs are less frequent than those discussed in the previous chapter, the figurative meanings attached to the simplex colour term are also discussed in this chapter, in addition to phrases in which they appear.

7.1 Brown

There are a number of extensions in meaning for *brown*, although several are no longer in use and many of the others are not well established. Phrases that are evidenced in use in the corpora include *browned off* and *brown nose*, which have several possible motivations. *Brown study* and *whity-brown* may draw some of their meanings from *black* and *white*.

Table 7.1 Figurative meanings of *brown* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Number	brown dozen	?1499	N
Deception	to do brown	?1548-1840	N
Serious	brown study	c1555-	Y
Concentration			
Taking Fire	fire into the brown	1854-	N
Community	brown-stone	1865-	Y
Half-and-half	whity-brown	1892-	N
Annoyance	browned off	1938-	Y
Servile Flattery	brown-nose	1939-	Y
	Brownie point	1963-	Y

7.1.1 Number

A *brown dozen*, or *round dozen*, refer to the standard value for a dozen: twelve (OED, *dozen*, noun 1c). An example from the OED is given below:

?1499 J. SKELTON *Bowge of Courte* (de Worde) sig. Biij^v, Haue at the hasarde or at the *dosen browne*. (OED)

Now obsolete, this phrase was first attested at the very end of the thirteenth century and the motivation behind the use of *brown* is unclear.

7.1.2 Deception

Another obsolete use of *brown* is in the phrase *to do brown*, which the OED tentatively suggests is "perhaps, 'to do thoroughly', suggested by roasting" or alternatively "to deceive" (OED, *brown*, adjective 5a). If this interpretation is correct, the process of deception is compared to that of an intense cooking method, where *brown* stands as a sign that the task is complete. Partridge defines *to do brown* as "to swindle utterly". Categorised in H22 "Truth and falsity", the last attestation of this phrase in the OED is from 1840 and no examples were found in the BNC or COCA.

7.1.3 Serious Concentration

When dwelling on serious or gloomy thoughts one may be said to be in a *brown study*, a phrase contained within the MM category H08 "Imagination". According to the etymology in the OED, *brown* was most likely being used with the figurative meaning of "gloomy", but this sense may now be falling out of use (OED, *brown study*, etymology). The sense of "gloomy, serious" is also listed under the adjectival use of *brown* (OED, *brown*, adjective 1b). No quotations are provided by the OED for this sense of *brown*, but it is cross-referenced with *brown study* so it is possibly only attested in the phrase. The phrase is found 4 times in the BNC and 12 times in COCA. From the corpus examples there seem to be two closely related uses of the phrase. The first is to suggest a bad mood, as in the examples:

'Sorry if I was in a brown study. I feel fine.' (BNC)

Otherwise the Honourable George Carstares seemed to be very much in a brown study, with a frown of worry in his blue eyes. (COCA)

The second use of *brown study* is to suggest a state of serious or deep thought, which may not necessarily be negative.

Another sharp blast of heavy rain threw itself at the windowpanes of her flat, and brought Leith, startled, out of the *brown study* she had fallen into. (BNC)

Allegra shot a quick look at Isobel, who seemed lost in a brown study. (COCA)

This second meaning is captured in the definition in the 1811 Dictionary of the Vulgar Tongue (1981) that states that when in a brown study "one is absent, in a reverie, or thoughtful". Both uses have the element of seriousness. The corpus examples suggest one falls or collapses into a brown study, and becomes lost in it until interrupted or startled out of it. These collocations suggest a deep state of thought.

7.1.4 Taking Fire

To fire into the brown, in B76 "Hunting and fishing", once meant to fire into a group of game-birds rather than aiming at one in particular; a metaphorical extension is "to fire, or launch a missile, indiscriminately into a mass" (OED, brown, noun 4). An example from the OED is given below:

1955 C. S. FORESTER *Good Shepherd* 23 Three square miles of sea, an immense target for any torpedo fired '*into the brown*'.

No examples were found in the corpora.

7.1.5 Community

Brown stone can refer to a variety of dark brown sandstone used as a building material. This in turn can refer metonymically to a house built of such material, or, by further extension, to designate the well-to-do (OED, brown-stone (b), S2). The majority of examples of brown-stone in the corpora signal the metonymy for a particular style of building, particularly those found in New York. Seven examples in COCA extend brown-stone to refer to the communities that live within such buildings:

By the middle of the last century, when I was a boy, the Suydams were among the bulwarks of the rigidly conservative and utterly complacent *brownstone* society that stretched from Union Square to the East Sixties and thought it had the answer to everything. (COCA)

Walking Tours A TOUR GROWS IN BROOKLYN, a tour that focuses on *brownstone* life in Park Slope. Daily at 10 a.m. and 1:30 p.m. (COCA)

"If you live nearby, you have a nice home and you have a job, you're probably not that excited by the benefits, and you're swamped by the drawbacks," said Brad Lander [...] citing the project's potential to worsen traffic and overshadow the *brownstone* communities nearby.

(COCA)

These examples describe a type of society as *brownstone*, as dictated by physical limitations of an area which hosts such buildings. But not only is *brown-stone* a description of the architectural style and boundary of an area, through a part-for-whole metonymy, it also describes the type of society contained within it. This can be viewed as a further metonymy, where the people that live in an area are represented by the buildings in which they live.

7.1.6 Half-and-Half

Whity-brown serves as a description of a "brown colour inclining to white [...] most commonly of paper" (OED, whity-brown, adjective 1a). Derived from this colour description is the figurative meaning "[n]either one thing nor another, neutral, undecided,

half-and-half' (OED, *whity-brown*, adjective 1b). This sense was not found in the corpora so an example from the OED is given below:

1895 <u>Westm. Gaz.</u> 28 Dec. 8/2 The whitey-brown men, a political tribe of undecided colour,..who side with any party. (OED)

The phrase is another example of how colours are used in combination with one another. A similar and yet contrasting phrase is *black and white* which indicates something "Clear, definitive, and unambiguous; not admitting of compromise or doubt" (OED, *black and white*, adjective 3). The term *brown* was originally given to denote a dark shade and is defined as "[d]usky, dark" (OED, *brown*, adjective etymology and 1a) and so is close in tone to *black*. In addition, even though both phrases contain reference to two colours, *black and white* refers to each opposite colour individually, whereas *whity-brown* is a combination of both *white* and *brown* in one overall shade, which straddles the boundaries of both categories. The resulting phrases have contrasting meanings as *black and white* are two polar opposites and thus there is a clear distinction between them; *whity-brown*, however, has a bit of both white and brown in the mix.

7.1.7 Annoyance

Allan (2009: 629) states that the faecal associations are "obvious" in the phrases *browned* off, brown-nosing and brown-tonguing. If you are browned off, you are said to be "bored, 'fed-up', disgusted" (OED, browned, adjective 2).

"You Scots are all very well at this and that, but this is baseball, this is quite different. You won't be any good at this". Eventually I got very *browned-off*. (BNC)

I just seem unable to connect properly, I can never smile at the proper places – it's like a permanent condition of being *browned off* with life. (COCA)

All of the corpus examples indicate that the person who is *browned off* is irritated or annoyed, rather than bored or disgusted. The OED notes that printed evidence is lacking for the phrase pre-1938, despite the *Partridge Dictionary of Slang* (Beale 1989) claiming that it was regular Army slang c1915 and was adopted by the R.A.F. c.1929. Green (2010) acknowledges the use of *brown* in the context of sodomy, but suggests another possible origin: the accumulation of brown rust on metal. *Browned off* may be closely linked to *brassed off*, possibly related to officers' brass buttons. Also fitting with this construction and sharing a similar meaning of annoyance are *cheesed off* and *pissed off*. All four phrases

are first attested in the late thirties or early forties. Another alternative explanation is that *browned off* draws on the sense of gloominess discussed in Section 7.1.3, although evidence is lacking for both phrases.

7.1.8 Servile Flattery

Brown is also connected to dirt and excrement in the phrase brown-nose. The OED cites Webster's definition: "from the implication that servility is tantamount to having one's nose in the anus of the person from whom advancement is sought" (Webster 1961), and states that this American slang is used to describe a sycophant who tries to curry favour (OED, brown-nose, S2). According to Green this was originally military slang. Brown-nose may be described as a part-for-whole metonymy, where the colour of the nose stands for the person or their character: however, it can also be interpreted as metaphorical as the action is hypothetical.

There is only one example of *brown-nose* in the BNC compared to 54 instances of variants in COCA. Someone is called a *brown-nose* only 3 times compared to a *brown-noser* 18 times in COCA. Verbal uses include 21 examples of *brown-nosing*, 8 examples of *to brown-nose* and 2 examples of *brown-nose*. Examples of *brown-nose* and *brown-nosing* include:

"Our critics do not believe me when I say we desire a place at the table," he says. "The truth is, we eschew political power" Well, you could have fooled me. He can *brown-nose* with the best. (COCA)

Real-world bosses tell tales of employees who impressed them without the dishonor of *brownnosing*. (COCA)

Philip (2003: 184) found that "if one is on the receiving end, one is passively 'brown-nosed'" such as:

While Saddam Hussein was allegedly being *brown-nosed* by a British MP this week, his people were out on the streets to mark the third anniversary of the start of the Gulf War. (Philip 2013: 184)

But this was not the case in the 2 examples of *brown-nosed* in COCA:

"You've always *brownnosed* the Commander and had your eye on his job. And now you want to see him out of the way so you can take over." He narrowed one eye and took aim. (COCA)

The only example in COCA that shifts the focus onto the person subjected to the *brown-nosing* is a one off example of *brown-nosee*:

In laying on a bonanza like this, Latham was admitting that he needed something. The Journal scribe was about to be a *brown-nosee*, not a *brown-noser*. (COCA)

From all of these examples it is clear that *brown-nose* has very negative associations. Other similar phrases noted by Allan are: *you're full of shit, that's why your eyes are brown* and *in the brown stuff.*

Originally from the US, a Brownie point is a "notional credit for an achievement" in order to gain "favour in the eyes of another" especially "gained by sycophantic or servile behaviour" (OED, *Brownie point*, compounds). There are 31 examples in the BNC and 59 in COCA. For example:

He'll earn Hollywood brownie points for sporting a natty Harrison Ford-style beard. (BNC)

The way it looks to me is that the president-elect gets *brownie points* with the conservative base as long as he is seen to be trying very hard to get that very, very big tax cut. (COCA)

The OED cites that this use is most likely derived from *brown nose*, but has popularly become associated with the junior section of the Girl Guides, called the Brownies after the colour of their uniform, and so is frequently spelled with a capital initial. According to *A Concise Dictionary of Slang and Unconventional English* (1989), however, the Brownie point originated as a bad mark in the Canadian Pacific Railways and has reversed in meaning to become a good mark.

7.2 Purple

The main metaphorical connection held by purple is with royalty and religion, which is reflected in P09 "Social class". This connection has spanned centuries and came around due to the painstaking processes involved in obtaining the dye from shellfish making it extremely expensive to produce and so, unless it was adulterated, it could only be afforded by the rich (see Biggam 2006). Those in power have historically attempted to protect this valuable status symbol by banning the sale of the finest quality dye and punishing those in

possession of high grade purple dyed cloth (Elliott 2008). Within D35 "Individual colours" are the terms *royal purple* and *pontiff's purple* referring to the particular hues associated with royalty and pontifical vestments.

Purple appears in both T04 "Virtue", as a symbol of "penitence and mourning" (OED, *purple*, 2b) and T05 "Moral evil" as things characterised by "richness or abundance" and a sign of ostentatious wealth (OED, *purple*, adjective 3). This latter sense, derived through its connection with royalty, has extended outwith social position to literature where it characterises an excessively elaborate writing style. A final use of *purple*, which is recorded in the OED but not the HT, lies in politics.

Table 7.2 Figurative meanings of *purple* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Moral Evil	purple sin	1601-	N
	purple language	1930	Y
Royalty	born to/in the purple	1681-	N
	purple chamber	1683-	N
	purple-born	1820-	N
	purple airway	1955-	Y
	purple zone	1970-	N
Elaborate Writing	purple patch	?1704-	N
	purple passage	1882-	Y
	purple prose	1901-	Y
	sub the purple	1958	N
Success	purple patch	1912-	Y
Politics	purple state	2002-	Y

7.2.1 Moral Evil

A *purple sin*, first recorded in the OED in 1601, is "a grave or heinous sin" (*purple* S2c special uses). No motivation is given in the OED for this phrase, but it may be linked to a *cardinal sin*, through the colour of a cardinal's robes that are "deep scarlet" (*cardinal* adjective 8). Both sins are in fact metaphorically red in colour, as the colour designated by the term *purple* was not always the shade present-day speakers now associate it with, originally describing a "crimson shade" (OED, *purple* adjective 1a). See Sections 7.6.1.2

and 7.6.1.4 for discussion of a similar sense of *scarlet*. *Purple sin* may derive from the association between purple and the colour of dried blood and bruised skin. Alternatively, it is recorded meaning "sexually explicit writing" in the OED, and "sexually suggestive but not explicit" and "not quite blue" in *The New Partridge Dictionary of Slang and Unconventional English* (2006).

An example of immoral behaviour is *purple language*, and only one example was found in COCA:

Stanley swore. "There's no call for that *purple language* in my kitchen," Myrtie said in that disapproving way she had. (COCA)

It is possible that both *purple sin* and *purple language* have adopted their meaning via an association with *blue* and its connection with licentiousness and profanities (see Section 6.6.3). The metonymy may have originated with *blue* but has now extended to *purple*, presumably made possible by their close proximity in the colour space.

7.2.2 Royalty

The purple or crimson robe or garment as traditionally worn by people of royal or imperial rank was significant, and added to their status (OED, *purpure*, noun 1). A *purple-wearer* was typically a "rich or noble person" (OED, *purple*, compounds), and to *wear the purple* by extension means to hold the dignity or office of which the colour is a symbol (OED, *wear*, verb 4). A person born into an imperial or royal family is *born in (the) purple* (OED, *born in (the)* purple, noun 1d) or *purple-born* (OED, *purple*, compounds), and royal births took place in a *purple chamber*, a room in the palace of the Byzantine emperors that was "decorated with purple cloth or to be inlaid with porphyry [a purplish-red stone]" (OED, *purple*, special uses S2c). A nonce word also appears in P09 "Social position": *dispurple*, attested in 1877, meaning to depose a sovereign and metaphorically strip him/her of his/her imperial purple robes.

Later coinages *purple airway* and *purple zone* are routes reserved for an aircraft on which a monarch or member of the royal family is flying (OED, *purple airway*, special uses; *purple zone*, special uses). Only one example of *purple airway* was found in BNC:

This is the sole example of any of the purple phrases relating to royalty that was found in the corpora, despite being marked as being in current use in the HT. There are several possible reasons for this, as both a change in denotation of the colour term *purple* and a cultural shift have occurred since the metaphorical sense of *purple* first arose. As mentioned in 7.2.1, *purple* once denoted a shade of red. Furthermore, Biggam details accounts that the colour produced by British whelks ranges from red-purple to violet and possibly also blue, brownish red or crimson (Biggam 2006: 44). The change in colour designation is perhaps irrelevant because royalty no longer signal their status by wearing purple and modern dyeing techniques mean purple is no longer the exclusive property of royalty, but easily available to all. Both of these factors have clouded the meaning for present-day speakers, leading to what Steinvall (2002: 204) calls an "opaqueness" surrounding phrases such as *purple prose* (see Section 7.2.3 below). Without understanding the original motivation, speakers may have difficulty in deciphering the meaning of the phrase.

7.2.3 Elaborate Writing

The phrases *purple patch*, *purple passage* and *purple prose* describe excessively ornate or elaborate prose (OED, *purple passage*, special uses; *purple prose*, special uses; *purple patch*, noun 1). This sense recalls the richness and sumptuousness associated with regal purple, discussed in 7.2.2. Examples from the corpora include:

One "purple passage" could consign a novel to condemnation. (BNC)

A local newspaper reporter indulged in some vivid *purple prose*. (COCA)

According to the OED, this sense originally had "appreciative connotations", but now is mainly depreciative. This is reflected in the corpus examples from the present study, and Philip also found "considerable evidence that *purple prose* is disapproved of" in the BoE (2011: 65).

The negative aspect of this metaphor is also shown in the rare phrase *to sub the purple*, which is journalists' slang for subediting excessively ornate passages, and is an example of a metaphorical use of *purple* being nominalized (*purple* B noun 8b). In contrast to the original meaning of an elaborate writing style, Ohtsuki (2000) suggests that *purple prose* can be used in the sense of profane words (7.2.1). He traces the original meaning of *purple prose* back to a bruise, wound or swelling, which is purplish in colour. Ohtsuki connects

the cause of the bruise, an assault, with profanities which often contain an assault on God. Steinvall (2002: 210) argues instead that taboo language can be used to make the language more colourful, linking back to the connotations of extravagance and decadence from *purple passage*, although he found no evidence of this in the BoE.

7.2.4 Success

Purple patch was not found in the corpora referring to a style of prose, but it was found with relation to another extended sense. This extended node of meaning this time is a positive one: a "colourful period of time" or a "run of good luck or success" (*purple patch* noun 2). For example:

Engineering recently announced a series of multi-million pound contracts. Were they a coincidence or are you going through a *purple patch* at the moment? (BNC)

Corpus evidence shows this latter meaning is often used with reference to the domain of sport, such as in the following example (see also Steinvall 2002: 210):

I was enjoying a *purple patch* and scored 11 goals in 14 games. (BNC)

From the extravagant clothes of the rich, to an elaborate writing style, *purple* is now used with the sense of brilliance, showing several stages of extension.

7.2.5 Politics

A further example of *purple* being used for type modification can be found in the context of politics as colours have for a long time been associated with political parties. Philip (2011: 161) observes that although *purple* is used as a colour in politics it is not nearly as well established as *red* or *blue*, and notes that *purple* tends to be used by fringe parties, such as the UK Independence Party. Within British politics, the Labour party is traditionally represented by the colour red (6.3.10), and the Conservative party by blue (6.6.4). However, Beech and Hickson (2012) discuss how the colours blue and purple are also used to describe the different approaches taken by the Labour party, following their defeat in the 2010 elections. Blue Labour is principally seen as opposing centralism, whereas Purple Labour advocates holding onto the successful strategy adopted by New Labour and its efforts to reconcile capitalism and socialism. Furthermore, purple is "chosen as the colour that represents the marginal constituencies which Labour needs to win" (Beech and Hickson 2012: 7). Similarly, in the USA, *purple* is used to refer to a state with

neither a Republican (6.3.10) nor Democratic stronghold (6.6.4) (OED, *purple*, adjective 4). *Purple* collocates with *state* thirty times in COCA, often along with *blue* and/or *red*, for example:

A blue state, red state and a *purple state* all overwhelmingly for Senator Obama. (COCA)

Though *purple* is not connected with any one major ideology it is used to refer to an area with politically moderate or centrist views. The colours of these parties are red and blue respectively, and purple lies between the two on the hue spectrum.

7.3 Pink

Pink is the most recent addition to the set of English basic colour terms, being first recorded in 1607. The OED defines pink as a colour "intermediate between red and white, often tinged with purple" (OED, pink, adjective 2a). Unlike many other BCTs, which are defined by giving prototypical items of that colour, pink is defined as a midpoint between two other colours. As a result, many of the metaphorical meanings of pink are borrowed from those of the surrounding colours red and white. Other figurative uses are metonymically derived from the colour of a healthy complexion of white skin, or from the flower, which the colour is named after.

Table 7.3 Figurative meanings of *pink* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Excellent Condition	pink (best example)	1597-	N
	pink (perfect condition)	1720-	N
	in the pink	1767*-	Y
	pink (up)	1854-	Y
	pinkish	1949	N
Homosexuality	pink triangle	1950-	Y
	pink pound	1984-	N
	pink dollar	1990-	N
	pink economy	1981*-	Y
Licentiousness	pink	1898-	N
Politics	pink	1820-	Y
	pinkness	1918-	N

	pinko	1925-	Y
	pinkie	1946-	Y
Enjoyment	tickle pink	1922*-	Y
	paint the town pink	1922-	Y
	rosy	1859-	Y
Rejection	pink slip	1963*-	Y

7.3.1 Excellent Condition

Pink has a meaning of the most excellent example or condition of something; that which has the most desirable quality or state (OED, pink, noun II 3a and b). According to the OED, this metaphorical meaning of the term pink is derived not from the colour pink, but from the flower of the same name. This sense of pink has extended to good health, and I suggest this has been influenced by the metonymic connection with the colour of a healthy pink complexion. For most people, there is a cognitive link between pink and the colour, not the flower, and so the healthy colour of white people's skin is more likely at the forefront of speakers' minds.

The phrase *in the pink* has developed from this use, meaning to be "in excellent health or spirits" (OED, *pink*, noun II 3b). This phrase appears in the BNC 19 times and in COCA 37 times, for example:

Dot didn't know what her convalescence was. 'To get you *in the pink*. For your operation'. (BNC)

A man of thirty-seven years, he'd looked *in the pink* of health. To have him weaken and die so suddenly had taken everyone, especially his wife, by surprise. (COCA)

The examples above, in line with the majority of others from the corpora, relate *in the pink* to being in good physical health. A few examples equate *in the pink* with emotional wellbeing and being in high spirits, for example:

"You're sure you're all right now?" *In the pink*, tickety-boo, right as rain and ready for action. I don't think I'll be going in for one of those prolonged periods of Post Traumatic Stress Disorder or whatever it's called. (BNC)

Back at my apartment there was a message saying I was going to be offered the part in "Dennis the Menace" after all. Suddenly, I feel a lot better. Lots better. In the pink. (COCA)

Several instances of *in the pink* occur in headlines; in the BNC 9 out of 19 citations are headlines and in COCA 7 out of 37 are headlines. For example:

In the Pink, Nothing flatters a post-winter pallor more than soft, skin-friendly pinks (BNC)

In these cases *in the pink* is used to signal something positive, happy or desirable, and often has a contextual reference to the colour pink. In the example above, the article that follows is a beauty feature on wearing pink cosmetics and the author presumably wants to evoke connotations of wellbeing and health associated with the colour.

Pinkish, which appears in B06 "Health", can describe someone who is "fit, well, thriving" (OED, *pinkish*, adjective 3). The use is marked as rare in the OED and does not appear in the corpora. In B30 "Skin", to *pink* or *pink* up is a metonym for the colour of a person's cheeks when they blush (OED, *pink*, verb⁴ 1b). There were no citations of *pink* up in BNC and 7 citations in COCA, for example:

"Her color was gray until we did a third defibrillation and she finally "*pinked up*," says Kitty Pitsenbarger. (COCA)

Unsurprisingly, this is Friction Boy; blush response *pinking up* his already doomed neck. (COCA)

Five citations, such as the first one above, describe medical situations when a person's skin colour is returning to a healthy pink colour after being deprived of oxygen. The second example, along with one other, describes skin which *pinks up* out of embarrassment.

7.3.2 Homosexuality

Pink is categorised in C06 "Sexual relations" as the term can be applied to "homosexuals or homosexuality" (OED, *pink*, adjective 9). The OED gives the earliest attestation for this sense in 1950, however, *Green's Dictionary of Slang* (2010) predates this to 1908. Koller (2007) explains that the connection between gayness and pink lies in that between femininity and pink; a "violation of the heterosexual norm is consequently equated with gender inappropriateness, i.e. gay men are assumed to be feminine and gay women masculine" (ibid.: 408-9). The association of pink for girls and blue for boys is an arbitrary one established around the 1920s or 1930s, whereas previously the colour for boys was pink (Koller 2007: 403; Allan 2009: 633).

Also in C06 "Sexual relations" is *pink triangle* in reference to the badges sewn on to clothing to identify gay men in Nazi concentration camps (OED, *pink triangle*, S3). The *pink triangle* has since been reclaimed as a symbol showing support for homosexual freedom and rights (OED, *pink triangle*, S3) although this symbolism "has since been eclipsed by the less overtly political rainbow flag" (Koller 2007: 409).

This sense of *pink* is also found in Y09 "Money", in the phrases *pink pound* and *pink dollar*, referring to "the perceived spending power of homosexuals as a group" or in plural the money belonging to, or earned by, homosexuals (OED, *pink*, S3). Neither phrase was found in either corpus, though this phrase is currently in use in newspapers. Another related phrase, cited by Philip (2011: 224), which does not appear in the OED or HT, is *pink economy*. This phrase appears to have briefly preceded the *pink pound*, with an example found in *LexisNexis* in 1981:

Members will take out shares and the intention is gradually to build what the homosexuals call the "pink economy". (Guardian, September 1st, 1981).

No examples of *pink economy* were found in COCA and only two examples of this phrase were found in the BNC, including:

The example of corporate America waking up to the belated realisation that what has become known as 'the *pink economy*' represents significant purchasing power. (BNC)

Unlike the *black economy* (6.1.2) and the *grey economy* (7.5.5), which draw on the metaphorical sense of illegality, the *pink economy* refers to the collective spending power of a group associated with pink: homosexuals.

7.3.3 Licentiousness

Pink appears in T07 "Licentiousness" along with BCTs *blue* and *purple*, which are perhaps more established colour references in this area. *Pink* can be applied to something which is vulgar, indecent or risqué and, according to the OED, is now used chiefly in Japan to refer to pornography or the sex industry (OED, *pink*, adjective 7).

Koller (2008) carried out a questionnaire to discover people's attitudes and cultural associations with the colour pink and discovered a wide range of connotations, some of

which contradict one another. For example, informants associated pink with childhood (40.8% of informants), innocence (35.5%) and youth (29.6%), but also lust (30.8%), desire (29.0%), sexuality (29.0%), eroticism (28.4%) and sexiness (27.8%). Along with anecdotal evidence, these results led Koller to suggest that saturation can play an important role in meaning in addition to hue alone. She explains that "adding white to the shade triggers cultural associations of innocence", whereas increased saturation results in sexual connotations (2008: 404-5). Similar results were obtained by Frenzel-Biamonte (2011: 100) who found that in German *rosa*, which is very pale, is frequently associated with being delicate or gentle, in comparison to the English loanword *pink*, a much more vivid and highly saturated shade, which was frequently associated with being strong.

No evidence of *pink* was found in the corpora with the meaning of licentiousness. One creative example from the OED is given below:

The heroine argued that although she wasn't exactly scarlet, she admitted that she might be 'a little *pink*'. (OED)

The non-basic term *scarlet* appears in T05 "Moral evil" and the phrases *scarlet woman* and *scarlet letter* appear in T07 "Licentiousness". Similar senses are also held by the BCT *red* itself. This citation from the OED is another example of how a metaphorical use of pink operates on the red scale as a less extreme version of red.

7.3.4 Politics

One of the more peripheral uses of colour in politics involves pink. Within S03 "Politics", *pink* is first recorded as an adjective in 1820 describing someone "politically left of centre; radical; socialist; liberal", or occasionally communist, and is marked as derogatory (OED, *pink*, adjective III 5). Pink is considered less extreme than red in politics. This sense is also recorded as a noun, along with the derived form *pinkness* meaning "politically (somewhat) left-wing" (OED, *pinkness*, noun 2).

Also within S03 "Politics" are the terms *pinkie* and *pinko*; derogatory references to a people with left-wing views. *Pinkie* was first recorded in 1946 and no citations of the term were found in the corpora. The older term, *pinko*, dated 1925, is found in use in both the BNC and COCA. The OED defines *pinko* as someone "tending to liberal socialism; politically (somewhat) left-wing" (*pinko* adjective 2). The OED marks this as a chiefly

North American use, yet 4 examples were found in BNC, and a further 34 examples in COCA, for example:

Socialism makes you bald! [...] It's sunglasses all round as our richly-coiffed Tory front benchers try to fight eye-strain caused by their chrome-domed *pinko* opponents. (BNC)

Half, he said, called Buchanan a "right-wing madman"; the other half said he was a "left-wing *pinko*". (COCA)

The first example, published in *Punch* magazine, a British satirical publication, goes on to talk about the "red plague" of baldness that afflicts the Labour party. Though not all examples of *pinko* are clear in COCA, they describe both leftism and communism in the corpus, and are frequently derogatory in nature.

In British politics, the party traditionally associated with red is Labour. According to Philip (2011: 161), New Labour can be assigned the colour pink rather than red to represent a less extreme political stance than the Labour. As cultural references to British politics, descriptions of Labour as *pink* were restricted to use in BNC, with 3 examples, including:

The Financial Times, which was slow off the mark in exposing Labour's tax plans and by declaring for Labour has shown itself to be as *pink* as its paper. (BNC)

Labour candidates would range from *deep crimson* to *shell pink* (BNC).

Both of these examples are deliberate metaphors. The first alludes to the pale pink colour of paper the Financial Times is printed on and suggests that the newspaper's protection of Labour hints towards an allegiance to the party. The second example describes a situation where several candidates from the same political party stand in the same election and are thus competing with one another. Candidates from the Labour party are graded by how left wing their political stance is through colour. Here, meaning is expressed by both saturation and hue as the far left politicians are described by a deep shade of the traditional red (*deep crimson*); those who are closer to centre move into another hue (*pink*) which is extremely pale in saturation (*shell*).

7.3.5 Enjoyment

Within the theme of Enjoyment is the phrase *tickled pink*, meaning "to delight; to overcome with pleasure or amusement" (OED, *tickle*, verb II. 3.). First recorded in 1922,

there are 6 citations of *tickle pink* in the BNC and 46 citations of *tickle pink* in COCA, for example:

She joined in a singsong in the sailors' mess, [...] after drinking from a can of beer. 'We were all *tickled pink*,' recalls one sailor. (BNC)

Brant, who now helps run Diversified Telcomm, Inc., a Florida long-distance carrier with \$10 million in sales, was *tickled pink* that the waiters still remembered his name. (COCA)

As was seen above, several examples use the phrase for effect to tie in with the topic under discussion, such as:

You may be *tickled pink* to know that rose wine is gaining popularity around this country. (COCA)

The fact that the Washington Times was *tickled pink* over this new feminist birth in the first place should have been the tip-off. (COCA).

In the first example, *tickled pink* recalls the pinkish colour of rosé wine and in the second example the phrase evokes the association between the colour pink and femininity and thus feminism.

This phrase appears on Kövecses' (2002: 87) list of happiness metaphors, as HAPPINESS IS A PLEASURABLE SENSATION. *Pink* stands for happiness, and most likely reflects the colour of flushed cheeks from laughing as a result of being tickled. The positive meaning, especially in reference to good health, has led to the phrase *tickled pink* being adopted by the supermarket ASDA in their charity campaign for breast cancer and has recently became the name of a charity in its own right.

Paint the town pink appears in Z02 "Social events" MM category as a variant of the more established phrase paint the town red meaning "to enjoy oneself flamboyantly; go on a boisterous or exuberant spree" (OED, paint, verb¹ P1). The OED cites the variations pink and, a hyponym of red, vermillion. Philip describes paint the town red as an emphatic form of go out on the town, meaning to go out and have fun, usually by "drinking, socialising, and dancing" (2011: 177). When red is substituted for another colour it is to emphasise or contrast a particular metaphorical meaning, though the overall meaning of enjoyment remains. Only one example of the phrase with pink was found in each corpus:

Together they had *painted the town a decorous shade of palest pink*, dancing at Le Bal Anglais, or was it Mimi Pinson, necking in other people's rooms, walking the streets of Paris, hand in hand during one timeless and unforgettable spring. (BNC)

The perky Ponyville posse *paints the town... pink*, in three episodes featuring lessons in self-confidence and friendship (COCA)

Given that the colour pink is so close to red on the spectrum and in extended meanings, when one is substituted for the other the result may be to avoid associations with the latter colour and highlight new ones in the former. The first example describes a couple falling in love and so the use of *palest pink* captures the meaning of romance and love, both of which were associated with pink by half of Koller's informants (2008: 407). *Red*, on the other hand, is the more prominent connection with lust, which may have been suggested if the phrase was kept in its more frequent form to *paint the town red*, along with connotations of a boisterous night fuelled by alcohol.

The second example describes events in episodes of the children's programme *My Little Pony*, based on a plastic toy range of ponies available in a range of pastel colours. The use of *pink* opposed to *red* emphasises the target market of young girls and draws on the associations of innocence and childhood. The use of *pink* also carries on the alliteration of the "perky Ponyville posse paints".

7.3.6 Rejection

A *pink slip* is a "notice of rejection or dismissal" from employment or office (OED, *pink slip*, noun 2). This simple metonymy is named after the colour of the card the notice came in. The OED notes this is also used figuratively, and examples of figurative use from COCA are given below:

Feel better fast by giving these five unhealthy habits the *pink slip* today. (COCA)

We're a nation of busy women, so while we're whittling down our to-do lists, sleep often gets the *pink slip* first. (COCA)

In both examples, the rejection has moved outwith the context of employment, away from people and to a type of behaviour, making it a hypothetical action.

7.4 Orange

Previous studies have found that while the secondary BCTs are generally low in figurative uses, *orange* is devoid of any. This result was confirmed in the present study using the HT data. The results found are not examples that can be considered metonymy or metaphor.

For instance, the *Orange Order* is a political society "promoting Protestant and Loyalist principles" in Northern Ireland and North America (OED, *Orange Order*, noun). The association with the colour orange is accidental as the OED notes it most likely derives from an association with the coincidentally named William of Orange, or William III. Orange ribbons and scarves were symbolically used as a mark or allegiance.

Orange is also associated with certain industries or groups. An orange book is recorded in the OED with two uses: the first is the name of a "report of the former Ministry of Agriculture and Fisheries that was published in orange covers, and the second is a "set of computer system security classifications published by the U.S. Department of Defence in 1985" (OED, orange book, special uses). An Orange Badge was displayed by disabled drivers enabling them to relaxed parking restrictions in the UK, until the scheme was superseded by the European-wide Blue Badge scheme (OED, Orange Badge, special uses).

Also, while the phrase *to suck* (*or squeeze*) *an orange*, meaning "to extract all profit" or "vitality" from something (OED, *suck an orange*, phrases) is figurative, its meaning clearly derives from the properties of the fruit, its juice, and not in any way the colour.

7.5 Grey

The last monochrome colour is grey, which lies between black and white. The OED states that when used figuratively, *grey* is often "in place of or in contrast to *black* to indicate a less extreme form of the activity, object, person" and this gives rise to phrases such as *greymail*, *grey market* and *greyout* (OED, *grey*, adjective 9). *Grey* therefore represents a midpoint on a scale, borrowing metaphorical meanings from *black* and influenced by those of *white*. Other extended uses of *grey* are based metonymically on things which are grey in colour, such as *grey hair* and *grey matter*.

Table 7.5 Figurative meanings of grey in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Age	grey-headed	1578-	N
	grey power	1970-	Y
Authority	grey eminence	1831-	Y
Boring	grey	1893-	Y
	grey suit	1969-	Y
Intelligence	grey matter	1894-	Y
Illegality	greymail	1927-	Y
	grey market	1933-	Y
	grey economy	1977-	Y
Vagueness	grey area	1935-	Y
	greyout	1942-	Y

7.5.1 Age

Grey-headed appears in B03 "Age" and E29 "Ability" as a characteristic of advanced years or long experience which can be used in figurative contexts to signal something ancient, old or decrepit (OED, *grey-headed*, adjective 1b and c). This connection is metonymically based on the colour that hair turns in old age, and was first recorded in 1578. This phrase, and the similar *grey-haired*, were not found with a metaphorical use in either corpora. Below are two examples from the OED:

A venerable old lady with grey-headed experience. (OED)

The World is now grown old, *grey-headed*. (OED)

The first example refers to a human referent and, though the lady may indeed have grey hair, it is her experience which is being described as *grey-haired*. The second example is even more metaphorical as the world is conceptualised as a person with greying hair. Both examples carry positive connotations of *grey-headed* being wise and knowledgeable: qualities which come through age. The use of *grey* to signal age or experience was recorded slightly later than the phrase *grey-headed*, in 1602 (OED, *grey*, adjective 7a).

Grey can relate to the social, political or economic group of elderly people (OED, grey, adjective 7b). The first recording of such use is in the phrase grey power, which appears in the OED, but is not in the HT. The phrase means the political or economic power of elderly people collectively, being given after black power, a slogan used in support of political power for black people (OED, grey power S3a). Grey power is also cited by Philip (2011: 224), and Allan states that grey power refers to the lobby groups for senior citizens in Australia and New Zealand, with the US counterparts the Gray Panthers. There are 4 examples of grey power in BNC, 3 of which are the name of such a group, and 2 examples in COCA. For example:

Several authors look hopefully towards the emergence of a *grey power* movement in Britain to counter the ageism. (BNC)

So the key to the '*gray power*' vote could be whether they flock to Bill Clinton's proposals to revamp health care and the economy in the United States. (COCA)

Allan also gives the example *grey vote* but no citations were found in either corpus. Another example with this sense is the *grey pound*, which refers to the spending power of the older generation (OED, *grey pound* S3a). This use was given after the *pink pound* (see Section 7.3.2) and is first recorded in 1990; however, no examples were found in either corpus.

Another meaning of *grey market*, which was discussed above, was found in the corpora, but not the OED or HT, in reference to the market space occupied by the older generation. Three examples from the same source were found in BNC, including:

The agency brief is believed to have stressed the need to educate potential consumers about the costs of healthcare for the elderly. [...] Commercial Union is one of several major insurance companies to target the *Grey market* with specially designed policies. (BNC)

This is another example of how a particular colour can be used to refer to a particular social group.

7.5.2 Authority

Grey eminence is grouped in S01 "Authority and control" and refers to a person who "exercises power or influence in a particular sphere without holding an official position"

(OED, grey eminence, S3a). There are no examples of grey eminence in BNC, but 15 examples in COCA, including:

Brucan, a longtime Communist official who broke with Ceausescu in his last year in power and who is something of a "*gray eminence*" for the Salvation Front. (COCA)

The phrase is translated from the French *éminence grise* originally applied to Père Joseph, the confidential agent of Cardinal Richelieu (OED, *éminence grise*, noun). Despite there being no examples of *grey eminence* in BNC, 7 examples of the original French *éminence grise* appear in BNC and in COCA, such as:

You could say it was a folly on the part of Lord Cobham of Stowe, a local landowner and *eminence grise*. (BNC)

I had two interviews [...]. The first was with an *eminence grise* of the field, who refused to be interviewed on the record. (COCA)

The nickname apparently derived from his evil influence over the Cardinal, though it is now thought that the Cardinal ruled him and not vice versa (Ammer 1993: 90). This meaning is potentially derived via the DARKNESS IS EVIL metaphor, where *grey* described the individual's malicious nature and the metaphor is then extended to any such person with powerful influence.

7.5.3 Boring

Grey appears in F07 "Uniformity and stereotypes" in the sense of "[1]acking individuality, dull and nondescript; boring, characterless; (also) anonymous, faceless" (OED, grey, adjective 10b). The OED notes that this is "sometimes with connotations of conformity or bureaucracy", as in the use of grey suit, when "conventional formal dress is regarded as suggestive of a conservative, bureaucratic, or conformist attitude, a lack of individuality" (OED, grey suit, special uses). All examples given in the OED of grey suits in this sense are plural suggesting that the meaning is a generalised idea about a group. The connection between this sense and clothing is also highlighted in the Bloomsbury Dictionary of Contemporary Slang (1991), where it is stated that, when this use of grey was popular in the sixties, most British males did dress in predominantly grey or muted tones. At the time this stood in sharp contrast to the metaphorically and literally more colourful hippies. Examples from the corpora include:

The greying of the City, you could euphemistically call it. More grey matter, more *grey suits*, more grey faces. The City's once colourful financiers could still prove the theory wrong. (BNC)

He brought a guest with him, an Albanian politician whose pale face and illfitting *gray suit* made Doug seem all the more radiant. (COCA)

The first example gives an extended metaphor, where it is no longer only clothing that is indicative of conformity, but the minds (*grey matter*), complexion (*grey faces*) and city as a whole. Furthermore, the grey is contrasted with the previously *colourful* nature (see Section 4.2.6). Even when *grey suit* is not used metonymically to stand for a group, in the example from COCA, it is a sign of being nondescript. Similar meanings of boringness are found for the non-basic colour term *beige* and other pale colours (see Sections 7.6.8 and 7.6.9).

7.5.4 Intelligence

Grey matter was the most frequently found expression with grey in Philip's study (2006: 77). Grey matter and white matter both appear in B42 "The brain and nervous system" on the basis of being types of brain tissue. Grey matter is the darker of the two and so the phrase is metonymical in origin. Because the active part of the brain is associated with grey matter, the phrase can be used to refer metaphorically to intelligence. Grey matter appears in the BNC 26 times, of which 17 are metaphorical, and 158 times in COCA, of which only 34 are metaphorical. In practice, however, the examples from the corpora lie on a scale between literal and metaphorical usage. At the furthest end of the metaphorical spectrum are examples such as the one below:

Where the blue chip companies find their *grey matter*. Many companies in manufacturing and services have established successful operations in Northern Ireland [with a] readily available and continuing supply of highly educated school-leavers and graduates. (BNC)

Here, it is blue chip companies which are described as having *grey matter* rather than an individual person. The section that follows explains that it is the collective brain power of the companies' well educated recruits that form the intelligence behind the company as a whole.

The majority of metaphorical uses of grey matter mean intelligence, such as:

While some of the financial concepts just barely made it through my *gray matter*, I did notice something that seemed off. (COCA)

In one example in COCA, *grey matter* is being used to describe the imagination, rather than intelligence or other more general brain function:

I closed my eyes, and, deep within my gray matter, caught the next train to Alabama. (COCA)

In addition, a few examples of *grey matter* indicate the brain function of memory, such as:

My boyfriend's criticism [...] signaled in no uncertain terms the loss of our connection - a shock that has apparently etched his words into my *gray matter*. (COCA)

But Gosseyn's memories, in this area, were false: imprints on his *gray matter*, having no bearing on reality. (COCA)

Grey matter is described as *old* 3 times in BNC and once in COCA, for example:

It just requires a little time and activity from the old grey matter. (BNC)

The old *grey matter* still sparks occasionally. (COCA)

Furthermore, reference to old age is made via grey hair in 2 examples in COCA, given below:

It is obvious that the information was not evaluated, and the only *gray matter* that entered in the decision was the gray in their hair. (COCA)

The dye may conceal gray hair, but *gray matter* is another question. An applicant's advanced degrees may threaten some interviewers or cause them to worry that if hired, the worker may not stay long with the company. (COCA)

These examples may be highlighting a connection between *grey matter* and grey hair, as the association between aging and the colour grey via hair colour could be influencing the meaning of *grey matter*.

7.5.5 Illegality

Steinvall found that *grey* is used very frequently to designate the middle area of some domain and in the domain of the economy, *grey* represents a borderline case between what

is legal and what is illegal (2002: 211). The *grey economy* was first recorded in 1977, not long after the *black economy* in 1974. Like the *black economy*, the *grey economy* is conducted by informal commercial activity which is unaccounted for in official statistics, but is "regarded as less ethically or legally questionable than the black economy" (OED, *grey*, S3a). There are no examples of *grey economy* in the BNC and only 6 examples in COCA, for example:

Macedonians live in part on the remittances from overseas relatives, in part on their wits, and in part on their "gray economy." Banks are not trusted. (COCA)

This is not quite a "black" economy, for money rarely changes hands, but is better described as the gray economy, or charcoal, or something else resembling the color of night. (COCA)

In the second example, the metaphorical meaning is captured in the discussion on what colour most aptly describes the economy. The economy is not entirely black, but dark like *charcoal* or the "color of night".

The New Partridge Dictionary of Slang and Unconventional English (2006) also records grey list meaning "to hold a person under consideration for blacklisting", which is not recorded in the OED. Only 3 examples were found in COCA (2 of which are from the same source). For example:

The searchers had interviewed only 13 scientists among some 200 people on the government's black list of "high-value targets" or among the thousands of midlevel people on the so-called *gray list*. (COCA)

This example suggests a grading in how dangerous the people on each list are considered to be, with *grey* standing for a less extreme threat than *black*.

Grey market was found in 38 examples in the BNC compared to only 3 in COCA. There are two senses of grey market recorded in the OED. The first appears in Y09 "Money", and exists on a scale with black market and white market. According to the OED, the grey market refers to the "Legal but arguably unethical traffic or trade in any officially controlled goods or currencies, or in commodities in short supply" (OED, grey market, noun 3). Whereas the white market deals in substances which are rationed or otherwise in short supply, the black market does so on an illegal platform. The grey market, though

legal, is still unethical. Only 3 examples of *grey market* were found in each of the BNC and COCA, for example:

Availability of oral opioids on the 'grey market' to drug users not receiving a prescription may be a factor. (BNC)

According to Allan, the *grey market* is "barely distinct from a *black market*" (2009: 629), and two examples from COCA support this statement as *grey market* is used synonymously with *black market*:

An underground market in foreign currency or, in the terms used here, a *black market* typically develops. This phenomenon also is called, variously, the "*grey market*," the "street market," the "unofficial market." (COCA)

Cash-strapped states, he predicts, will increasingly seek to replace the "grey market" of illegal betting parlors with legal video-game lotteries and riverboat gambling. (COCA)

The low numbers in the corpora suggest that this meaning is not conventionalised and one reason for this may be that there is such a small distinction between a *black market* and *grey market*.

An additional reason why this sense is not particularly frequent may be the fact that another meaning of *grey market* was found in the corpora much more frequently than the sense explained above. A *grey market* can also describe trading in a security before it is officially released on the Stock Exchange (OED, *grey market*, noun 2). Found within Y08 "Trade and Commerce", it appears 32 times in the BNC and once in COCA, for example:

The Zeneca shares started at 700p in the 'grey' market, but now are in danger of slipping right back to the 600p price before the closing date of June 21. In practice, he will be compelled to rely on historical and global capitalist prices, and on prices in the parallel black and grey markets which everywhere mitigate the chaos of socialist central planning. (COCA)

According to the OED, *greymail* serves as a milder form of blackmail, which it is named after. First recorded in 1927, it appeared relatively recently compared to its counterpart *blackmail*. Rather than demanding money, *greymail* uses compromising information to exercise power over a person (OED, *greymail*, noun 1). A second, narrower sense appears in the OED, used in US Law, to describe "the threat of revealing government secrets, made by an accused party (esp. in cases of espionage) as a strategy of avoiding prosecution"

(OED, *greymail*, noun 2). It is the latter sense which appears in S07 "Law". No examples of *greymail* were found in the BNC, but 7 examples appear in COCA, for example:

Ferreting out whistleblowers was just part of each litigant's strategy to play on the other's fear of sensitive information becoming public. Lawyers on both sides used the words "*greymail*" or "blackmail" during conversations. (COCA)

The Classified Information Procedures Act was passed in 1980 to address the problem of *graymail*, (n388) which arose most often in the prosecution of U.S. intelligence operatives. (COCA)

All citations in COCA have a legal context, and only one (the first above) refers to a company, rather than the government, being threatened to have their secrets exposed. The definitions of *blackmail* and *greymail* suggest that the former is concerned with money, but the latter with the power held with incriminating evidence. However, not all examples of *blackmail* explicitly mention payment or money, and so, along with the very high figures for *blackmail*, this suggests it is used more frequently and with a wide application, including all types of extortion.

7.5.6 Vagueness

A *grey area* is the space occupied by issues or topics which cannot be considered *black* or *white*; it is the middle ground in which there is vagueness or lack of clarity. The OED defines the phrase as "An intermediate area between two opposing positions; a situation, subject, etc., not clearly or easily defined, or not covered by an existing category or set of rules" (OED, *grey area*, noun 1). This is the most frequent *grey* metaphor in both corpora, with 111 citations in the BNC and 505 citations in COCA. Examples of *grey area* include:

His job was to ensure the communists got the required 99 per cent vote at elections and to maintain some semblance of a dialogue with people in the *grey area* between loyalty and opposition. (BNC)

"Can not accept any personal gifts." He wants no *gray area* in his life-he is a man of integrity. (COCA)

The divide between social drinking and alcoholism is a *gray area* that researchers and therapists are still unable to navigate with ease. (COCA)

A number of examples in the corpora involve *grey areas* in legal contexts, where one would expect there to be a very clear "set of rules". Steinvall highlights that there is no fuzzy border between what is legal and what is illegal from the point of view of the law, but there may be a vagueness surrounding the morality (2002: 211). A number of examples from the corpora capture the moral and ethical ambiguity involved in the law, for example:

Avoidance is a *grey area* at the boundaries of legality and illegality. (BNC)

Others lurk in a legal *gray area*, accepting "suggested donations" for the food and wine to get around requirements for business and liquor licenses. (COCA)

Reference is made to the black and white continuum in several examples of *grey area*, for example:

I didn't mean to divide the world into black and white, you know. Of course there's a *grey area*. (BNC)

Well, now wait a minute. I don't think things are that black and white. No, there's a lot of *gray* area. (COCA)

On the other hand, a small number of examples negate the existence of a *grey area* on certain issues, often stating that the topic is *black and white*, for example:

Indeed, most scientists say there is no real *gray area* in the black-and-white world of classified and unclassified science. (COCA)

He sees things in black and white. There are no gray areas with this president. (COCA)

Another sense of *grey area* is found in the OED and the HT, in Q02 "Buildings and inhabited places", meaning a residential area affected by poverty but not regarded as a slum (OED, *grey area*, noun 2). Again, the meaning of *grey* is something which is on the midpoint of a scale; rather than at either extreme end. This meaning was not found in the corpora.

Grey-out was not found in BNC but does appear a total of 18 times in COCA, with various nuances of meaning, often bordering literal and metaphor use. The first sense of *grey out* is to "drain of colour", then metaphorically to "reduce the distinctiveness, individuality, or

vitality of" (OED, *grey*, phrasal verbs 1a). Two examples were found in COCA in which *grey out* is used to refer to something which has been made paler:

There's also FocusMode, which *grays out* all text on the screen except for the one sentence you're working on. (COCA)

Three or four months after application, the sun doesn't '*gray out*' the finer product as much as the coarser one. (COCA)

Both of these examples describe things (text and wood chips) which have lost some of their colour. In the first citation, the function of software described is to help a writer minimise distraction on the screen they are working on and so the *greyed out* text is made paler in contrast to sharp black text. As a result, the text fades into the background and becomes less noticeable. Similarly in the second example, *grey out* describes the bleaching effect the sun has on wood chips. In addition to meaning something which appears paler, *grey out* can also describe blurred vision. For example:

There were no streetlights at this end of the block, and the rain obliterated the outlines of the houses and cars, *graying out* the suburban scene. (COCA)

In this example, the darkness and rain are obscuring the person's sight. The incoherent shapes and colours blur together to give an overall appearance of greyness. *Gray out* can also refer to vision which has become blurred when losing consciousness:

I hit the other bulkhead, my vision graying out, then managed to get to my feet again. (COCA)

The OED defines this sense as "partial or incipient blackout" (OED, *greyout*, noun) and so again it is a less extreme version of the similar *blackout*. Only three examples of this sense appear in COCA, two of which are from the same source. The use of the present participle alludes to the onset of losing consciousness rather than to the completed state. This is the only metaphorical sense of *grey out* in the HT and appears in the category C01 "Physical sensibility".

The remaining citations refer to the use of *grey out* in computing. According to the OED, something (such as a menu or icon) which is displayed in grey or more faintly, is used to indicate that the option is unavailable (OED, *grey*, phrasal verb 1b). Examples include:

If you haven't created a password before, the Old Password field will be *grayed out*; otherwise, enter your old and new passwords in the required fields, and click OK. (COCA)

If the Connect button is disabled (*grayed out*) in the Wireless Network Connection dialog box, the network may lack Wired Equivalent Privacy or newer Wi-Fi Protected Access security. (COCA)

All but one citation are from the computer magazine *PC World*, which reflects that this sense is restricted to a technological context. What all of these examples share in meaning is the use of *grey* to describe something which is no longer there, unavailable or difficult to see.

7.6 Non-Basic Colour Terms

Non-basic colours have largely been neglected from the study of the metaphorical use of colour. One exception to this is a short discussion on a selection of non-BCTs by Steinvall (2002), who suggests that the low salience of both the colour concept and the term make non-basic CTs less likely figurative candidates. Any figurative sense held by them is usually attributed to its pre-colour sense. Research by Casson (1994), Kerttula (2002) and others has shown that many of the non-BCTs in English once also held non-colour entity senses. These non-BCTs entered the lexicon via a metonymic process, whereby "entity stands for entity's colour" (Casson 1994: 17). An entity with a strong colour association, for example the plant *lavender* (whole), is used to stand for the hue of the flower (part).

A problem associated with researching non-basic colour terms in corpora is that due to the polysemous nature of the terms, both the entity and the colour are retrieved by searches. For example, the 507 and 2,793 examples of *lavender* in the BNC and COCA respectively include only a small proportion of references to the colour. Furthermore, whether metaphorical uses of these terms draw on the colour sense or entity sense is often ambiguous, and is discussed in the examples below.

7.6.1 Scarlet

The term *scarlet* originally referred to the name of a cloth, often bright red in colour, but also sometimes of other colours (OED, *scarlet*, noun 1a). *Scarlet* was later restricted to denote cloth or clothing of a bright, vivid red colour, inclining to orange, before narrowing to denote this shade of red as a colour term. The metaphorical connections regarding *scarlet* are listed in the table below:

Table 7.6.1 Figurative meanings of *scarlet* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
High rank	scarlet	1496-	N
	scarlet-day	1632/3-	N
	scarlet runner	1864-	N
Licentiousness	scarlet whore	1590-1709	Y
	scarlet lady	1807-	N
	scarlet woman	1816-	Y
	scarlet letter	1850-	Y
Embarrassment	scarlet	1597-	Y
Wickedness	scarlet	1623-	Y
Love	scarlet fever	1846-	N

7.6.1.1 High Rank

The colour *scarlet* holds many associations, the majority of which draw on its use as a cloth or in clothing. Within B77 "Textiles" *scarlet* is also subcategorised under "textiles with specific qualities" and "rich or costly". Also in the B77 "Textiles" category are *London scarlet*, the name for a particular colour of cloth (OED, *London*, noun u), and *Welsh scarlet*, marked as ironic in the OED, meaning a worn out piece of clothing (OED, *Welsh scarlet*, S4). The second name inverts the traditional association of scarlet as a cloth which is rich and costly.

In the neighbouring category B78 "Clothing", *scarlet* can refer to an "Official or ceremonial costume of scarlet, as the uniform of a soldier, the gown or robe of a doctor of divinity or law, a judge, a cardinal, etc.; also, the scarlet coat worn in the hunting field" (OED, *scarlet*, noun 3). Steinvall suggests this use is rare and is becoming restricted to historical discussion (2002: 175). According to the OED, the rank, dignity or office may also occasionally be signified by the scarlet robe and this extended meaning is apparent from the categorisation of this sense in S04 "Political office". Through a part-for-whole metonymy, *scarlet* can be used to indicate one who wears a scarlet uniform or insignia, such as a judge, man in the hunting field or soldier (OED, *scarleter*, noun 4a and b), also referred to in the seventeenth century as a *scarleteer* (OED, *scarleteer*, noun). Similarly, in

obsolete military slang a soldier was called a *scarlet runner*, in reference to his scarlet jacket.

As mentioned above, several metaphorical uses of *scarlet* can be traced back to a connection with the cloth or clothing as well as the colour. Within E30 "Time", a *scarlet-day* or *scarlet-gown day* is "an occasion in university or civic life observed by the public wearing of state or official robes of scarlet" (OED, *scarlet*, C2a). No examples were found in the corpora.

7.6.1.2 Licentiousness

Perhaps the most current figurative use of *scarlet* is licentiousness. Gieroń-Czepczor (2010: 33) draws a connection between the figurative meaning of licentiousness attached to both *scarlet* and its superordinate *red*, pointing out that: "*scarlet woman* and *red-light* areas reflect the connotations of sexual sin".

The phrase *scarlet lady* was first recorded at the start of the nineteenth century. According to the OED, this was "an abusive epithet applied to the Church of Rome in allusion to Rev. [Revelation] xvii. 1–5" (OED, *scarlet*, C2a). The *scarlet lady*, also called the Whore of Babylon, was a figure of evil and corruption, clothed in scarlet and draped with gold and pearls. Only two examples of *scarlet lady* are found in the BNC: however, they refer to the name of a Virgin Atlantic aircraft:

He says the mood on board the freedom flight, the *Scarlet Lady* was a mixture of relief and regret. (BNC)

The *Scarlet Lady* is an image of a woman or flight attendant wearing a red dress used for marketing purposes by the company and the colour red corresponds to that of their branding. A playful juxtaposition is created between the pejorative meaning of *scarlet lady* and the name of the company, Virgin. Other near synonyms include *scarlet whore*, first recorded in 1590. Two examples were found in COCA, and both in the full form the *scarlet whore of Babylon*:

And did I mention these puddings are soaked in copious amounts of booze? This could be why the Quakers once called plum pudding "the invention of the *scarlet whore* of Babylon." (COCA)

His tone [...] was tinged with the modest satisfaction of the prophet who has correctly foretold the earthquake, the plagues of hail and scorpions, the frogs coming out of the mouth of the dragon, the sea of fire -- and who still has the *scarlet whore* of Babylon up his sleeve. (COCA)

Lastly out of this set of synonyms is the phrase *scarlet woman*, which is still in current use, with 20 examples of *scarlet woman* in the BNC and 13 examples in COCA. For example:

I took your father away, n'est-ce pas? In your mind I was a *scarlet woman* and could be nothing else. (BNC)

Within months she had gone from America's Sweetheart to Scarlet Woman (COCA)

The New Partridge Dictionary of Slang and Unconventional English (2006) also records scarlet sister (first attestation 1951) and scarlet collar (first attestation 1985) meaning a prostitute. The later construction follows the pattern of blue-collar and white-collar for types of worker according to their uniform (6.6.15).

In Nathaniel Hawthorne's *The Scarlet Letter*, a romance novel first published in 1850, the protagonist gives birth to an illegitimate child and so is made to wear an embroidered red letter 'A' (standing for 'adultery') on her clothing as a symbol of her sin. Only two examples of *scarlet letters* were found in the BNC, both of which referred to the book. In COCA, however, along with many references to the title of the book or the symbol within it, there are also 61 examples of the symbol being applied to other contexts, such as:

Grading should only be a measure of a child's learning, not a *scarlet letter*, Smith says. (COCA)

The stain of the allegations is like a scarlet letter that never really goes away. (COCA)

The first example is particularly apt given that grades are often written in red ink. In the second example a comparison is made between a scarlet letter and a stain as both become metaphors for an indication of bad reputation.

7.6.1.3 Embarrassment

Scarlet appears in B30 "Skin" under the meaning of turning red with shame or indignation. This use is not confined to embarrassment. Like *red* (6.3.4), *scarlet* can signal anger. Sirvydė (2007: 150) found that when *red* is used to collocate with *anger*, the emotion can range from *pink* to *red* to *scarlet* as the "darker or more intense the colour (red) is, the

angrier they are in English". According to the OED, blushing is referred to via the colour terms *red* and *scarlet*, and a few other non-basic terms too, such as *ruddy* and *vermilion*. Examples from the corpora include:

Watching in satisfaction as his cheek turned *scarlet*. (BNC)

I [...] saw the stares of all the boys my age. I felt myself flush *scarlet* with humiliation. (COCA)

Scarlet collocates with many emotions in the corpora, from anger, fury and rage, to humiliation, shame and embarrassment, to excitement, pleasure and passion.

7.6.1.4 Wickedness

As discussed above, *red* has long been associated with immorality and sin, and so too is the hyponym *scarlet*, as evidenced below:

Though your sins be as *scarlet*, they shall be as white as snow (Isaiah, 1:18)

Scarlet is categorised under the T05 "Moral evil" MM category as an offence or offender may be described as scarlet meaning they are heinous (OED, scarlet, adjective 2a). One example found in the BNC comes from poetry but offers an example of scarlet in the sense of evil:

The seven hills of Babylon meant Rome, and, once there, he went to town on *scarlet*, and fornication, lulling himself with wrath. (BNC)

This example of *he went to town on scarlet* combines the metaphorical extensions *to paint the town red* and *to go to town*. Connected is the use of *red* and *scarlet* to signal sex and lust, a particular type of sin.

The OED includes another definition of *scarlet* as an "aristocratic street ruffian, a Mohock" (OED, *scarlet*, noun 5) within the E28 "Behaviour and conduct" category. The only quotation given by the OED is from the turn of the eighteenth century. It is possible that this meaning may be based on a metonymic use of the colour scarlet in the ruffian's dress, although it more likely draws on the metaphorical use of *scarlet* as something evil or wicked.

7.6.1.5 Love

A humorous use of the phrase *scarlet fever* alludes to women's or girls' attraction to soldiers in red uniforms (OED, *scarlet fever*, noun 2). This use of the phrase attaches the well-established metaphor LOVE IS ILLNESS (for example Kövecses 2010: 26) to the name of the disease *scarlet fever*, which is characterised by a distinctive scarlet rash. In this instance, *scarlet* metonymically alludes to the officers' uniform. No such uses of this phrase were found in the corpora.

7.6.2 Gold

Gold, and other metallic terms, are often used with figurative meanings. These meanings are usually attributed entirely to the properties of the precious metal that is high in value. Yet gold is valuable for several reasons, such as its scarcity and chemical properties, but also because of its appearance. The beauty and unique colour of *gold*, in contrast to other metals, have caused it to be in high demand. The phrases discussed here relate to its meaning of value which is equated with money, and things that are excellent or successful. A counter example to this is found in the context of sport, where *golden* has a negative meaning.

Table 7.6.2 Figurative meanings of *gold* in the HT and corpora

Metaphorical	Phrase	Dates of	Examples in
Extensions		figurative use	Corpora
Eloquence	golden mouthed	1577-98	N
Popularity	golden girl	1896-	Y
	golden boy	1937-	Y
	golden oldie	1966-	Y
Bribery	golden (silver) key	c1450-	Y
	gold proof	1619	N
	golden handshake	1960-	Y
	golden handcuffs	1976-	Y
	golden parachute	1981-	Y
	golden share	1982-	Y
	golden hello	1983-	Y
	golden skirt	20086-	N

⁶ First attestation found in *LexisNexis*, *The Economist*, 3rd January 2008.

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Sport	to make a gold	1876-1882	N
	golden duck	1967-	Y
Special Treatment	gold card	1970-	N

7.6.2.1 Eloquence

Within O03 "Speaking" is *golden mouthed*, meaning pleasing or eloquent speech. *Mouth* metonymically stands for the act of speaking and *golden* stands for excellence and value. This meaning was not found in use in the corpora.

7.6.2.2 Popularity

A *golden girl* was recorded before a *golden boy*, yet only the latter is given a definition in the OED: "a popular or successful boy or man" (OED, *golden boy*, special uses 2). Most examples of *golden girl* in the corpora refer to a character's name or the title of the TV programme *Golden Girls*. Excluding these, there are 22 examples in the BNC and 109 in COCA. For example:

And Britain's *golden girl* at the Barcelona Olympics, farmer's daughter Sally Gunnell, is rewarded for her thrilling 400m hurdles win with the MBE. (BNC)

Adele sets the record straight. Is the Grammy *golden girl* really taking a hiatus after her big Grammy win the other night? (COCA)

Golden boys were more frequent in the corpora, with 39 examples in the BNC and 171 in COCA. For example:

Britain's *golden boy* who lost his shine when newcomer David Grindley beat him for the final place. (BNC)

The former golden boy is now nothing more than a public disgrace. (COCA)

In many examples, such as the second given, a negative tone is used with *golden boy*, suggesting that the man in question is no longer very *golden*. Unlike *golden girls*, who are mostly restricted to sportspeople or celebrities, with physical strength or beauty, *golden boys* are often successful business men or politicians. For example:

Sugar had half the company then, was the *golden boy* of the decade, and was worth at least 600m on paper. (BNC)

He joined Boeing in 1965 after getting a master's degree in aeronautical engineering from Princeton and was quickly identified as a *golden boy* destined for greater things within the company. (COCA)

A *golden oldie* is an old song or film that has remained popular, or an elderly person who has retained their popularity, especially a veteran performer (OED, *golden oldie*, draft additions). There are 32 examples in the BNC and 99 in COCA. For example:

She [...] told Ira Dilworth that I was a 'capable director'. She has been one of my favourite 'golden-oldies' ever since. (BNC)

The radio is tuned to a station that plays the *golden oldies* of Frank Sinatra and many others of the 1940s and 1950s. (COCA)

Most of the corpus examples of *golden oldie* are of songs, films or people, although there are also a few examples of clothes, cars or books that are considered old and popular, or more often, topical issues that were being returned to:

Many commentators assumed the 1992 contest would be a medley of the GOP's favorite *golden oldies* from elections past - welfare and affirmative action, gays and abortion. (COCA)

In cases such as this, abstract ideas are described as *golden*. The issues are not exactly popular, but contentious, which is why they remain current, in spite of being old.

7.6.2.3 Bribery

There are numerous phrases involving *gold* and *golden* in Y08 "Trade and commerce". One of the oldest of all the gold phrases is a *golden*, or sometimes *silver*, *key*, which is a type of bribe exchanged for "something that one needs or desires" (OED, *golden key*, noun¹ 4c). In this case, *gold* or *silver* stands for the money that changes hands. There are 5 examples of *golden key* in the BNC and 4 examples in COCA. For example:

When you learn how to search out and retrieve information you are in possession of a *golden key* to doing successful public relations. (BNC)

"And at that point, it was like a golden key was given to me," he went on, his voice dropping. (COCA)

However, the exchange of money is not explicit in any of the corpus examples, suggesting the phrase now means a valuable piece of information or knowledge that can metaphorically open doors. The reverse sense is held by *gold proof*, an obsolete phrase meaning "proof against being bribed or tempted by gold" (OED, *gold proof*, compounds).

A number of phrases involve the business practices of corporations. For instance, a *golden handshake* is "a gratuity given as compensation for dismissal or compulsory retirement" (OED, *golden handshake*, special uses 2). There were over double the number of *golden handshakes* in the BNC, with 32 examples, than in COCA, with 15 examples. For instance:

Thirty retired council officers may have to pay back their early retirement *golden handshakes*, because of a High Court ruling. (BNC)

For example, because laws prohibiting age discrimination outlaw mandatory retirement, older executives and professionals who suffer little if any discrimination can extract lucrative "golden handshake" retirement incentives from their employers. (COCA)

The use of *golden* to mean a benefit of some sort is found in the very recent coinage *golden skirt*, describing women who accumulate several directorships on boards. Not found in the OED or corpora, the earliest use found within *LexisNexis* is from 2008:

Because of this, some of the best women have collected as many as 25-35 directorships each, and are known in Norwegian business circles as the "golden skirts". (*The Economist*, 3rd January 2008)

The use appears to originate from Norway in response to changes in the law setting targets for the number of females in top positions of public companies.

Benefits that employers offer their employees to make it "difficult or unattractive" for them to leave and work elsewhere are called *golden handcuffs* (OED, *golden handcuffs*, special uses 2). Seven examples were found in the BNC and 17 examples in COCA. For example:

Company pensions were the *golden handcuffs* which chained staff to a company. (BNC)

After the four-year vesting period for employee stock options ended, the *golden handcuffs* were off. (COCA)

According to the OED, *golden handcuffs* gave rise to a *golden hello*; a large sum offered to a senior person as enticement to move firms (OED, *golden hello*, special uses 2). There are 10 examples in the BNC and 2 in COCA. For example:

Without the new grant for *golden hellos* the World would have lost its research workers. (BNC)

Perks such as *golden hellos*, lease car schemes, mileage allowances and relocation allowances could also be at risk. (COCA)

A *golden share* is a "residual stake in a company" that "allows the holder to veto any undesirable changes", and is often held by the government when a nationalized industry is privatized, according to the OED (OED, *golden share*, draft additions). There are 29 examples in the BNC and 3 in COCA. For example:

He also would like all correspondence about the future of the Government's 'golden share' in Rover to be published. (BNC)

One alternative [...] is the implementation of *golden shares*, retaining effective veto power, and restricting foreign investors to nonvoting shares, so that countries, acting as investors, will not be able to steer the recipients of their investing in any direction they desire. (COCA)

Golden shares may not have a high monetary value, but they offer a lot of power to sway big decisions. The final business metaphor is a *golden parachute*, a long-term agreement "guaranteeing financial security to senior executives dismissed as a result of their company being taken over or merged with another" (OED, *golden parachute*, draft additions). COCA has more examples than the BNC, with 100 examples to 7. For example:

Directors may receive substantial compensation for premature termination of their employment contracts, or may benefit from a 'golden parachute'. (BNC)

And when he left to run for vice president, he got a multimillion-dollar *golden parachute*. (COCA)

In most of these phrases, *golden* stands for the money that is exchanged for some form of bribe or compensation, and consequently its value in the form of leverage.

7.6.2.4 Sport

To make a gold is an obsolete phrase for hitting the bull's eye in archery (OED, gold, noun¹ 6). In contrast, a golden duck is "an instance of a batsman being dismissed on the first delivery faced" or "a score of nought obtained" in cricket. There were only 3 examples in the BNC. For example:

There was a hush of expectancy as he walked to the wicket... but this is what happened the first ball he faced... Out for a *golden duck*. (BNC)

The Mayor [...] was angry last year after Darlington scored a public relations *golden duck*.

There was a booking mix-up which meant [...] that Mr Wright and the Darlington Cricket Club secretary Mr Brian Dobson could not take the West Indian official team portrait. (BNC)

In the second example, the meaning of a *golden duck* has been extended outwith the context of the game of cricket and into a PR situation, during which a mistake was made. The participants are cricketers, however, and so *golden duck* is another example of a sporting metaphor that has partially been extended but not as far as into a completely different domain (see *red card* at 6.3.6 and *yellow card* at 6.4.5).

7.6.2.5 Special Treatment

The OED defines a *gold card* as a "preferential credit or charge card allowing the holder access to a range of benefits and financial services not available to regular card-holders (a proprietary name in some applications)" (OED, *gold card*, draft additions). According to the *Bloomsbury Dictionary of Contemporary Slang* (1991) this meaning has inspired the use of *gold card* as a verb meaning to "assert oneself, behave ostentatiously or resolve a situation by the use of wealth". Although a modifier rather than a verb, the only similar extended sense found in the corpora is from COCA:

The beautiful people land here for ravishing beaches, gourmet cuisine and discreet resorts, all colored by European beau monde, fashion models and *gold-card* flash. (COCA)

The OED notes that the concrete meaning of *gold card* is also used in transferred senses, but none of the examples provided illustrate this. As no examples of *gold card* being fully extended to describe behaviour were found in the corpora, the first attestation is unknown.

7.6.3 Livid and Puce

Steinvall (2002: 154-155) found a strong correlation between the use of *puce* as a facial colour and the concepts of anger and rage and proposed that it may be displaying a similar development as the term *livid* followed, in that *puce* may also be leaving the colour domain. Table 7.6.3 show the figurative meanings for the non-BCTs *livid* and *puce*.

Table 7.6.3 Figurative meanings of *livid* and *puce* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Anger	livid	1912–	Y
	puce	1925*-	Y

Livid originated as a bluish leaden colour that describes the discolouration of a bruise (OED, *livid*, adjective 1) and is represented in B07 "Ill-health", under Blemish, and D35 "Individual colour", under *blue*. For example:

The wound was swollen and *livid*: the colours of bruising were showing already. (BNC)

The teacher pointed to a *livid* bruise below McGrotty's dirty left knee cap. (COCA)

The corpus examples also describe scars and other injuries as being *livid*, which may or may not involve bruising, such as:

For the rest of his life he bore a thin but *livid* scar on the right-hand side of his face. (BNC)

Physical injuries are described as *livid* and "inflamed" skin is described as *angry* (OED, *angry*, adjective 8). *Livid* is recorded with the meaning of being "Furiously angry, as if pale with rage" from 1912, and is located in the category I07 "Anger" (OED, *livid*, adjective c). Examples of the figurative sense include:

Pa would've been *livid* with me for getting pregnant. (BNC)

Mike could see Ahearn get *livid*. Literally. His red complexion went white around his mouth, and his lips peeled back from his teeth in a vicious grin. (COCA)

While the definitions and corpus examples may suggest that *livid* has gone full circle in its colour designation, moving from dark to pale, there is an additional sense of the term that

may explain this anomaly. According to the OED, *livid* can be "Prefixed, as a qualification, to other adjectives or substantives of colour" (*livid*, b). Although the OED gives no details of how *livid* qualifies colours, examples from the corpora imply that *livid* colours stand out and can include a range of hues. For example:

The warmth and mildness has brought a fine crop of toadstools. The most spectacular of these have been some magnificent specimens of Verdigris agaric. [...] They had sprouted from buried wood in the vegetable garden and sported *livid* blue-green, slimy caps. (BNC)

I manipulated the controls, changing the grid's display to a mosaic of *livid* red against black. (COCA)

Although the figurative sense of *livid* meaning anger is now more common than its description of a bruise, both senses are current. Due to its association with injury, *livid* has developed a sense of extreme and is not in fact associated with any specific hue. Instead, it describes contrast in colours, whether dark or light (see also *stark* in Section 5.3.2).

Another non-BCT that collocates with anger is *puce*. As a non-BCT it denotes "a purple brown or brownish purple colour" (OED, *puce* adjective), but is used to describe facial colour 10 times in the BNC and 16 times in COCA, although not exclusively as a result of anger. For example:

His face was *puce* with rage and frustration. (BNC)

All was going to plan on Sunday and His Smugness had grand plans for his 800 in winnings when Harrington's hole-in-one on 16 turned Hannan's face *puce*. (COCA)

This use of *puce* recalls the sense of anger contained in the phrase *blue in the face* (see Section 6.6.8), as both facial colours may be explained by the lack of breath caused from over-exertion, or from holding one's breath in trying to suffocate the emotion. Yet neither *blue* nor *puce* is a colour that can be used to literally describe skin. Rather the terms are used hyperbolically to indicate a heightened colour caused by blood rushing to the surface. In the BNC 70% of all uses of the colour *puce* refer to facial colour, which strongly corresponds with Steinvall's findings, in contrast to only 20% of uses in COCA. This supports my earlier assertion that these examples allude to the change in saturation and hue of the skin tone, rather than the hue.

7.6.4 Lavender

Lavender entered the lexicon as a colour term in 1882, and had developed the metaphorical sense of "effeminate, homosexual" by 1928, categorised within C06 "Sexual relations" (OED, lavender, draft additions 1997). Steinvall (2002: 214) comments that lavender has developed in parallel with pink, which is the "more established and much more linguistically productive colour reference to homosexuality". Pink and purple are both now considered to be feminine colours: however, distinguishing between them, Koller (2008: 420) describes lavender as "androgynous" and suggests that purple can be allocated to gay women and pink to gay men. From the OED definitions it appears both pink and lavender were originally applied mostly to men, though the examples of phrases formed with lavender indicate that it has now widened to include men and women and indeed the gay community as a whole.

Table 7.6.4 Figurative meanings of *lavender* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Homosexuality	lavender	1928-	Y
	dash/streak of lavender	1929-	Y
	lavender lad/boy	1949 ⁷ -	N
	lavender law	1999 ⁸ -	N

Within C06 "Sexual relations" is the phrase *a dash/streak of lavender*, which was found only once in COCA:

In his 1926 biography, the poet Carl Sandburg wrote that the President and Speed possessed "a *streak of lavender* and spots soft as May violets." (COCA)

A number of phrases using *lavender* can be found in Johnson (2004), and date to the 1950s in America. At this time the second *red scare* was taking place, when the fear of communists infiltrating the government resulted in a number of persons considered to be security risks being forced out. Among these were ninety-one homosexual men, the so-called *lavender lads*, or *boys*, and a small number of lesbians, who were considered to be a

⁷ Lavender boy does not appear in the OED, but *Green's Dictionary of Slang* (2010) gives 1949 as the first attested date.

⁸ Lavender law does not appear in the OED, but *Green's Dictionary of Slang* (2010) gives 1999 as the first attested date.

particularly high security risk. This hysteria over homosexuals in the government was labelled the *lavender scare*, in parallel with the *red scare*. One example was found in COCA:

This characteristic of the piece's historical context also includes the fact that McCarthyism is also referred to as the "*Lavender Scare*" because of the connection between the color lavender and homosexuals, who, as a group, were commonly persecuted under McCarthyism. (COCA)

In the same period, so-called *lavender marriages* took place, when one or both partners would marry to cover up their homosexuality. This phenomenon was particularly common in Hollywood, where actors and actresses wanted to avoid being blacklisted. *Lavender spots* or *ghettos* were areas where large numbers of homosexuals lived or worked, or which they frequented, and the *lavender menace* was a group of radical lesbian feminists. One example of *lavender ghetto* was found in each of the BNC and COCA:

What a sheltered life she leads, in her self-built *lavender ghetto*. (BNC)

What might TV by and for gays and lesbians look like, and is this really a leap forward or just a leap into a *lavender ghetto*? (COCA)

In more recent years *lavender linguistics* has emerged and involves the study of *lavender language* used by and in reference to the gay community.

How *lavender* has come to be associated with the gay community is not entirely clear. A possible explanation draws a connection between homosexuality and the colour purple. Though *lavender* is grouped under "Blue" in the *Historical Thesaurus*, its subdivision *purplish blue* suggests that the superordinate of *lavender* may be considered to be either *blue* or *purple*. According to *Green's Dictionary of Slang* (2010), the term *queen*, meaning a gay man, provides a link with the association of the colour purple with royalty, discussed above. However, Baker (2002: 49) suggests that the homosexual use of *queen* stems instead from the older word *quean*, meaning a harlot. Unlike *queen*, which is used for women of high rank, *quean* has connotations of low status and eventually became associated with homosexuals.

An alternative explanation comes again from *purple*, rather than specifically the non-basic colour term *lavender*. Koller claims that the historical links between lesbians and feminism are revealed by the perception of purple as a lesbian colour (2008: 420). Purple was one of

the suffragettes' colours, along with green and white. Women's demands for the right to vote resulted in women over thirty being enfranchised in the UK in 1918, an age limit which was then lowered to twenty-one in 1928, and this period coincides with the new use of *lavender*. The OED records the first use of this word in the sense of "homosexual" in 1928 and, according to Sawer (2007: 46), the colour lavender came to be associated with lesbians in the 1930s in the USA. Thus, the associations of lavender with lesbians and feminism all arose at around the same time.

The final argument may explain why it is *lavender* that appears in the phrases discussed above, as opposed to *purple*. The *Bloomsbury Dictionary of Contemporary Slang* suggests that *lavender* is:

A facetious term appropriated from the vocabulary of heterosexual mockers for use by the gay community itself; the colour and scent of lavender being thought as quintessentially feminine and 'old-maidish', respectively. (Thorne 1990: 308)

The same argument can be made for the term *pansy* for "a male homosexual; an effeminate man; a weakling" (OED, *pansy*, noun 3b). For example, Johnson (2004: 67–68) explains that "a newspaper column on the 'The Best Laughs of 1950' included several zingers about 'the pansy tint in the State Dept." *Lavender* and *pansy* have a lot in common; both are types of flower which lend their name to a non-basic colour term and can be used to describe homosexuals.

Steinvall takes this argument one step further and suggests that *lavender* has acquired its figurative meanings through the domain of clothing (2002: 214). He proposes that this formation "could tentatively be viewed as a type of part-whole metonymy, similar to that of uniforms" (ibid.: 214), where a colour may be named after a group with a distinctive uniform colour, such as *marine blue* (Royal Marines) and *navy* (Royal Navy). He points out an important distinction, however: here we are not dealing with a formal uniform, but with a very prejudiced idea of typical clothing of the group.

In addition to a prejudiced view of typical clothing of the community, the behaviour of community members may also be being called into question. Lakoff's (1975) claim that women have a more in-depth knowledge of colour terms than men has since been thoroughly tested. As feminine traits have historically been associated with gay men, there

may be a perception that they would comfortably use non-basic terms themselves. The unofficial uniform of feminine colours suggested by Steinvall (2002), along with the interference of the pre-colour meaning of flowers, provide a number of factors which have possibly contributed to the link between *lavender* and HOMOSEXUALITY.

7.6.5 Rose

Table 7.6.5 Figurative meanings of *rose(y)* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Optimism	rosy	1685-	Y
	rose-coloured	1780-	Y
	rose-tinted	1783-	Y
	rose-tinted spectacles/glasses	1830-	Y
	rose-pink	1837-	N
Enjoyment	rosy	1859-	Y

The colour senses of *rose* and *rosy* are much older than their superordinate *pink*, as both were adopted in the fourteenth century in contrast to the BCT, which is only attested from 1607. *Rose-coloured, rose-tinted* and *to see through rose-coloured spectacles* (and variations, including *glasses*) share the metaphorical meaning of "Characterized by cheerful optimism, or a tendency to regard matters in a highly favourable or attractive light". Dobrovol'skij and Piirainen (1998) observe that the figurative use of *rose*, to mean something which is good, positive or pleasant, is cross-linguistic as it is present in English, German, Dutch, Swedish, French, Russian and Japanese. They suggest that this meaning is due to the positive associations with pink things across cultures, such as baby girls and spring in Japanese culture, due to the pink flowers of the plum and cherry trees (1998: 21). Steinvall (2002: 215) argues that the figurative meaning comes directly from the rose flower, and not a general association with the colour pink, arguing that *pink* is not used in the same sense.

While the meaning of optimism most likely does derive from associations with the flower, the connection with the colour sense is made explicit in the phrases *rose-tinted/coloured glasses/spectacles*. As a result, these phrases draw on a visual interpretation, and strengthen the link with colour. Steinvall (2002: 88) debated whether *rosy future* is closely

related to the colour sense at all. Ultimately, he treated it as such, basing his decision on the fact that *rosy* is a more frequent and therefore a more conventionalised colour term than *rose* (ibid.: 87).

In the BNC there are 29 citations of *rose-tinted*, including 9 references to spectacles and 2 references to glasses, such as the following:

Perhaps, being on honeymoon, you wore rose-tinted spectacles? (BNC)

Hankering after the 'good old days' is a way of always viewing history with *rose-tinted* glasses. (BNC)

There are 17 metaphorical uses of *rose-coloured* in BNC and over half of the examples describe *rose-coloured spectacles* (9 examples in total) and another 5 examples describe *rose-coloured glasses*. For example:

Just because they are OK with you it doesn't mean you are blind to their inadequacies or view them through *rose-coloured spectacles*. (BNC)

His third requirement is a top-notch chief financial officer who won't see the world through the *rose-coloured glasses* of an ex-salesman. (BNC)

In COCA, there are a total of 22 figurative uses of *rose*. Only 2 examples of *rose-coloured* are found, both modifying glasses. In contrast, there are 20 examples of *rose-tinted*, of which 2 refer to spectacles and 6 refer to glasses. For example:

First, say the experts, take off the *rose-coloured glasses* so you don't become really discouraged. (COCA)

Europeans, with their rose-tinted Euro-glasses, do not see that prospect. (COCA)

In addition to spectacles and glasses, *rose-tinted/coloured* also describe a number of other things in the corpora, such as:

The chimpanzees' warfare and cannibalism changed for ever her *rose-coloured* idea of them as somehow 'better' than us. (BNC)

Of course such *rose-tinted* retrospection served a dual purpose. (BNC)

A "provincial beauty whose finest hour was an affair with a popular singer and how *rose-tinted* that memory can be." (COCA)

But the 216 young poll respondents are not leading the *rose-tinted* lives one might expect. (COCA)

While *rose* and *rosy* hold the positive meaning of optimism, with this also comes a sense of being unrealistic or inaccurate, as some of these examples show.

7.6.6 Peachy

Peach has been used to describe a "particularly fine or desirable person", especially an attractive young woman, since 1710, and this sense can be applied more generally to an "exceptionally good example of its kind" (OED, *peach*, noun¹ 4). The meaning of attractiveness could allude to either physical shape, and so in comparison with the shape of the fruit, or to their pink complexion.

Table 7.6.6 Figurative meanings of *peach*(*y*) in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Excellence	peach	1710-	Y
	peachy	1900-	Y
	peachy keen	1951-	Y

This meaning is shared by the derivative form *peachy*, and often occurs in the phrase *peachy-keen* (OED, *peachy*, adjective 2; *peachy-keen*, special uses). According to the OED the figurative meaning of *peachy* originated in the US, and appears a total of 4 times in the BNC and 69 times in COCA, suggesting it is still predominantly an American use. Corpus examples meaning attractiveness include:

I'd call her an eyeful, Kate. *Peachy*. (BNC)

You climb better and sprint harder when your abs are *peachy*. (COCA)

Examples of *peachy* in the more general sense of something excellent or great. For example:

A *peachy*, picnic-in-the-park pop group whose politics merrily stab a finger at habitual thinking, society's hang-ups and the staid music business. (BNC)

Nothing was going to spoil my *peachy* mood, let alone swotty nit-picking from Ms. Big Pantaloonies. (COCA)

Even though *peachy* has a very positive sense, some corpus examples suggest that it is sometimes used in a facetious manner:

So other than a few minor world and national problems with politics, pestilence, sex, drugs and money, everything's *peachy*, right? (COCA)

I smashed my cab. I got mugged, but other than that everything's *peachy*, Ma, thanks for asking!! (COCA)

The figurative senses of *peachy* and *rosy* are in fact very similar, and in 3 examples the terms are used as equivalents, such as:

Things are better than they were but, you know, things aren't complete *peachy* and *rosy* by any stretch of the imagination. (COCA)

Both terms describe things that are positive, and yet they are also used with a note of scepticism, whether having a *rosy* outlook is seen as overly optimistic, or the use of *peachy* is flippant.

7.6.7 Amber

A *red light, yellow light* and *green light* have already been discussed in reference to the signals indicated by each colour. The non-BCT shares its meaning of caution with *yellow*.

Table 7.6.7 Figurative meanings of *amber* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Caution	amber light	1956-	Y

The non-BCT *amber* is used figuratively as an "indication of approaching change or danger" (OED, *amber*, adjective b). The metaphorical sense was found 3 times in each of the BNC and COCA. For example:

Huge capital schemes, given an *amber light* in the Autumn Statement, could get the green light straight away. (BNC)

Kathleen Sullivan, who represented the pharmaceutical industry in the Supreme Court, sees today's ruling as nothing more than, in her words, an *amber light*. (COCA)

In the figurative examples of *amber light*, as with the other terms, the light is hypothetical.

7.6.8 Drab, Vanilla and Beige

A number of non-basic terms share the metaphorical sense of boringness with the BCT *grey*, and these are displayed in Table 7.6.8.

Table 7.6.8 Figurative meanings of drab, vanilla and beige in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Boring	drab	1892*-	Y
	vanilla	1972	Y
	beige	1982 ⁹ -	Y
	beige food	200110-	N

Drab originally referred to a kind of cloth, before lending its name to its "dull light-brown" colour and then figuratively to things "dull or lifeless" in appearance or character (OED, *drab*, noun² 1c). Examples of the final sense include:

I think most fans here would rather see much more of a really meaningful England game in front of a packed Wembley and much less of a meaningless match at a near-empty Windsor. [...] 60 minutes was far too much for such a dull, *drab* game. (BNC)

Leta had fully intended to continue her teaching career in the East, but she was forced into what she considered a *drab* existence of housework and dressmaking because New York City did not allow married women to teach. (COCA)

Vanilla can describe things that are plain, conventional, safe or unadventurous, after the "popular perception of vanilla as the ordinary, bland flavour of ice-cream" (OED, vanilla, draft additions). This figurative use derives specifically from vanilla ice-cream, not vanilla in general as a flavour. It can be argued, however, that the colour vanilla, a shade of white,

⁹ *Beige* in the sense of boring does not appear in the OED, but *The New Partridge Dictionary of Slang and Unconventional English* (2006) gives 1982 as the first attested date.

¹⁰ The earliest example of *beige food* in *LexisNexis* dates from 2001, suggesting this use of *beige* is very recent.

also reinforces this sense. The lack of hue and low saturation may also contribute to the sense of blandness. In total 8 examples of *vanilla* were found in the BNC and 29 examples in COCA. Examples from the corpora include:

The firm has a non-mainstream product called Jump available for the Mac, but there are no plans for a *vanilla* version of SAS software on that box. (BNC)

It's a big change from even a few years back, when mentioning an affinity for anything but *vanilla* sex induced the giggles. (COCA)

The judges all agreed that Jessica did herself no favors with such a *vanilla* song choice. (COCA)

Angelides says it won't be a plain *vanilla* election. How could it be? He's going against the most popular California governor since Ronald Reagan. (COCA)

The OED notes that this was originally given in reference to sexual relations, and is now often applied to computers, and these two senses are reflected in the first two examples. The corpora data reveals, however, that *vanilla* is applied widely, as in the last two examples.

The metaphorical sense of *beige* as uninteresting appears to "parallel to the more established use of *grey*", according to Steinvall (2002: 214). The figurative meaning of *beige*, as something or someone that is boring or bland, is not recorded in the OED, or subsequently in the HT. The most likely reason it does not appear is because the OED's entry for *beige* has not been updated since 1933, and the figurative use appears to be a recent development. *Green's Dictionary of Slang* (2010), for example, defines the figurative meaning as "the perceived blandness of the colour beige" or something "deeply tedious".

Despite being aware of the figurative use of *beige*, Steinvall (2002: 212) found no examples in the BoE. In his corpus study he discovered that the term *beige* occurs most often in the domain of clothing (ibid.: 159), leading him to suggest that the figurative use originates from this domain (ibid.: 213-4). He argues that as fashions change beige clothing may appear dull or boring, and by extension so too do the people wearing them. He suggests that *beige* is following in a similar path to *drab*.

The perception of *beige* as a boring and uninteresting colour was found in the corpora; objects that are beige are often described in a negative way and examples of adjectives that collocate with it include: *bland*, *boring*, *drab*, *dull*, *nondescript* and *soulless*. Two examples of *beige* meaning dull were found in BNC, and 11 in COCA.

The vague beige word that has naturally attached itself to Mr Major is 'nice'. (BNC)

I see a not very tall man, pleasant enough to look at but a *beige* man, not very exciting, not very sexual. (BNC)

I'm not a beige personality. But that's OK. I enjoy myself. (COCA)

If you're satisfied with this score, then by all means go on with your *beige*, mediocre life of resignation and inevitable decline. (COCA)

Beige is used to describe word choice in the first example. The word *nice* serves as a back handed compliment as it suggests a neutrality and mediocrity not worthy of higher praise. In the second BNC example, the appearance of a man is described as *beige* and "not very exciting, not very sexual", and so passes judgement on the personality as well as appearance alone. A description of personality also features in the next example, from COCA, but in this instance the person enjoys themselves and so is declared not to be *beige*. In the final example, a certain lifestyle is described as *beige* and "mediocre" and is clearly intended to be pejorative.

In two examples, *beige* has a double meaning; one literal and one figurative and both meanings are explained.

"It's *beige*," she said. *Beige* it is-upholstered, carpeted, and painted in brownish, grayish, yellowish hues. And *beige* metaphorically, too. Any random dull normal person [...] could come up with snappier ideas for the future. (COCA)

Steve Weeks [...] puts it this way: "The town is going *beige* on us." He means that both literally and figuratively. Specifically, he is referring to Steve Wynn-owned properties like the Mirage, which in their bid for a more high-end image have opted for variations on off-white signs. But in a larger sense, Las Vegas is a more corporate town than it used to be, says Weeks. (COCA)

The first example describes interior decor that lacks both colour and imagination. In the second example, companies are choosing signs that are off-white rather than the traditional neon. *Neon* appears in the HT under "Bad Taste" with a figurative meaning, which is reflected in the example above as companies avoid neon signs to promote a more "highend image". The term *greige* describes a colour between *grey* and *beige*, after fabric that has not undergone any dyeing (OED, *greige*, noun 2 and etymology). One example with a figurative use was found in COCA:

The CIA headquarters in Langley. The Pentagon in Arlington. Several others unmarked and unknown. These are *greige* ziggurats of bureaucracy and secrecy. (COCA)

The meaning of blandness and lack of character is shared by grey, beige and greige.

No examples of *beige food* were found in either the BNC or COCA and so the *LexisNexis* corpus was consulted. Here, 21 examples of *beige food* were found along with one example of *beige* diet, in inverted commas, for example:

"A lot of people in hospital are anxious or bored," adds Grossman. "The meal may be the highlight of their day. And when you're ill, you don't want all this unidentifiable **beige food**." (The Independent, 2001)

"You shouldn't have *beige food*" he says firmly, and that includes bread, cakes, biscuits, pastries, chips, pasta, rice and even potatoes. (The Daily Mirror, 2009)

That kind of 'beige' diet is low in the nutrients contained in fresh fruit and vegetables. (The Sun, 2011)

Bland, beige food is never on my radar - I'm just too big on flavour. (Nottingham Post, 2014)

These examples highlight not only the lack of flavour, but also nutrients contained in food that is *beige*. Both *vanilla* and *beige* can be traced to an association with food. These low saturation terms can be contrasted to *colourful*, which often has positive associations of being interesting, in contrast to something *colourless* (see Section 4.2.6). Similarly, highly saturated colours can be considered exciting or immoral (see Sections 6.3.9, 7.2.1 and 7.6.1.4).

7.6.9 Milky and Lily-Livered

Non-basic terms for *white* share the meaning of cowardly with their superordinate, and are displayed in Table 7.6.9.

Table 7.6.9 Figurative meanings of *milky* and *lily-livered* in the HT and corpora

Metaphorical	Phrase	Dates of figurative	Examples in
Extensions		use	Corpora
Cowardly	milky	1602-	Y
	lily-livered	a1616-	Y

A figurative sense of *milky* appears in I04 "Composure" and I16 "Fear", where it describes a person as soft and gentle, or, with unfavourable connotations, timorous and weak, and in recent slang use, cowardly (OED *milky*, adjective, 4a). The only example was found in the BNC:

Finch was a man with no zone of indifference and a lifelong distaste for *milky* kindnesses, which made his present wish to push Henry away and into a career of his own both powerful and covert. (BNC)

A Concise Dictionary of Slang and Unconventional English (1989) suggests that milky is used to describe the change in pallor caused by fear. It is also possible that it originated through comparison with milk itself and its mild taste and thin consistency. Even if this is the case, I believe its lack of hue may also serve to reinforce the sense.

Similarly, *lily-livered* means to be cowardly through a description of the liver being as white as the colour of a lily. Despite Philip (2006: 82) claiming that *lily-livered* is "nighobsolete" it appears in the corpora fairly frequently, with 8 citations in the BNC and 27 citations in COCA. Examples include:

The Government are still *lily-livered* in that respect. (BNC)

You know I'm right, but you're just too lily-livered to say it for yourself. (COCA)

In contrast to the phrase *lily-white* discussed in 6.2.4, where the colour link is made explicit, it is most likely *lily-livered* no longer holds colour associations for most people.

The lack of hue metaphorically stands for a lack of bravery, supporting the original development of the terms.

7.7 Secondary Basic Colour Terms and Non-Basic Colour Terms Conclusion

Chapters 6 and 7 have shown how productive English colour terms are for figurative meanings. Most of the primary BCTs hold numerous figurative meanings, which have survived over long periods of time. This chapter has demonstrated how the secondary BCTs also have several figurative senses. While this is not a quantitative study, the number of examples of each figurative phrase was generally far lower for the secondary BCTs than the primary BCTs, and even lower for the non-BCTs. They may not be as high in number, or as well established as the basics, but it is unfair to dismiss the secondary terms as never, or only rarely, holding figurative senses (cf. Wyler 1992: 141). The only exception to this is *orange*, for which no figurative meanings were found, confirming previous observations.

A significant finding is that the principle of colour mixing extends to the figurative meanings held by the secondary BCTs. When white is added to a colour it becomes paler and this also results in the watering down of figurative meanings. The secondary colours that contain white share the figurative meanings of their superordinate colour, only to a lesser extent. For instance, *red* is associated with communism and socialism in comparison to a more moderate left-wing position linked to *pink*. *Grey* is used to indicate a less extreme negative than black, or to an area of uncertainty. Similarly, the colour purple is obtained from mixing red and blue, and in political contexts, *purple* can draw on the associations of both colours.

Another important finding is the extended uses of several non-basics, such as *scarlet*, *gold*, *lavender*, *rose*(*y*), *peach*(*y*), *beige* and other pale colours. Non-BCTs have previously been dismissed as unlikely candidates for metaphorical meanings. For the examples *grey*, *beige* and *drab*, Steinvall states:

Although it is my belief that these meanings are based originally on metonymy, it seems that the connection between colour and certain moods has become almost metaphorical. (Steinvall 2002: 215).

For all the examples discussed in Chapters 6 and 7, the figurative uses of colours can be traced back to an association with an object of that colour. One of the differences between the basic and non-basic colour terms is that the pre-colour sense in the latter is often still transparent. The transparent meaning of *orange*, therefore, helps to explain why no figurative meanings for the term were found. It remains problematic as to why some non-BCTs then can develop figurative senses. Some of the possible reasons why they are able to do so have been discussed. For instance, in Casson's (1994) classification, *scarlet* and *beige* are both opaque colour terms that are also derived from non-salient objects, making them excellent candidates for figurative use. In the case of *rose* and *peach*, both terms are used in the figurative sense with the –y derivative, which marks the form as a colour use. This supports the argument that colour has some impact on the development of these terms, despite their original motivations being the original objects of flower and fruit. The non-BCTs that do have figurative meanings, therefore, are highly salient colour terms.

8 Conclusion

This thesis has presented an analysis of the figurative meanings associated with the colour domain in English. Chapter 2 presented the context for this work, bringing together previous research on two major areas of linguistics: metaphor and colour. I suggested that the union of these two topics would provide a suitable area for study using a unique combination of methods.

The methodologies used in this thesis were outlined in Chapter 3. The core methodology that underpins this work derives, with adaptations, from the Mapping Metaphor project. Coding of the two MM colour categories has fed into both the project and this thesis and has shown overarching metaphorical connections between COLOUR and other domains, such as WHITE=truth and GREEN=environmentalism, and colour more generally, such as COLOURED=deception. In addition, it was shown that colour is a target domain for a large amount of polysemous language describing aspects of tone and saturation, such as *cool*, *deep* and *rich*. Chapters 4 and 5 discussed the results from the first MM "Colour" category and largely reflect the MM procedure, with the addition of an element of corpus methodology, drawing from the BNC and COCA. Chapters 6 and 7, however, took the analysis of individual colour terms back into the HT and corresponding OED data in order to trace more specific uses of such metaphorical connections, i.e. those in phrases, such as *white witch, out of the blue* and *rosy outlook*. A corpus analysis of these phrases was also presented.

The aim of this concluding chapter is to tie together the results from all four analysis chapters and summarise some of the overall findings. This discussion will be structured according to each research question, displayed below:

Research Questions

- 1. How does the general concept of colour lend itself to metaphor and metonymy?
- 2. Which hue terms lend themselves to metaphor and metonymy and in what ways?
 - a. BCTs
 - b. Non-Basic Colour Terms
- 3. In which semantic target domains are colour metaphors and metonymies particularly productive?
- 4. How do the processes of metaphor and metonymy interact in the colour domain?

8.1 How does the general concept of colour lend itself to metaphor and metonymy?

The first research question is concerned with colour as a broad phenomenon and in a way contrasts with the second research question, which is concerned with individual hues. While hue is the most prototypical element of colour in English, it was important to analyse other qualities too to gain a full understanding of metaphor and metonymy within the semantic area. In the HT, individual hues appear further down in the categorisation of colour reflecting a more specific meaning. The MM project's decision to split the HT colour category in two created a distinction between the hue and non-hue aspects of colour and allowed for separate methodologies to be employed for each.

This analysis fills a gap in the literature as only a few studies have discussed the use of colour metaphors that are not hue terms. Barcelona and Soriano (2004) compared the DEVIANT COLOUR IS A DEVIANT SOUND metaphor in English and Spanish and Dorst et al. (2013) discussed lexical items that can describe both colours and human behaviour, such as *strong*, *pale* and *cheerful*. While studies on the neurological condition synaesthesia are plentiful, those focusing on cross-modal language shared by the whole population are fewer in number.

8.1.1 Source and Target

The lexis from the D34 "Colour" category was analysed in Chapters 4 and 5, revealing colour as both the source and target of many metaphors. The most productive of the source metaphors was the use of the superordinate *colour*, which has developed a variety of highly metaphorical senses. The presence of colour can be both positive and negative. For instance something that is exciting is *colourful*, whereas if something is *coloured* it may have been manipulated so as to appear truthful. The absence of colour indicates mostly negative meanings, for example, something with no distinctive character is *colourless*. Similarly, being physically unwell can be metonymically referred to as being *off-colour* and this has developed a more general metaphorical meaning of being deficient in some way. COLOUR is also the target of metaphors, mapping onto MM categories such as: B07 "Ill-health", E47 "Movement" and F16 "Sequence". Lexis such as *sickly*, *vivid*, *vibrant*, *riot* and *clash* are used to describe dimensions of saturation, brightness and tone, in addition to the effects of colour combinations.

8.1.2 Cross-Modal Metaphor

Unlike the neurological condition of synaesthesia, cross-modal language has not received a lot of attention in the literature. Studies that have been conducted are often grounded in Psychology and so do not analyse the language from the perspective of metaphor. The current study sought to address the need for further analysis of cross-modal language and uncovered a number of examples relating to the sense of colour. This investigation, discussed in Chapter 7, was possible because the areas of sensory meanings could be easily identified and compared using the MM categories.

While bi-directional metaphor is not common in the data there are a few cases. Examples of bi-directional colour metaphors include a weak link with A28 "Atmosphere and weather" and stronger links with B07 "Ill-health" and I06 "Emotional suffering", along with several Level 2 "Emotion" categories. The only bi-directional cross-modal metaphor found was between D34 "Colour" and C13 "Hearing and noise", which confirmed findings from previous research. A graduated scale of sensory modalities has been suggested, while lower sensory modalities include more experience-based sensations (for example touch and taste) and so are judged as more immediate than higher sensory modalities which include object-based sensations (for example colour and sound).

8.1.3 How Are These Terms Used?

Deignan (1999: 195) suggested that mappings such as those between colour and temperature are first made by experts, resulting in more exploitation of metaphor in these areas of meaning than is usual. A degree of this was revealed in the corpus data, as many colour metaphors were often used in the context of art or interior décor. (Elsewhere in the thesis, corpus examples provided were selected to be representative of both the register and the context in which the metaphor under discussion was found.) Indeed some modifiers were found to collocate with specific hues, and so can be said to have become fixed expressions for paint colours, such as *burnt sienna*.

While some of these terms may have been created and predominantly used by experts, some of this lexis is adopted into the general language. The D34 "Colour" category reveals a large colour vocabulary describing saturation and brightness or tone, although the definitions of many of these terms in the OED rely on equally metaphorical language and so it is not always clear which dimension of colour is being described. The corpora suggest

that these colour metaphors are often used as qualifiers, modifying hue terms. While this might give a more detailed or evocative description of a colour, it does not necessarily follow that they are used in a precise manner. The accuracy in matching colour designations with associated terms has previously been shown to be low, and it was suggested that many of the colour qualifiers discussed in the present study are no different, suggesting a general insecurity surrounding colour language besides the basic colour terms. Further corpus analysis could shed more light on the contexts in which such language is most often used.

8.1.4 Metaphorically Motivated Polysemy

Corpora were used to discover if the polysemous words are currently used in their colour senses. Some of the terms recorded in the HT have dropped out of use, or reflect fairly unusual or creative examples. And yet in some cases, the last attestations given by the OED could be post-dated, and some colour senses, such as *deep*, *solid*, *vibrant* and *warm*, have become conventionalised. The view taken here is that while these terms are indeed polysemous, they are metaphorically motivated. This contrasts with Deignan (1999) who believes that the colour sense of *deep* is an example of non-metaphorical polysemy, as to understand it the depth sense is not accessed in any way. Deignan (ibid.: 183) does acknowledge that this is an area researchers will disagree about and that it may appear to be an arbitrary decision selecting a "cut-off point" for when a metaphor dies. When a metaphor is first created there will be a period of novelty when the mapping is still new. During any kind of language change there is a period where both old and new meanings coincide alongside each other (see Traugott and Dasher 2002: 11-12), and this is no different for metaphor. This stage may result in multiple polysemous meanings sometimes with, sometimes without, a clear path between them. And yet an important consideration is that this overlapping stage will last a different amount of time from speaker to speaker. I argue that etymological versus present-day interpretations of metaphor are two poles that can be reconciled. Instead of advocating an either or approach, taking both etymology and present day understanding into consideration can provide a fuller understanding not only of how metaphor is created, but also of how it reached its current state in the language system.

8.2 Which hue terms lend themselves to metaphor and metonymy and in what ways?

The second pair of analysis chapters focused on individual hue terms, taking the primary and secondary BCTs in turn. Chapter 6 discussed the primary BCTs: black, white, red, green, yellow and blue and Chapter 7 discussed the secondary BCTs: brown, purple, pink, orange and grey. Colour lends itself to forming metonymies, which often extend into the area of metaphor (see Section 8.4). The HT data revealed that, while the primary BCTs generally hold more figurative extensions than the secondary BCTs, all BCTs hold several figurative meanings, apart from orange. A significant finding was how the secondary BCTs describe hues that are made up of a mixture of more than one colour, resulting in their figurative meanings being affected by that of the colours from which they are derived, for example: pinko (white and red), purple state (red and blue) and grey area (black and white).

In addition to revealing the various figurative senses of secondary BCTs, the non-BCTs are also much more metaphorical than existing research suggests. Steinvall (2002: 212) suggested that the low salience of both the colour concept and the term make non-BCTs less likely to be used figuratively. For non-BCTs, interference from the pre-colour meaning often remains transparent for many speakers, unlike BCTs. As a result, non-BCTs have in previous work been omitted from analysis and Niemeier (1998: 142) identified the need to address this issue. The present study took up this challenge and found that several non-BCTs are used figuratively. While the pre-colour sense motivates figurative meanings, often there are features of the colour that reinforce and support that meaning. Furthermore, given that all BCTs can be traced back to an association with an object, this issue is not confined to the non-BCTs.

It was found that the figurative meanings of some non-BCTs overlapped with their superordinate BCT. What was particularly interesting about this finding was that in some cases they had a similar motivation, such as *grey* sharing the meaning of boringness with *beige*. In other cases this was via completely separate paths, such as *red* and *scarlet* sharing the meaning of licentiousness. One developed through an association with places (*red light district*) and the other with people (*scarlet women*). There are several *white* phrases alluding to fear that have different motivations, in addition to those of the non-BCTs *milky* and *lily-livered*. The existence of various terms within one BCC holding the same, or

similar, figurative meanings may lead to a reinforcement of that concept, whether or not the motivation is the same.

In spite of the difference in time periods that each BCT was established, there is not a vast difference in when the figurative senses of these terms emerge in phrases. Many of the figurative phrases enter around the fifteenth and sixteenth centuries, and continue into the nineteenth century. A study of the simplex BCTs would uncover earlier figurative uses, which have not been the focus of the discussion in this study. Often the most recent phrases, such as *red card*, *blue movie* and *brown nose*, which are all first recorded in the twentieth century, fit in with an existing metaphor. The fact that many of the metaphorical extensions have phrases that have entered over a long period of time demonstrates their systematicity. For example, the well-established connection between *black* and illegal activity has phrases recorded from the fourteenth to twentieth century. Also of importance is how the majority of phrases examined are still in use. Indeed, for the colours *red*, *yellow*, *blue* and *grey* very close to all of the phrases recorded in the HT were found in use in the corpora. This is proof that colour metaphors are largely systematic.

As many non-BCTs have developed much later than BCTs, so too have many of their figurative meanings. The non-BCTs make up some of the most recent developments in figurative colour meaning, with several first recorded attestations from the twentieth century, such as *livid*, *puce*, *vanilla* and *beige*. Their newness is also reflected by the fact some senses are not recorded in the OED, such as *golden skirt* and *beige*. In spite of this, several of the figurative meanings of non-BCTs are not so recent; *scarlet* is first recorded in a figurative sense at the very end of the fifteenth century, *golden* in the sixteenth century and *rosy*, *milky* and *lily-livered* in the seventeenth century.

Both the BNC and COCA are general purpose corpora and the findings from each were comparable. The first difference in the corpora was between British and American English, yet this rarely had an effect on the retrieved colour examples. There were only a few examples of culturally specific colour uses that appeared exclusively in one corpus, or weighted towards one, such as those describing political colours (*yellow-dog* and *purple state*) or currency (*green pound* and *greenbacks*).

Otherwise, the main distinguishing feature was size, with COCA providing a much larger pool of data. Gieroń-Czepczor (2011: 72) suggested that the figurative use of *black eye*

was obsolete, or very rare, based on the lack of evidence from the BNC. While a lack of examples in corpora does not in any way suggest that a sense is not in use, the presence of examples can indicate that it is still current. The present study revealed this sense is not only still current, but frequent, with 172 metaphorical examples in COCA. This example illustrates the benefit of consulting more than one corpus. *Black eye* is an unusual example, however; when this pattern generally occurred, the figurative use was often only found in low numbers in one corpus, such as for *black anger*, *red warning*, *pink economy* and *grey eminence*.

8.3 In which semantic domains are colour metaphors and metonymies particularly productive?

Certain areas of meaning appear to attract colour metaphors and metonymies. While this is not a quantitative study, some of the intuitively strongest connections are outlined here.

8.3.1 Economy

The monochrome colours have developed a number of parallels with one another. One such area is in finance where the *grey market* refers to the trading of controlled goods, which is legal but arguably unethical, whereas the *white market* deals in substances which are rationed or otherwise in short supply and the *black market* does so on an illegal platform. *Greymail* is a milder version of *blackmail*, without any money involved. In addition, *greenmail* is when a company is forced to buy its own shares at an inflated price from another firm with just enough stock to pose a hostile takeover. *Greenmail* fits the pattern of the other colours, but is named after the colour of US money, *greenbacks*. The *black economy* refers to economic activity that is not declared for tax purposes and the *grey economy* is correspondingly less ethically questionable. Financial processes that are illegal are described as *black* in contrast to those that are legal and *white*, and those that are *grey* lie somewhere in between. The figurative meanings of colour metaphors shade into one another, revealing their systematic nature.

The distinction between good and bad is turned on its head, however, in the metonymy to be in the black, which has positive connotations of being in credit (in contrast to being in the red) after the colour of the ink in which entries in a ledger were once written. Also, to bleed white means to drain someone of all their money or resources and alludes to colour draining from a person's face when they lose blood. These examples are both specific

metonymies with separate motivations from the BLACK IS EVIL and WHITE IS GOOD metaphors profiled in the other finance metaphors.

The *pink pound* and the *grey pound* refer to the perceived spending power of homosexuals and the older generation, who also form the basis of the *pink economy* and the *grey economy*. Also, the *green pound* draws on the meaning of agriculture.

8.3.2 Clothing

A metonymic motivation can be evidenced for the names of workers through their distinctively coloured uniforms, and these in turn often become extended further. As the colour of mourning in the western world, *black* is associated with death in the undertaker's uniform: *black job, black man, blackmaster* and *black work*. Manual labourers are described as *blue-collar* workers, in contrast to *white-collar* workers in administrative roles, *green-collar* workers in horticultural and environmental work and *scarlet collar* workers in the sex industry. The figurative use of *purple* and *scarlet* emerged due to an association with the rich and powerful, who were the only ones that could afford the dye.

Steinvall (2002: 214) suggested that both non-BCTs *lavender* and *beige* developed their figurative meanings through a connection with textiles; *lavender* through the association of a hypothetical uniform, offensively attributed to the homosexual community, and *beige* through its frequent use as a textile colour. Both are possible explanations, though multiple motivations can be found for each. I suggested that interference from the flower sense of *lavender* and the lack of hue and saturation of the colour *beige* have also influenced the development of these terms.

8.3.3 Physical and Emotional Wellbeing

Physical and emotional wellbeing is frequently associated with physiological changes in colour. Perhaps on the most basic level is the connection with physical conditions, for example being *off-colour* is a sign of illness. A longstanding use of *pink* as the most excellent example or condition of something derives not from the colour pink, but from the flower of the same name. I suggested that a folk etymology may be interfering with this meaning as this use of *pink* is often used to refer to good health through the metonymic connection with the healthy colour of white people's skin. This use has given rise to the phrase *in the pink* meaning to be in good health or spirits. Similarly, to *pink* or *pink up* refers to the colour of a white person's cheeks to signal embarrassment or a return to good

health after being unwell. Extending into emotional wellbeing is the phrase *tickled pink*, meaning to be overcome with enjoyment or amusement, which likely comes from the blushing caused by tickling. Blushing is also metonymically described via *red*, *crimson*, *scarlet*, *rose*, *ruddy* and *vermillion* to signal a range of emotions. *Ashen* was found to collocate with emotions frequently in the corpora, and is used with restricted reference to emotions, along with *livid* and *puce*. I suggested that these colour terms signal emotions by indicating an increase or decrease in saturation from the normal complexion, rather than as hyperbolic hue terms.

Black takes on the role of an intensifier when applied to emotions: black afraid, black angry and black depressed. Grey is used negatively to signal gloominess. Blue is the colour of dejection, often pluralised in the blues, then extended to the genre of music. The use of blue in this context possibly derives metonymically from the bluish tinge that skin takes on when there is a lack of oxygen in the blood supply. To look blue was once the more frequent collocation, whereas to feel blue is now more common, reflecting how the meaning has cemented itself in the emotion domain and so further in the realm of metaphor.

8.3.4 Political Colour

While not metaphors in the traditional sense, political party colours are symbolic of their ideological basis. The colour of the sky motivates the link between *blue* and CONSTANCY, reflected in the phrase *true blue*. This is the motivation behind the choice of *blue* to stand for the Conservatives in the UK. In the USA, however, the Democratic Party identifies with *blue*, also due to its connection with the sky, but through the different extended meaning of FREEDOM.

The colour pink is made up of a mixture of red with white. As a result *pink* adopts many of the figurative meanings associated with red, but in a less extreme form. For example, in politics a *pinko* is a term for someone tending to liberal socialism, in contrast to a *red* radical socialist. The addition of *white* metaphorically waters down the symbolism of red. Even though *purple* is not associated with any major ideology, it is found as a political colour in both the UK and the USA. In the UK, *purple* represents the strategy adopted by New Labour and the marginal constituencies needed by the party, and in the USA, *purple* represents a swing state. Those with centralist views are therefore allocated *purple* on the basis that it combines the colours red and blue, the colours of the two main parties, Labour

and Conservative and Republicans and Democrats, respectively. This is another example of how the colour mixing rules are applied to figurative meanings.

8.3.5 Morality

Morality and immorality are well represented in various ways by colour. The metaphors EVIL IS BLACK/VIRTUE IS WHITE extend back to Old English and are closely linked to EVIL IS DARK/VIRTUE IS LIGHT. I also suggest that colour serves as an intermediate stage for the metaphor MORALITY IS CLEANNESS. Colour is used metonymically in the domains of cleanness and dirtiness, where the presence of any colour signals an impurity or imperfection. This is then metaphorically extended to the domains of morality and immorality. However, there was not only the *black* and *white* divide found for this metaphor, but the hue terms *purple* and *scarlet* also symbolise wickedness. Colour can also be described as *wanton* or *savage* and a vivid display is called a *riot* of colour, where colour is the target. It is significant that all of these colours, or descriptions denoting colours, denote high saturation.

8.3.6 Problems with the Domain View

The MM categories are not meant to correspond exactly with semantic domains, but to account for easily understandable ideas. They were adjusted for this purpose, and to facilitate the computational analysis, from the HT categories, where there is also no single level category that corresponds to a basic level of meaning. The categories move from one concept to the next under the principle of moving from the most general ideas to the more specific. With this in mind, the HT structure can be viewed as a sophisticated tool with which to compare areas of meaning against one another in order to identify metaphor.

The analysis of general colour metaphors in Chapter 4 drew heavily upon the MM categories, and the discussion on cross-modal metaphors in Chapter 5 was made possible by the easy identification of relevant areas of meaning corresponding with the senses. In contrast, only three groups of colour metaphors were identified in Dorst et al.'s (2013) study, which aimed to identify the basic meaning as part of the MIPVU procedure. The present study has unearthed a large number of domains (in the shape of categories) that are connected with colour, from ILL-HEALTH and LIFE to TRUTH and MORALITY.

In Chapters 6 and 7, the MM categories were featured less heavily in the analysis for methodological reasons, but were still useful. The metaphors discussed here raised several issues regarding what a domain is. For instance, the motivation behind the connections WHITE IS GOOD and BLACK IS EVIL stems from the relative safety afforded by light and the unknown danger of darkness. Here we have an example which has formed the basis of numerous metaphors and metonymies involving the colours black and white, yet it can be traced back to the domains of darkness and light. The boundaries between domains are therefore problematic, as meanings shade into one another. The HT structure allows for these fuzzy boundaries between relevant domains to be taken into consideration, through categories with a close semantic relationship, which may or may not also be neighbouring categories. Another problematic feature of the colour domains again concerns where potential boundaries lie. Metaphors are traditionally expressed in terms of DOMAIN X is DOMAIN X. And yet, in the example above, the first domain is not colour, but an individual hue. In the case of fixed phrases discussed in Chapters 6 and 7, explicit mention is made of both colour and some other domain. Of fundamental importance to the traditional distinction between metaphor and metonymy in the present research is whether one considers colour to be a different domain to the word that is modified. For instance, while the metaphorical sense of red card meaning a dismissal was found to be rare in the corpora, with only five examples in the BNC, they were all used within the context of sport. In this case, it cannot be said that the meaning of a foul has been transferred outwith the domain of sport. A possible reason that colour does not map onto the standard notations of metaphor is due to the extent of its foundations in metonymy, discussed in more detail below. These examples highlight the advantages of viewing metaphor and metonymy on a scale, as it allows for different stages of development. For what has been described as a seemingly straightforward example of a domain, colour presents several challenges.

8.4 How do the processes of metaphor and metonymy interact in the colour domain?

By its very nature, as a visual feature, colour lends itself to metonymy. It was highlighted earlier in the study that colour is an unusual example with which to discuss the interaction of metaphor and metonymy due to its predisposition towards the latter. Understanding colour as a concept and separating it from its context is something many cultures and their languages can do with ease. However, apart from when we consult colour charts, colour is rarely experienced in isolation in everyday life.

In many cases the evidence suggested that while a colour phrase had a clear and traceable metonymic motivation, it had been extended in some way, moving into the area of metaphor.

8.4.1 Metaphor and Metonymy Scale

In the case of colour, a metonymic motivation can almost always be found. The complex connection between morality and colour was discussed in Chapter 4, where I suggested that the real metaphorical link is between the domains of morality and dirtiness. Darkness and blackness stand for dirt through a metonymy, which serves as an additional stage in the chain towards morality. Similar cases were found elsewhere in the data, such as the metaphorical connection between youth and plants. As green is the colour of unripe plants the term can stand for vegetation and so becomes associated with the figurative meaning of freshness or youth.

Previous research has shown that drawing a line between metaphor and metonymy is not easy, and it has been suggested that a better way to approach the issue is to consider the two processes as occurring on a continuum. In the case of phrases involving a colour term, those at the farthest end of the metaphorical scale draw on a pre-existing link, such as those between colours with morality and youth described above. In a *white lie*, for example, a metaphorical interpretation must be made for *white*, as the hue term modifies an abstract noun, which cannot have a literal colour. Also, in the case of *black market*, *white market* and *grey market*, markets do not have any salient colour association that is required for a metonymic interpretation, but instead draw on an established metaphorical sense of black meaning something bad or illegal. These examples offer support to Steinvall's (2002: 195-196) suggestion that the metaphorical use of colour can be similar to type modification, as both have a classifying function.

At the other end of the scale are phrases which are grounded more firmly in metonymy. Charteris-Black (2003: 296-297) and Deignan (2005: 66) have discussed cases where it is unclear whether physical actions actually occur or not, and illustrate with the examples of *licking one's lips* with anticipation or *keeping an eye on*. Several examples from the present study fall into this category where a connection with the physical world becomes hypothetical, such as *red card* (dismissal) and *green light* (permission). Yet it was not only actions, but also objects, such as *red carpet* (special treatment) and *blue ribbon* (prize), that were found to behave in this way.

In addition, many identifying features were found to be figurative in context. A change in collocation from *looking blue* to *feeling blue* reflects a shift from metonymy to metaphor. *Black and blue* and *black eye* are metaphorically extended from meaning a physical injury to an emotional injury, or an assault on a non-human agent. Similarly, people are associated with a distinctive physical feature, such as grey hair (*grey power*) or blue eyes (*blue eyed boy*), even though they do not necessarily possess these attributes. This argument can also be made for all of the associations around uniforms discussed above. The salient colour of clothing associated with a group of people reflects a figurative link.

The subtle differences between a physical (metonymic) description and a hypothetical (metaphorical) one was only revealed through the corpus data. These examples fall into Goossen's category of "metaphor from metonymy", where the whole expression starts as a metonymy and the meaning is later metaphorically mapped onto another domain. Also found in the data was Goossens's category of "metonymy within metaphor", where the metonym is embedded in an expression that is to be interpreted metaphorically. For example, to be *caught red handed* involves a metonymic link where *red* stands for the blood on the guilty person's hands. The phrase, however, must be interpreted metaphorically as it is mostly used for non-violent crimes.

8.4.2 Uncertain Motivations

Even if speakers do not know with any certainty what the etymologies are behind figurative meanings it is possible that in some cases they can be deduced because colour terms are so readily understandable. A large proportion of colour metaphors stem from the prototypes of colours; for instance, the phrase *out of the blue* derives from the meaning of a clear blue sky. In other cases, there is not always a salient object that can be linked to a figurative use of a colour. Despite being of uncertain origin, *blue laws* (overly strict laws) shares similar meanings with other phrases, from pornography in *blue movie* to blasphemy in *blue language* and *blue joke*, which were all found to be frequent in the corpora.

A speaker's lack of etymological knowledge can, however, result in problems of understanding and can possibly lead to changes in meaning. The original figurative meaning of drunkenness in *blue Monday* appears to have dropped out of use, being superseded by the more established figurative meaning of dejection. Similarly, the meaning of *in the pink* (to be in good health or spirits) is used to describe happiness or

health, and for most speakers is most likely associated with the healthy colour of white people's skin, rather than the sense of the flower, from which it in fact derives (7.3.1). The association between royalty and purple came about because of the high costs of the purple dye, but wearing the colour is no longer an identifying feature of the monarch. In addition, whelk dye produced a range of colours, in contrast to the shade denoted by *purple* we think of today. In cases where the motivation is unclear a figurative meaning can drop out of use, be overtaken by another that is better known or develop in different directions. Examples where the original motivation cannot be confirmed because of a lack of historical records are comparable with cases where folk etymologies have gained momentum.

8.5 Future Directions

As has been discussed, colour lends itself to the process of metonymy, in part, because it is always encountered in the real world as an attribute of something else. A comparison with categories that represent similar visual properties, to investigate whether they too readily enter metonymies may offer further insight into this type of process. Future case studies could focus on the Mapping Metaphor categories D32 "Transparency and opacity" and D36 "Variegated colours", for instance, which are both semantically close to the D34 "Colour" and D35 "Individual colour" categories.

While this study includes some diachronic information, such as dates of first attestation, its main focus is on the figurative use of colour as it is currently used. Future work could place a greater emphasis on earlier material. The HT data offers an important source of information about the historical picture of metaphor in colour. Analysis could focus on the simplex colour terms, most of which were not discussed in this study, as these often include earlier extensions in meaning than phrases.

Non-basic colour terms have been shown to hold figurative meanings. Many of these figurative uses appear to be fairly recent developments and so an in-depth study using a more up-to-date and specialist corpus could reveal more about their development and use. In order to gain a full picture of how cross-modal language operates, all of the sensory areas of meaning, in addition to those involving only colour, should be analysed. The categorisation of the HT provides a way to identify sense lexemes and the date information will show when the lexical transfers took place. Furthermore, despite an apparent similarity between how synaesthetes and non-synaesthetes understand innate cross-modal mappings, such as between pitch and light (see, for example, Marks 1982), further work is needed

here. The level of agreement among synaesthetes for cross-modal mappings could be tested and compared with that of non-synaesthetes. A comprehensive account of cross-modal language would contribute to our understanding of how the senses are linked to one another.

8.6 Final Remarks

The main aim of this thesis was to investigate metaphors and metonymies surrounding colour. A comprehensive account of the colour qualifiers found within the D34 "Colour" domain was given, revealing the range of semantic areas that are transferred into and out of colour. Until now, this has not been discussed in any depth or from the perspective of a metaphorical analysis. Likewise, a provisional study into cross-modal language has been carried out, covering metaphors involving colour. Finally, the figurative meanings of hues were analysed in the form of phrases including a colour term. This covered all of the basic terms along with a number of non-basic terms. A bottom-up approach was taken and so rather than focussing only on the most prototypically metaphorical colour terms, all lexis with a colour sense was taken into consideration.

The main data source used was the *Historical Thesaurus*, and by extension its counterpart the *Oxford English Dictionary*. Using these resources I collated various extended meanings surrounding colour, how they came about and when. As a result, I could corroborate previous suggestions that, for colour, a lot of metaphor is preceded by a process of metonymy. In order to find out if these figurative senses were used in the present day and in what ways, I consulted electronic corpora: the *British National Corpus* and the *Corpus of Contemporary American English*. The corpus data both obscured and enlightened the investigation into the nuances between metonymy and metaphor. Deciding on what sense was intended in individual cases with limited context available was not always easy, yet in many cases the corpus examples revealed subtly different ways in which meanings are extended from metonymy to metaphor. This analysis could only have been made through a combination of both lexicographic and corpus-based methods.

Even though the analysis of a single semantic area cannot in itself form the grounds of generalizations about language, it can nevertheless reflect patterns found in other semantic areas. In the case of colour, whether something is viewed as metonymy or metaphor is often dependent on whether the history of the term is known or not. By considering the etymology and recent developments of a meaning, the whole picture can be given. Rather

than being classed as either metaphor or metonymy, a more flexible approach towards the two processes can be taken as examples can fit onto a scale moving from clear cases through to more ambiguous ones. The MM procedure can unlock the metaphorical sense data contained within the HT and OED, and highlight how sophisticated those data are. The present work serves as a case study of only one area of meaning and highlights the potential for similar in-depth investigations into specific semantic areas using this procedure.

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Appendix 1 – Old Mapping Metaphor Category Codes to New Metaphor Map codes

MM Category code	New code	Category name
	1A	THE EARTH
A01	1A01	The world and the earth
A02	1A02	Region of the earth
A03	1A03	Cardinal points
A04	1A04	Land and islands
A05	1A05	Landscape, high and low land
A06	1A06	Level land and marshes
A07	1A07	Wild and cultivated land
A08	1A08	Body of water
A09	1A09	Rivers and streams
A10	1A10	Seas and oceans
A11	1A11	Lakes
A12	1A12	Ice
A13	1A13	Tides, waves and flooding
A14	1A14	Named regions of earth
A15	1A15	Geological features
A16	1A16	Minerals
A17	1A17	Earth science
A18	1A18	Universe and space
A19	1A19	Celestial sphere
A20	1A20	Sky
A21	1A21	Heavenly body
A22	1A22	Planets and satellites
A23	1A23	Stars
A24	1A24	Sun
A25	1A25	Constellations and comets
A26	1A26	Astronomy
A27	1A27	Astrology
A28	1A28	Atmosphere and weather

B01 1B01 Life B02 1B02 Birth B03 1B03 Age B04 1B04 Biological sex B05 1B05 Absence of life B17 1B06 Biology B18 1B07 Biological processes B19 1B08 Habitats and taxonomies B27 1B09 The human body B28 1B10 Bodily shape and strength B29 1B11 Body parts B30 1B12 Skin B31 1B13 Hair B32 1B14 Bodily tissue B33 1B15 Bones, muscles and cartilage B34 1B16 Sense and speech organs B35 1B17 Internal organs B36 1B18 Digestive organs B37 1B19 Bodily secretion B38 1B20 Bodily excretion B39 1B21 Sex organs B40 1B22 Respiratory sys		1B	LIFE
B03 1B04 Biological sex B05 1B05 Absence of life B17 1B06 Biology B18 1B07 Biological processes B19 1B08 Habitats and taxonomies B27 1B09 The human body B28 1B10 Bodily shape and strength B29 1B11 Body parts B30 1B12 Skin B31 1B13 Hair B32 1B14 Bodily tissue B33 1B15 Bones, muscles and cartilage B34 1B16 Sense and speech organs B35 1B17 Internal organs B36 1B18 Digestive organs B37 1B19 Bodily secretion B38 1B20 Bodily excretion B39 1B21 Sex organs B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43	B01	1B01	Life
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B05 1B05 Absence of life B17 1B06 Biology B18 1B07 Biological processes B19 1B08 Habitats and taxonomies B27 1B09 The human body B28 1B10 Bodily shape and strength B29 1B11 Body parts B30 1B12 Skin B31 1B13 Hair B32 1B14 Bodily tissue B33 1B15 Bones, muscles and cartilage B34 1B16 Sense and speech organs B35 1B17 Internal organs B36 1B18 Digestive organs B37 1B19 Bodily secretion B38 1B20 Bodily excretion B39 1B21 Sex organs B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10	B03	1B03	Age
B17 1B06 Biology B18 1B07 Biological processes B19 1B08 Habitats and taxonomies B27 1B09 The human body B28 1B10 Bodily shape and strength B29 1B11 Body parts B30 1B12 Skin B31 1B13 Hair B32 1B14 Bodily tissue B33 1B15 Bones, muscles and cartilage B34 1B16 Sense and speech organs B35 1B17 Internal organs B36 1B18 Digestive organs B37 1B19 Bodily secretion B38 1B20 Bodily excretion B39 1B21 Sex organs B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 <td< td=""><td>B04</td><td>1B04</td><td>Biological sex</td></td<>	B04	1B04	Biological sex
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B34 1B16 Sense and speech organs B35 1B17 Internal organs B36 1B18 Digestive organs B37 1B19 Bodily secretion B38 1B20 Bodily excretion B39 1B21 Sex organs B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B32	1B14	Bodily tissue
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B37 1B19 Bodily secretion B38 1B20 Bodily excretion B39 1B21 Sex organs B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B35	1B17	Internal organs
B38 1B20 Bodily excretion B39 1B21 Sex organs B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B36	1B18	Digestive organs
B39 1B21 Sex organs B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites IC HEALTH AND DISEASE	B37	1B19	Bodily secretion
B40 1B22 Respiratory system B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B38	1B20	Bodily excretion
B41 1B23 Vascular system B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B39	1B21	Sex organs
B42 1B24 The brain and nervous system B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B40	1B22	Respiratory system
B43 1B25 Human anatomy B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B41	1B23	Vascular system
B10 1B26 Death B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B42	1B24	The brain and nervous system
B11 1B27 Dead person B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B43	1B25	Human anatomy
B12 1B28 Manner of death B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B10	1B26	Death
B13 1B29 Cause of death B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B11	1B27	Dead person
B14 1B30 Killing B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B12	1B28	Manner of death
B15 1B31 Disposal of corpses B16 1B32 Death rites 1C HEALTH AND DISEASE	B13	1B29	Cause of death
B16 1B32 Death rites 1C HEALTH AND DISEASE	B14	1B30	Killing
1C HEALTH AND DISEASE	B15	1B31	Disposal of corpses
	B16	1B32	Death rites
B06 1C01 Health		1C	HEALTH AND DISEASE
	B06	1C01	Health

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B07	1C02	Ill-health
B08	1C03	Mental illness and sanity
B09	1C04	Healing and treatment
	1D	PEOPLE
B64	1D01	Humankind
B65	1D02	Person
B66	1D03	Man
B67	1D04	Woman
B68	1D05	Baby and young person
B69	1D06	Adult and middle-aged person
B70	1D07	Old person
B72	1D08	Races and nations
	1E	ANIMALS
B44	1E01	Animals
B45	1E02	Animal habitats and sounds
B46	1E03	Groups of animals
B47	1E04	Animal bodies
B48	1E05	Insects and other invertebrates
B49	1E06	Fish
B50	1E07	Amphibians
B51	1E08	Reptiles
B52	1E09	Birds
B53	1E10	Classes of mammals
B54	1E11	Cats
B55	1E12	Dogs
B56	1E13	Other clawed mammals
B57	1E14	Ungulate, having hoofs
B58	1E15	Horses, elephants and wild pigs
B59	1E16	Domestic pigs
B60	1E17	Ruminants
		Bats, aardvarks, flying lemurs and tree-
B61	1E18	shrews
B62	1E19	Primates
B63	1E20	Zoology and taxidermy
	l	

	1F	PLANTS
B20	1F01	Plants
B21	1F02	Flowers and grasses
B22	1F03	Trees and shrubs
B23	1F04	Cacti, ferns, moss and algae
B24	1F05	Cultivated plants
B25	1F06	Weeds
B26	1F07	Botany
	1G	FOOD AND DRINK
B73	1G01	Food and eating
B74	1G02	Drinks and drinking
B75	1G03	Farming
B76	1G04	Hunting and fishing
	1H	TEXTILES AND CLOTHING
B77	1H01	Textiles
B78	1H02	Clothing
	1I	PHYSICAL SENSATION
C01	1I01	Physical sensation
C02	1I02	Sleep
C03	1I03	Awake
C04	1I04	Weariness
C05	1I05	Invigoration
C06	1I06	Sexual relations
C07	1I07	Drug use
C08	1I08	Poison
C09	1I09	Touch
C10	1I10	Taste
C11	1I11	Smell
C12	1I12	Sight
C13	1I13	Hearing and Noise
B79	1I14	Cleanness
B80	1115	Dirtiness
	1 J	MATTER
D01	1J01	Alchemy
D02	1J02	Chemistry
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D03	1J03	Weight, heat and cold
D04	1J04	Solidity and density
D05	1J05	Lack of density
D06	1J06	Granular texture
D07	1J07	Fine and coarse texture
D08	1J08	Strength
D09	1J09	Weakness
D10	1J10	Hardness
D11	1J11	Softness
D12	1J12	Unctuousness
D13	1J13	Semi-fluidity
D14	1J14	Liquid
D15	1J15	Water
D16	1J16	Humidity
D17	1J17	Wetness
D18	1J18	Leaking and spilling
D19	1J19	Flowing and floating
D20	1J20	Dryness
D21	1J21	Gas
D22	1J22	Air
D23	1J23	Physics and mechanics
D24	1J24	Radiation, radioactivity, magnetism, electricity and quantum physics
D25	1J25	Light
D26	1J26	Flickering and glowing light
D27	1J27	Illumination
D28	1J28	Reflection
D29	1J29	Natural light
D30	1J30	Artificial light
D31	1J31	Fireworks
D32	1J32	Transparency and opacity
D33	1J33	Darkness
D34	1J34	Colour
D35	1J35	Individual colours
D36	1J36	Variegated colours
		I

D38	D37	1J37	Good condition
E01	D38	1J38	Bad condition
E02		1K	EXISTENCE AND CAUSATION
E03	E01	1K01	Existence and character
E04	E02	1K02	Creation
E05	E03	1K03	Destruction
E06	E04	1K04	Causation
IL SPACE	E05	1K05	Chance
E40 1L01 Space E41 1L02 Distance E42 1L03 Size and spacial extent E43 1L04 Shape E44 1L05 Place and position E45 1L06 Relative position E46 1L07 Direction IM TIME E30 1M01 Time E31 1M02 Duration in time E32 1M03 Occasion E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence IN MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 <t< td=""><td>E06</td><td>1K06</td><td>Occurrence</td></t<>	E06	1K06	Occurrence
E41 E42 E42 E43 E43 E44 E44 E44 E44 E45 E45 E46 E46 E46 E47 E30 E31 E31 E31 E32 E33 E33 E33 E34 E34 E34 E34 E34 E34 E34		1L	SPACE
E42 1L03 Size and spacial extent E43 1L04 Shape E44 1L05 Place and position E45 1L06 Relative position E46 1L07 Direction IM TIME E30 1M01 Time E31 1M02 Duration in time E32 1M03 Occasion E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence IN MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement E51 1N05 Slow movement	E40	1L01	Space
E43 E44 E44 E45 E45 E46 E46 E46 E46 E47	E41	1L02	Distance
E44 1L05 Place and position E45 1L06 Relative position E46 1L07 Direction IM TIME E30 IM01 Time E31 1M02 Duration in time E32 1M03 Occasion E33 IM04 Period of time E34 1M05 Day and evening E35 IM06 Night E36 IM07 Measurement of time and relative time E37 IM08 Suitability of time E38 IM09 Frequency E39 IM10 Change and permanence IN MOVEMENT E47 IN01 Movement E48 IN02 Types of movement E49 IN03 Progressive movement E50 IN04 Rate of movement and speed E51 IN05 Slow movement	E42	1L03	Size and spacial extent
E45	E43	1L04	Shape
E46 1L07 Direction TIME E30 1M01 Time E31 1M02 Duration in time E32 1M03 Occasion E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E44	1L05	Place and position
IM TIME E30 1M01 Time E31 1M02 Duration in time E32 1M03 Occasion E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence IN MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E45	1L06	Relative position
E30 1M01 Time E31 1M02 Duration in time E32 1M03 Occasion E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence IN MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E46	1L07	Direction
E31 1M02 Duration in time E32 1M03 Occasion E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence IN MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement		1 M	TIME
E32 1M03 Occasion E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E30	1M01	Time
E33 1M04 Period of time E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E31	1M02	Duration in time
E34 1M05 Day and evening E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E49 1N04 Rate of movement and speed E51 1N05 Slow movement	E32	1M03	Occasion
E35 1M06 Night E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence	E33	1M04	Period of time
E36 1M07 Measurement of time and relative time E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E34	1M05	Day and evening
E37 1M08 Suitability of time E38 1M09 Frequency E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E35	1M06	Night
E38 1M09 Frequency E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E36	1 M 07	Measurement of time and relative time
E39 1M10 Change and permanence 1N MOVEMENT E47 1N01 Movement Types of movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E37	1 M 08	Suitability of time
1N MOVEMENT E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E38	1M09	Frequency
E47 1N01 Movement E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E39	1M10	Change and permanence
E48 1N02 Types of movement E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement		1N	MOVEMENT
E49 1N03 Progressive movement E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E47	1N01	Movement
E50 1N04 Rate of movement and speed E51 1N05 Slow movement	E48	1N02	Types of movement
E51 1N05 Slow movement	E49	1N03	Progressive movement
	E50	1N04	Rate of movement and speed
E52 1N06 Movement in a specific direction	E51	1N05	Slow movement
	E52	1N06	Movement in a specific direction

E53	1N07	Transference
E54	1N08	Impulse
E55	1N09	Impact
E56	1N10	Immobility and restlessness
	10	ACTION
E07	1001	Operation and influence
E08	1002	Action
E09	1003	Preparation
E10	1004	Repetition
E11	1005	Continuation
E12	1006	Execution and performance
E13	1007	Completion
E14	1008	Cessation
E15	1009	Inaction
E16	1010	Endeavour
E17	1011	Difficulty
E18	1012	Easiness
E19	1013	Restoration and recovery
E20	1014	Advantage
E21	1015	Safety
E22	1016	Success
E23	1017	Disadvantage and harm
E24	1018	Adversity
E25	1019	Failure
E26	1O20	Energy, violence and speed of action
E27	1021	Slow action and degrees of caution
E28	1022	Behaviour and conduct
E29	1023	Ability
	1P	RELATIVE PROPERTIES
F01	1P01	Relationship
F02	1P02	Relevance
F03	1P03	Correlation
F04	1P04	Sameness
F05	1P05	Contrast
F06	1P06	Difference
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F07	1P07	Uniformity and stereotypes
F08	1P08	Variety
F09	1P09	Similarity
F10	1P10	Imitation
F11	1P11	Equality and inequality
F12	1P12	Accompaniment
F13	1P13	Exemplification and specificity
F14	1P14	Order
F15	1P15	Disorder
F16	1P16	Sequence
F17	1P17	Number
F18	1P18	Mathematics
F19	1P19	Computing
F20	1P20	Measurement
F21	1P21	Measurement of length
F22	1P22	Measurement of area
F23	1P23	Measurement of volume
F24	1P24	Measuring instrument
F25	1P25	Measurement of weight
F26	1P26	Quantity
F27	1P27	Degree
F28	1P28	Greatness and intensity
F29	1P29	Sufficiency and abundance
F30	1P30	Increase in quantity
F31	1P31	Moderateness and smallness of quantity
F32	1P32	Insufficiency
F33	1P33	Decrease in quantity
F34	1P34	Wholeness
F35	1P35	Completeness
F36	1P36	Incompleteness
F37	1P37	Part-whole relationships
	1Q	THE SUPERNATURAL
G01	1Q01	Supernatural
G02	1Q02	Deity
G03	1Q03	Angel
		ı

G04	1Q04	Devil
G05	1Q05	Heaven
G06	1Q06	Hell
	2A	MENTAL CAPACITY
H01	2A01	Mind
H02	2A02	Intellect
H03	2A03	Consciousness
H04	2A04	Character and mood
H05	2A05	Psychology
H06	2A06	Thought
H07	2A07	Perception and cognition
H08	2A08	Imagination
H09	2A09	Understanding
H10	2A10	Cleverness
H11	2A11	Wisdom
H12	2A12	Reason and argument
H13	2A13	Lack of understanding
H14	2A14	Stupidity
H15	2A15	Foolishness
H16	2A16	Intellectual weakness
H17	2A17	Foolish person
H18	2A18	Intelligibility
H19	2A19	Memory and commemoration
H20	2A20	Knowledge and experience
H21	2A21	Lack of knowledge
H22	2A22	Truth and falsity
H23	2A23	Secrecy and concealment
H24	2A24	Beliefs and opinions
H25	2A25	Disbelief and uncertainty
H26	2A26	Expectation
J01	2A27	Philosophy
	2B	ATTENTION AND JUDGEMENT
H27A	2B01	Attention and inattention
H27B	2B02	Enquiry and discovery
		1

H27C	2B03	Answer and argument
H27D	2B04	Judgement
H28	2B05	Importance
H29	2B06	Unimportance
H30	2B07	Esteem
H31	2B08	Contempt
K01	2B09	Aesthetics and good taste
K02	2B10	Tastelessness
K03	2B11	Fashionableness
K04	2B12	Physical appearance
	2C	GOODNESS AND BADNESS
H27	2C01	Good
	2C02	Bad
	2D	EMOTION
I01	2D01	Emotion
I02	2D02	Strong emotion and lack of emotion
I03	2D03	Excitement
I04	2D04	Composure
105	2D05	Pleasure
106	2D06	Emotional suffering
107	2D07	Anger
108	2D08	Love and friendship
109	2D09	Hatred and hostility
I10	2D10	Indifference
I11	2D11	Pity and pitilessness
I12	2D12	Jealousy
I13	2D13	Gratitude and ingratitude
I14	2D14	Pride
I15	2D15	Humility
I16	2D16	Fear
I17	2D17	Courage
	2E	WILL
L01	2E01	Will and personal choice
L02	2E02	Necessity and inclination
L03	2E03	Willingness and desire
		I

L04	2E04	Intention and planning
L05	2E05	Decision-making
L06	2E06	Motivation and demotivation
	2F	POSSESSION
N01	2F01	Possessing and lacking
N02	2F02	Wealth
N03	2F03	Poverty
N04	2F04	Sharing
N05	2F05	Obtaining
N06	2F06	Loss
N07	2F07	Retaining
N08	2F08	Relinquishing
N09	2F09	Giving
N10	2F10	Taking
N11	2F11	Providing and storing
	2G	LANGUAGE
O01	2G01	Language
O02	2G02	Languages of the world
O03	2G03	Speaking
O04	2G04	Study of language
O05	2G05	Naming
O06	2G06	Expression of opinion
M01	2G07	Refusal
O07	2G08	Curse
	3A	SOCIETY AND THE COMMUNITY
P01	3A01	Society
P02	3A02	Kinship and relationship
P03	3A03	Kinship group and family
P04	3A04	Family members and genealogy
P05	3A05	Marriage
P06	3A06	Social communication and culture
P07	3A07	Solitude and social isolation
P08	3A08	Social attitudes
P09	3A09	Social position
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P10	3A10	Social discord and peace
	3B	INHABITING AND DWELLING
Q01	3B01	Inhabiting and population
Q02	3B02	Buildings and inhabited places
	3C	ARMED HOSTILITY
R01	3C01	War and armed hostility
R02	3C02	Military forces
R03	3C03	Weapons and armour
R04	3C04	Air and sea hostilities
R05	3C05	Peace and absence of war
	3D	AUTHORITY
S01	3D01	Authority and control
S02	3D02	Rule and government
S03	3D03	Politics
S04	3D04	Political office
S05	3D05	Exercise of authority
S06	3D06	Punishment
	3E	LAW
S07	3E01	Law
	3F	MORALITY
T01	3F01	Morality and immorality
T02	3F02	Right and justice
T03	3F03	Wrong and injustice
T04	3F04	Virtue
T05	3F05	Moral evil
T06	3F06	Guilt
T07	3F07	Licentiousness
	3G	EDUCATION
U01	3G01	Education
	3Н	FAITH
V01	3H01	Faith
V02	3H02	Religious groups
V03	3Н03	Church government
V04	3H04	Worship
V05	3H05	Places and artefacts of religion
	l l	

	3I	COMMUNICATION
W01	3I01	Communication
W02	3I02	Representation
W03	3I03	Signs and signals
W04	3I04	Insignia and heraldry
W05	3I05	Information and advertising
W06	3I06	Records
W07	3I07	Sound and video recording
W08	3I08	Writing
W09	3109	Printing and publishing
W10	3I10	Reading
W11	3I11	Books
W12	3I12	Journalism
W13	3I13	Television and broadcasting
W14	3I14	Correspondence and telecommunications
	3J	TRAVEL AND TRAVELLING
X01	3J01	Travel and journeys
X02	3J02	Transport
X03	3J03	Railways
X04	3J04	Navigation
X05	3J05	Air and space travel
	3K	OCCUPATION AND WORK
Y01	3K01	Occupations and work
Y02	3K02	Industry
Y03	3K03	Workers and workplaces
Y04	3K04	Tools and equipment for work
Y05	3K05	Containers
Y06	3K06	Machines
Y07	3K07	Materials and fuel
	3L	TRADE AND FINANCE
Y08	3L01	Trade and commerce
Y09	3L02	Money
	3M	LEISURE
Z01	3M01	Leisure and games

Z02	3M02	Social events
Z03	3M03	Movements and styles in the arts
Z04	3M04	Music
Z05	3M05	Visual arts
Z06	3M06	Literature
Z07	3M07	Performance arts and film
Z08	3M08	Sport
Z09	3M09	Types of sport
Z10	3M10	Dance