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นางสาวศิรินทร์ธร ด้วงคต

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A CORPUS-BASED STUDY OF PATTERNS AND USES OF ENGLISH COLOUR TERMS:

A CASE STUDY OF THE ADJECTIVES *BLACK*, *WHITE*, AND *RED*

Ms. Sirintorn Duangkhot

A Thesis Submitted in Partial Fulfillment of the Requirements

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ศิรินทร์ธร ด้วงคต: การศึกษารูปแบบการใช้คำเรียกสีในภาษาอังกฤษตามแนว
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วิทยานิพนธ์หลัก : อ.ดร. รักสงบ วิจิตรโสภณ, 136 หน้า

ในเชิงอรรถศาสตร์ ได้มีการศึกษาคำเรียกสีกันมาหลากหลายรูปแบบ (ตัวอย่างเช่น
ผลงานของ Berlin and Kay 1969, Leech 1981, Wyler 1992, และ Allan 2009) อย่างไรก็ตาม
ผลงานเหล่านี้โดยเฉพาะของ Wyler (1992) และ Allan (2009) เป็นผลงานที่ใช้ข้อมูลที่ถูกคิดขึ้น
เพื่ออธิบายหรือทดสอบประเด็นต่างๆในทางภาษาศาสตร์ แต่สำหรับงานวิจัยชิ้นนี้ซึ่งดำเนินตาม
แนวภาษาศาสตร์คลังข้อมูล ใช้ตัวบทที่เจ้าของภาษาใช้ในการติดต่อสื่อสารจริงที่ได้จากคลังข้อมูล
แห่งชาติอังกฤษ (บีเอ็นซี) มาทำการศึกษารูปแบบและการใช้คำเรียกสีที่ทำหน้าที่เป็นคำคุณศัพท์
จำนวนสามสีคือ สีดำ สีแดง และสีขาว

ทั้งนี้ มีการพบว่า คำคุณศัพท์ที่ใช้เรียกสีทั้งสามสีดังกล่าวเป็นคำคุณศัพท์ที่ถูกใช้บ่อยที่สุด
100 คำแรกของบีเอ็นซี ซึ่งถือเป็นแหล่งข้อมูลสำคัญของภาษาอังกฤษแบบอังกฤษร่วมสมัย การใช้
คลังข้อมูลภาษาในงานวิจัยชิ้นนี้ก่อให้เกิดผลวิจัยที่สำคัญ 2 ประการกล่าวคือ

ข้อที่ 1. ความหมายในเชิงวัจนปฏิบัติ (pragmatic meanings) หรือนัยแฝงแห่งบริบท
(discourse prosodies) ของคำเรียกสีนั้นเกิดจากการที่คำเรียกสีปรากฏร่วมกับคำอื่น ไม่ใช่เพราะ
คำเรียกสีนั้นมีคุณลักษณ์ของความหมายแฝงในตัวเอง ในอีกนัยหนึ่งก็คือ ความหมายในเชิงวัจน
ปฏิบัติของคำเรียกสีนั้นเป็นคุณลักษณ์ของวลีที่มีคำเรียกสีปรากฏร่วม ไม่ใช่ของคำเรียกสีนั้นๆแต่
เพียงคำเดียว

ข้อที่ 2. ความหมายในเชิงวัจนปฏิบัติหรือนัยแฝงแห่งบริบทนั้นไม่ได้เกิดขึ้นเฉพาะกับการ
ใช้คำเรียกสีในเชิงอุปมาอุปไมย (figurative use) เท่านั้น แต่ยังเกิดกับการใช้คำเรียกสีตาม
ความหมายที่แท้จริง (non-figurative use) ซึ่งในความเป็นจริงแล้ว การใช้ในประเภทหลังนี้ปรากฏ
เป็นผลวิจัยที่มีนัยสำคัญของงานวิจัยชิ้นนี้

ภาควิชา : <u>ภาษาอังกฤษ</u> ลายมือชื่อนิสิต...

สาขาวิชา: <u>ภาษาอังกฤษ</u> ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก.....................

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SIRINTORN DUANGKHOT: A CORPUS-BASED STUDY OF PATTERNS AND USES OF ENGLISH COLOUR TERMS: A CASE STUDY OF THE ADJECTIVES *BLACK*, *WHITE*, AND *RED*. ADVISOR: RAKSANGOB WIJITSOPHON, Ph.D., 136 pp.

Color terms in English have been explored in semantics (e.g. Berlin and Kay 1969, Leech 1981, Wyler 1992, Allan 2009). However, these studies, particularly Wyler (1992) and Allan (2009), rely on intuition-based data. This research applies corpus linguistics, using authentic, naturally-occurring data drawn from the British National Corpus (BNC) to explore lexicogrammatical patterns and uses of the three English colour term adjectives—*black*, *white* and *red*.

These three adjectives are found to occur within the list of 100 most frequently-used adjectives in the BNC, representing contemporary British English. The use of corpus data in this research reveals two significant findings. That is,

(1) the pragmatic meanings or discourse prosodies of the colour terms are realized as a result of their co-occurrences with other words, not quite because the color terms have their own distinctively connotative properties. In other words, the pragmatic meanings of the colour terms are the properties of the phrases, not each single word of the colour terms;

(2) these pragmatic meanings or discourse prosodies are not restricted to the figurative use of the colour terms, but also extend to the non-figurative category which, as a matter of fact, constitute a substantial part of findings in this research.

Department : ENGLISH   Student's Signature ....

Field of Study : ENGLISH   Advisor's Signature ....

Academic Year : 2011

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Chapter I

Introduction

1.1   Preliminaries

Colour terms have long been interesting features for linguistic analysis or research. This is because colour is considered a part of human communication, hence is appealing to linguists especially in the issues of the relationship between the language and the world. This is why it is found in many linguistic disciplines. Colour is a favoured subject in semantics, particularly in the issue of universal colour categorisations (Berlin and Kay, 1969) They are an intriguing issue of research in cognitive linguistics (e.g. MacLaury 1987, 1992, Steinvall, 2002) and are explored in cross-cultural translation (Susan-Philip, 2003). They are also investigated in literary works specifically in the domain of metaphor (Wyler, 1992).

The three English colour terms *black, white*, and *red* are selected for this research because they are found to occur within the list of the 100 most frequently-used adjectives in the British National Corpus, or the BNC, a general corpus of 100 million words, representing British English. Moreover, they also appear in the 100 most frequently-used adjectives in the Corpus of Contemporary American English or COCA, a monitor corpus of 425 million words, representing American English. These data are the ratification of the significance of these colour terms and serve as primary rationale for this research.

The title of this research "A CORPUS-BASED STUDY OF PATTERNS AND USES OF ENGLISH COLOUR TERMS: A CASE STUDY OF THE ADJECTIVES *BLACK, WHITE*, AND *RED*" needs an elaboration. Firstly, the study of *patterns* in this research refers only to noun phrases which consist of the colour terms in questions and the adjacent nouns to their right positions. Secondly, by way of labeling *English colour terms*, the study refers only to the noun phrases containing the three English colour terms.

The main focus of this study is to explore the three colour terms in authentic contexts to see whether they have distinctive patterns of use and/or pragmatic

meanings or intended meaning (cf. 2.1.2.2 and 2.2.2.1.1.4) indicating how they are used in certain contexts. However, within the literature of English colour terms, there have been only few studies which pay attention to the use of the colour terms. These are, for example, Wyler (1992) and Allan (2009). Nonetheless, these studies are introspection-based and rely upon intuition when producing the list of the colour term phrases and making the claims about their features.

This study aims to address these shortcomings from previous studies. It is a corpus-based research and relies on authentic, naturally-occurring data drawn from the BNC. This means that intuitive observations about the colour terms are checked against the corpus data. Moreover, the claims made in this research are based on the way the colour terms are actually used. Corpus data, in comparison to dictionaries, offer two essential sets of information for analysis in this research i.e. (1) linguistic environment where each colour term phrase occurs; and (2) pragmatic meanings or discourse prosodies that take into account the environment surrounding the colour term phrases and indicate how these terms are/should be put into uses.

To illustrate, dictionaries can give meanings and some indications of usage e.g. *white elephant* (cf. 4.2.2.1.1.3.3), but not the linguistic environment and the pragmatic meanings of the colour term phrases e.g. *black hole* (cf. 4.1.2.1.1.1) in the meaning sense of difficulty or hardship. Moreover, dictionaries usually make a list of colour term phrases in figurative use more than literal use of the terms e.g. more of *black sheep* (cf. 4.1.2.1.1.4) type of phrases, but not *black people* (cf. 4.1.2.2.1.1) which conveys a sense of racial discrimination. With corpus data, this research is able to present several long lists of colour term phrases in literal use.

1.2 Aims of the study

As mentioned above, this study concentrates on examining the uses of three English colour terms by examining corpus data, which is considered a collection of real texts, representing authentic uses by native speakers. In so doing, this study pays particular attention to the following two research questions:

(1) what are the lexicogrammatical patterns of English colour-term adjectives –*black*, *white* and *red*– in authentic uses of English?

(2) what meanings and functions do these lexicogrammatical patterns of the three English colour terms have in authentic uses of English?

To illustrate, the abovementioned *lexicogrammatical patterns* refer to the English lexis and its grammatical features. The lexis deals with word combinations which can be identified by using the concept of collocation. The collocation in this research is expressed in the form of noun phrases which consist of the nouns in different semantic categories and the three colour terms acting as the modifiers. Hence, these phrases or lexicogrammatical patterns of the three colour-terms adjectives are the most frequent or common noun phrases containing the three colours.

The meanings and functions of these lexicogrammatical patterns are described as *pragmatic meaning* referring to intended meaning or speaker's meaning. This pragmatic meaning is associated with the consideration of the surrounding linguistic contexts. It is called by Sinclair (2003:117) as "semantic prosody- semantic because it deals with meaning and prosody because it typically ranges over combinations of words."

1.3 Method and material

To answer those two research questions discussed above, the study applies, as its theoretical framework, the notion of "extended units of meaning", proposed by Sinclair (2004). Under this concept, the study explores the collocation, the semantic preference, and particularly the discourse prosody or the pragmatic meaning of each colour term phrases. This is to see the patterns of occurrences of the colour terms and the pragmatic implications they may have. The results from each colour term are then compared to identify similarities and differences in relation to the findings from previous studies.

This study acquires the data for analysis from two major sources -- PIE and the BNC. The database Phrases in English or PIE provides a powerful interface with the BNC for studying English words and phrases as it allows users to extract recurrent sequences of words that occur in the BNC. In this research, PIE provides the collocational patterns or the most frequent phrases of the three colour terms tagged as adjectival modifiers. These phrases are then taken to the BNC to search for their distributional and collocational profiles.

British National Corpus or BNC is an electronic collection of over 100 million words of modern British English. In this study, it supplies the distribution data e.g. frequency information, text domains of each colour term phrases retrieved from PIE. It also provides concordances which are the key for the analysis used for this research.

1.4 Outline of the study

This study is arranged for presentation in the following orders:

Chapter 1 presents an overview of the research by outlining arguments or contributions of this study, the aims, as well as the method and material used in the analysis.

Chapter 2 presents a literature review on the issue of English colour terms, as well as the analytical tools studied by many scholars and are used in this study.

Chapter 3 explains the methodology used in the study. The key terms that are involved in the analysis e.g. word frequency, concordance lines are described along with the information about major sources of the data i.e. PIE and the BNC.

Chapter 4 presents findings of each individual colour term in relation to their collocational patterns i.e. colour terms in collocation with figurative noun phrases, colour terms in collocation with human noun phrases, colour terms in collocation with clothing noun phrases, and colour terms in collocation with body-part noun phrases.

Chapter 5 synthesizes and discusses the results from previous chapters in order to make comparisons to those of previous studies. The chapter concludes with this study's limitations and offers suggestions for further study of the English colour terms.

1.5 Concluding notes

This chapter presents an overview of this study by discussing the rationale, aims, and how it is conducted methodologically. The next chapter provides literature review on previous studies of colour terminology and theoretical frameworks of this study.

Chapter II

Literature Review

2.0 Introduction

This chapter discusses two fundamental frameworks for the present study i.e. (1) previous studies on English colour terms and (2) analytical frameworks.

2.1 Previous studies on English colour terms

Colour terminology has attracted a great interest from researchers in different fields. It has been a favoured subject in anthropology (e.g. Lucy1996, Foley 1997), in cognitive studies (e.g. MacLaury 1987, 1992, Steinvall 2002), in psychology (e.g. Crawford 1982, Corbett and Morgan 1988). In semantics, the most dominant theory in the past 30 year of colour term studies is the universalism of colour categorization proposed by Berlin and Kay (1969). To certain extent, after the publication of *Basic Color Terms* by Berlin and Kay in 1969, it has been evident that almost every piece of literature in colour semantics has been steered into only two directions. That is, (1) the literature which are against the *Basic Colour Terms* theory, henceforth referred to as the relativism and (2) the literature which are in support of the theory, henceforth referred to as the universalism.

2.1.1 Relativism vs Universalism

The focal point of arguments between the two theories lies in the question whether colour terms are universal. In the view of relativists originally led by the American anthropological linguists Sapir and Whorf (cf. Sahlins 1978, Wierzbicka 1990, Lucy 1997), the domain of colour was the best example for illustration of the arbitrary nature of language. As Bloomfield (1933:140) put it:

> "Physicists view the color spectrum as a continuous scale of light waves of different lengths, ranging from 40 to 72 hundred-thousandths of a millimeter, 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."

In other words, for the relativists, colour terms are not universal among speech communities as each language divides its semantic categories of colours or has a process of colour segmentation in their own way. Leech (1981:233) illustrated that, "the systems of colour terminology of different languages differ widely and unpredictably in the way they cut up the continuum of colour."

The universalists, best represented by Berlin and Kay (1969:2), on the other hand, proposed in their well-known book *Basic Colour Terms* a different view to refute the above notion of relativism. They hypothesized that there was an underlying pattern of universality as they wrote:

"We suspect that this allegation of total arbitrariness in the way languages segment the color space is a gross overstatement."

To support their hypotheses, Berlin and Kay experimented by asking native speakers of twenty languages to map the focal point and outer boundaries of each basic colour terms in their languages by using 329 colour chips. The results of their investigations are regarded as revolutionary in 3 aspects. First, they were able to show that "color categorization is not random and the foci of basic color terms are similar in all languages" (1969:10). Second, they claimed that there appears to be a universal process, which specifies a fixed order in which the basic colour terms are encoded in a language. Third, no language seems to have more than eleven basic colour terms, although they acknowledged that there are some doubtful cases e.g. Hungarian and Russian. These eleven basic colour terms are black, white, red, green, yellow, blue, brown, purple, pink, orange, and grey (Steinvall, 2002: 18).

The universal theory has become a solid ground for various disciplines researching on colour terminology in the past thirty years. However, the theory has not gone without criticism. It has been strongly attacked by relativists particularly on the point that the proposed colour categories are extremely westernized (cf. Lucy 1992). That is, these categories are restricted and clearly based on divisions within the

English language. For example, the division of blue which is a feature of several non-Germanic European languages including Italian, Russian, and Turkish is not taken into consideration although different names of the blue shades in these languages are considered to be as different as *red* and *white* in English. Moreover, social, cultural, and contextual factors of each speech community should be counted for consideration (Wyler 1992: 189). This is because each language expands their categories differently, "making the value of every term different from system to system" (Spence, 1989, cited in Wyler, ibid.).

2.1.2 The use of colour terms

Although universalism and relativism are the dominant theories in colour semantics, they are concerned mainly with the perception of colour terms or the segmentation of colour continuum and pay much less attention to the linguistic aspects of colours terms. Wyler (1992:17) criticized the research done by both universalists and relativists as "linguistic isolation," meaning that a term or name of colour is investigated as an isolated morpheme without being related to the way it is used by speakers and hearers in their native languages. Wyler (ibid: 18) commented further that such questions as "what properties within a natural language do colour terms have? and "How are these properties used by speakers and understood by hearers of that language?" have not been adequately addressed as far as universalisms and relativisms are concerned. These studies, accordingly to Wyler, tend to focus on other issues of the colour terms more than on "natural language and its possibilities as a medium of communication" (ibid.).

Wyler's comment has answered the question why the use of the colour terms should be examined. The colour terms, like other lexical items, are used in human communication in order to create the comprehension among a speech community. Hence, it is important to be able to explain how they are used by native speakers, more specifically English speakers, and how they are perceived by the hearers in authentic uses. This is the main focus of this study which examines two categories of colour term uses i.e. figurative use and non-figurative use.

2.1.2.1 Figurative use

As a definition of figurative meaning, Sinclair (2003: 174) proposed that it "is one which concerns abstract ideas rather than concrete physical ones, and it is used in contrast to the literal meaning, from which it is often considered to be derived by "extensions". For example, "summit" literally means the top of a hill. But modern journalists often label it as a meeting of important people. This shows that metaphors of height tend to be used to express importance of an organization. The facts that climbing a mountain is not easy and not many people do it, so this aspect adds to the figurative meaning of "summit" (ibid: 175).

In relation to the figurative use of colour terms, Wyler (1992) proposed that colour terms can function as signals and they can deliver secondary coding in certain contexts. According to Wyler, primary coding is "understood as an act of naming" (p.138) whereas secondary coding is "a willful act carried out by a person" (ibid.). The secondary coding can be divided into 'intended coding' and intuitive coding.' The intended coding means that colour terms can function as signs or signals for the purpose of changing some behavior. For instance, *red* can refer to 'danger' or 'fire', so it sends out a warning for a person to be aware of danger and keep out. The intuitive coding is "the acquisition of meaning without knowledge of the act of giving significance to a specific colour" (p.139). This type of coding is associated closely with social conventions of a given society. For example, *white* can signal *purity* or innocence, but it can also refer to grief and sorrow on some cultural conventions. This has become linguistically important as some of these codings have been lexicalized and become idiomatic expressions (p.141). For example, *to show the white flag*, *to have a green light* are considered codings of colours in the form of expressions with figurative use of colour terms.

This means that when colour terms are used figuratively, they do not designate a hue perceptible to the human eye and have acquired a meaning which is a devoid of colour. For example, *to be in the red* has no relation to the colour *red*, but actually refers to a loss of a business. Or *to be back in the black* does not denote the meaning of the colour *black* but refers to financial success of a corporate.

Additionally, Wyler acknowledged that the metaphoric process which creates the idiomatic expressions or idioms is "the result of a pragmatic comprehension of the structure" (p.146). For example, the expression a *red-letter day* which denotes a day off or a happy day is derived from the perception of a calendar or diary where Sundays and holidays are printed or marked in red letters.

Such a comprehension creates a pragmatic implication of the idiomatic expressions where colour terms act as a sort of initiator of meaning which no longer has anything to do with colour. However, according to Wyler, this is not the case for the colour terms in non-figurative use: "it has to be noted that the colour as such is a sort of initiator in the non-figurative use, but it does not retain any function by way of colour designation in its figurative use" (ibid.) Wyler's stand on this particular issue is slightly too strong. This present study takes a different view and will show later that that the non-figurative use of English colour terms also contains pragmatic implications.

Furthermore, Wyler mentioned that in people's minds, colours are associated with certain things and this association can be intangible and/or tangible. For example, *black* is associated with night, darkness, death, mourning; *white* is with winter, innocence, purity, void; *red* relates to blood, fire, aggression, danger, life, love (p.150-1). This association has become the symbolic force of the colour terms. Accordingly, positive or negative evaluation of the dynamics symbolized by the colours materializes. Moreover, when colour terms in general are part of figurative phrases, the negative connotations seem to prevail (p.156).

In so far as the present study is concerned, Wyler addresses the three colour terms in question. That is, *black* is dominant with negative connotations. Some samples are *black day* (hopeless, devoid of luck), *black look/black in the face* (be angry), *to get on the black ice* (troublesome, dangerous), etc. In addition, Wyler claimed that *black* also has positive connotations e.g. *black* can be viewed as the colour of elegance, of dressing for festive occasions, or *to be in black* (figures) means the success of a business, or *black gold* refers to mineral oil. Still, there are only few

positive collocations of *black* as Wyler comments "yet on the linguistic level there are few collocations to that end" (p.159).

White, according to Wyler, has both positive and negative connotations. Some of these *white* phrases are *white lie* (pardonable lie), *white-handed* (being innocent), *a white slave* (a prostitute), *a white war* (strong economic competition), *white lips* (being filled with anger), *white-livered* (cowardice) (ibid.). *Red* can also be marked with both negative and positive connotations, but, as Wyler claimed, the majority of *red* phrases have negative connotations (ibid.). Some of these phrases are *to be a red rag to someone* (makes a person furious or aggressive), *to paint the town red* (enjoy the night life, have a good time), *to see red* (to become furious) (p.155). All of these idiomatic expressions show that the figurative meanings of these colour term phrases have nothing to do with colour designation.

Similar work on figurative use and connotations of colour terms is carried out by Allan (2009). According to the author, connotations of colour terms are measured based on the concept of whether the phrases in which the colour terms occur are orthophemisms (straight-talking), dysphemisms (offensive language), or euphemisms (sweet-talking) (p.627).To Allan, *black* contains dysphemistic connotations as it is used to refer to human colour skin and become a racial term representing negative attitude towards dark-skinned people (p.628). *Black* is also related to darkness, death, decay and evil deeds. Some of its phrases are *black humour* (jokes about adversity), *a black leg* (ostracized and excluded, under suspicion or punishment), *black money*, *black market*, *black look* (a face clouded with anger).

White, according to Allan, is the opposite to *black* as it connects to purity, light, free from malignity or evil intent and thus with the beneficent, the innocent, and the harmless (ibid.). Therefore, the term has more euphemistic connotations than others. Some of the phrases are *white magic* (compared to *black magic*), *white collar* (versus *blue collar*), and *white lie* (pardonable lie). According to Allan, *white* can also be used dysphemistically to delineate cowards and other negative connotations e.g. *white feather* (an item sent to a coward), *white flag* (surrender), *white elephant* (expensive but useless item) (p.628).

To Allan, *red* is ripe for metaphorical use (p.631) and has more dysphemistic than euphemistic associations. It is linked to blood and fire as in *red for danger*. Other phrases are *to be in the red* (to show a deficit), *red tape* (inefficient action), *red herring* (misleading distraction) (p.631). *Red* can also be used euphemistically as in *red letter days* (good days), and *red carpet treatment* (p.631). (ibid).

As can be seen from the examples given about, both studies by Wyler (1992) and Allan (2009) concentrate on the figurative use of colour terms. They state that such individual color terms as *black*, *white* and *red* have a tendency to be either positive or negative in their connotative properties. However, saying that *black, white*, and *red* have a tendency to connote positive or negative implications may be too hasty especially when both studies are introspection-based and rely on their intuition when giving out and discussing the lists of all figurative colour term phrases. In other words, methodologically they do not depend on authentic data representing real uses of the colour terms. Therefore, this study aims to fill this gap by using the naturally-occurring data used by native speakers in real life. These data provide frequencies or other statistical values which are counted and calculated using complex statistical models. This means that meanings and functions of the colour terms found in the analysis are supported by authentic and empirical evidences drawn from real uses.

2.1.2.2. Non-figurative use

It is found in this research that the non-figurative use of the colour terms constitute quite a substantial part of the findings. That is, out of the four noun groups of collocations with which the three colour terms occur most frequently, three of them belong in the non-figurative categories. These are human nouns, clothing nouns, and body-part nouns. Hence, the non-figurative category is considered significant as far as the frequency information is concerned.

However, the non-figurative use of English colour terms has been given only little attention in literature. Both Wyler (1992) and Allan (2009), which are modern and key studies on colour terms rarely mention it in their studies. This may be because literal meaning in general is understood as having no pragmatic implication. Still, this

may not be the case for Philip (2003) who examines literal language in comparison to figurative language. She claimed by citing a few scholars in the field of literal language e.g. Gibbs (2002), Giora (2002), Ariel (2002), Israel (2002) that the most common subdivisions of literal language are word meaning, prototypical meaning, salient meaning, and pragmatic meaning (p. 45).

Conventionally literal language is called 'word- or sentence-meaning.' Gibbs (2002: 475, cited in Philip (2003: 45)) defined it as "context-free, semantic meaning." Israel (2002:424, cited in Philip (2003: 46)) mentioned that it "[i]s the meaning inherent in its letters: it is the 'plain' meaning of a text, opposed to 'figurative' senses which require a richer mode of interpretation." Accordingly, *word meaning* does not relate to issues concerning uses or speaker meaning.

Prototypical meaning is not purely denotative comparing to word meaning as words are understood as referring to the most typical member of denoted class (Philip, 2003: 47). The prototypical image of a word in use may not match with the actual characteristics of an object being discussed, but will normally conform to the most typical features associated with it.

Salient meaning draws in extended meaning apart from the core meaning of words, phrases, or sentences. To be salient, they "have to be coded in the mental lexicon, and, in addition, enjoy prominence due to their conventionality, frequency, familiarity, or prototypicality" (Grice 2002: 490-91). To certain extent, salience also depends on one's perception of what is typical, frequent, and conventional which results in the fact that less semantically prominent meanings are less salient and often overlooked (Philip, 2003: 48).

As far as this present study is concerned, pragmatic meaning which is discussed next is most relevant. This is because this present study focuses on investigating the patterns and meanings of the English colour terms in authentic uses. The analytical tools particularly semantic prosody (cf 2.2.2.1.1.4.) applied in this research are meant to identify the speaker's intention for delivering the messages, which, in actual fact, is the key concept of pragmatic meaning.

Pragmatic meaning refers to speaker's meaning which concerns the meaning deriving from when words are put into uses. Moreover, it involves the consideration of the surrounding linguistic context and the extra-linguistic setting in which the words are used. It also concerns the speaker's intention in using a particular utterance or a choice of word in a given communicative context (p.49). Hence, pragmatic meaning is not only concerned with words a speaker uses but what he/she means them to convey above their purely denotative function (p.50). In regards to this present study, pragmatic meaning is related to the notion of semantic prosody (cf. 2.2.2.1.1.4**.**), which, according to Sinclair (2003: 117), refers to:

> "Often the use of a word in a particular cotext carries extra meaning of an emotive or attitudinal nature…[a]nd sometimes this kind of meaning is called "pragmatic" meaning. [T]his kind of meaning is structurally important, and essential for the understanding of language text. We will call it SEMANTIC PROSODY – semantic because it deals with meaning, and prosody because it typically ranges over combinations of words in an utterance rather than being attached just to one."

This theoretical ground is drawn to support an argument of this present study in that pragmatic meanings and functions of colour term phrases can also arise even though they are used non-figuratively in certain contexts.

2.2 Analytical frameworks: Corpus Linguistics

As mentioned above, the main research questions of this present study concern meanings and functions of English colour terms in authentic uses. In order to find answers to these questions, the present study applies corpus linguistics and its descriptive tools for analysis.

2.2.1 What is Corpus Linguistics?

Corpus Linguistics is "the study of language based on examples of 'real life' language use" (McEnery and Wilson, 2001: 1). The term 'corpus' is a Latin term for 'body' (McEnery and Wilson, 2001: 29). A corpus is "a collection of naturally

occurring examples of language stored in an electronic database" (Hunston, 2002: 2). It can also be described as "a finite-sized body of machine-readable text, sampled in order to maximally representative of the language variety under consideration" (McEnery and Wilson, 2001: 32). As a corpus is "designed or required to have a particular representative function" (Leech, 1991: 11) of a language as a whole, it is, therefore, designed, stored and computerized in a systematic and structured, not random, way. This unique qualification of a corpus has made it distinct from a text archive or text database.

2.2.1.1. The nature of Corpus Linguistics

Corpus linguistics has played an important role in many areas of language studies including English linguistics research, English Teaching, and translation. This may be due to three important facts about corpus linguistics (cf. Biber *et al*. 1998, Tognini-Bonelli 2001, Hunston 2002):

First, a corpus-based research is empirical in nature i.e. language use is studied by using naturally occurring texts which are considered authentic data used by native speakers in real life. This helps linguists in a number of ways e.g. (1) their intuitive observations about language can be checked; (2) their claims are made based on the way language is actually used; and (3) their statements can be verifiable as the date from natural texts are observable. Nonetheless, as corpus data are natural texts, they may present 'typicality' of language phenomenon but not their 'well-formedness' (Sinclair 1991, Biber et al 1998, cited in Hunston 2002:22). Therefore, a corpus does not give information about whether something is correct or possible, but only whether it is frequently used or not (Hunston, ibid).

Second, a corpus-based analysis is the combination of both quantitative and qualitative analytical techniques. Quantitative data provides frequencies or other statistical values which are counted and calculated using complex statistical models in order to expound what is observed in linguistic features (McEnery and Wilson, 2001: 76), while in qualitative analyses, analysts use the frequency of words and their

various patterns to offer functional interpretations explaining why those features or patterns exist in language or language variety (Biber *et al*. 1998: 9).

Lastly, corpus data are "machine-readable" i.e. a corpus-based study can make substantial use of the computer which has the capacity for storing and processing large amounts of data. This advantage of computer enables researchers to examine a large amount of data from different varieties in a short time and be able to analyse them in a more systematic and reliable way than is possible by hand.

2.2.1.2 A corpus-based vs an introspection-based study

The typical characteristics mentioned above make corpus linguistics empiricism and are different from introspection-based linguistics (cf. McEnery and Wilson 2001). That is, corpus data are observable as they are natural texts from real uses, hence they are authentic. Unlike the introspective data, they are artificial and only invented for discussion on particular issues. Moreover, a corpus-based study does not rely on intuition for an interpretation of linguistic phenomenon. It rather uses the corpus data to check the intuitive observation about language. This is because intuition of a particular person about language can be wrong. Furthermore, a corpus-based study can make generalization about language without bias as the analysis is supported by systematic calculations, thus, the "inequality" e.g. different frequencies is meaningful.

2.2.1.3 Limitations of a corpus

A corpus approach may present a number of advantages, however, its limitations should as well be considered. As mentioned in 2.2.1, a corpus is described as maximally representative, not representative. This suggests that it cannot be regarded as totally representing what a language is actually like. As illustrated by McEnery and Wilson (2001: 10), corpora are partial in two senses of the word. That is (1) they are incomplete as they retain only some valid sentences of a natural language; and (2) they are skewed meaning that frequency is the determiner of an inclusion of lexical items in a corpus. Thus, some sentences exist in a corpus because they are used frequently, while others may occur by chance.

Within these limitations, a corpus-based research (1) should be combined and complemented with other approaches (Biber *et al* 1998: 9); and (2) should use more than one corpus, as the findings can be checked against each other (Stubbs 2000). This is in order to tackle the partiality of corpora i.e. they are incomplete and skewed. Hence, conclusions or statements about a language drawn from a corpus should be treated as deductions, not as facts. This is because "[a] statement about evidence in a corpus is a statement about that corpus, not about the language or register of which the corpus is a sample" (Hunston 2002: 23).

2.2.2 Descriptive tools in Corpus Linguistics

2.2.2.1 Patterns of lexical co-occurrence

According to Tognini-Bonelli (2001), patterns of co-occurrence and patterns of repetition of lexical items are essential components in a corpus and are the key to analysis of corpus data. Many corpus findings have shown that one of the essential phenomena in language is "co-selection" (cf. Sinclair 1991). That is, words habitually occur in repeated forms of verbal environment. Therefore, meanings are not realized through one single word, but rather a lexical item and its co-textual features. Thus, an interpretation of a text is influenced by patterns of lexical items that occur in the text (cf. also Partington 1998, Hunston 2002). Accordingly, to investigate the relationship between patterns and meanings of the English colour terms in question, this present research draws on the concept proposed by Sinclair (2004) –the description of extended of units of meaning.

2.2.2.1.1 Description of extended units of meaning (Sinclair 2004)

According to Sinclair (2004), a choice of a word or phrase is not independent but is instead influenced by other lexical items. The co-textual features are the factors which delineate the context of occurrence of a core word or phrase at the lexical, grammatical, semantic and pragmatic levels, which are then described into the following four descriptive categories: collocation, colligation, semantic preference, and semantic prosody. Each will be discussed in turn:

2.2.2.1.1.1. Collocation was first coined by the British linguist J.R. Firth (1957) along with his classic and often quoted slogan "you can judge a word by the company it keeps." He maintained that collocation is an integral part to the analysis of word meanings:

> "Meaning by collocation is an abstraction at the syntagmatic level and is not directly concerned with the conceptual or idea approach to the meaning of words. One of the meanings of *night* is its collocability with *dark*, and, of *dark*, of course, collocation with *night*."

> (Firth 1957:196, cited in Partington 1998: 15)

As a student of Firth's, Sinclair elaborates further on the definition of collocation, which he sees it as "the occurrence of two or more words within a short space of each other in a text" (Sinclair, 1991: 20). Based on this definition, collocation is a consequence of the linearity of language. In other words, a node word incorporates other words in the co-text. These other words are co-selected with the node word and form a regular pattern. In reference to "a short space" based on the above definition, Sinclair (1991) indicated that the length of span in which a node word or phrase co-occurs with other lexical items should be considered when identifying collocates. Sinclair *et al* (2004: xix) did suggest that a four-word span is the optimal length for a collocational analysis.

For example, in Sinclair's analysis (2004: 31) of the co-selection patterns of the phrase *naked eye*, the words like *the, with, to,* and *see*, and *visible* occur noticeably and repeatedly at different positions to the left of the phrase. That is at the first position to the left (N-1 position), the word *the* is an inherent component of *naked eye*; at the immediately to the left position of *the* (N-2 position), the words *with* and *to* dominate the occurrence pattern; at the immediately next position of *with* and *to* (N-3 position), *see* and *visible* are repeatedly seen. These are shown in: *you can see with the naked eye* or *just visible to the naked eye* (Sinclair 2004: 32). Apparently, *the, with, to, see* are the collocates of the phrase *naked eye*.

In relation to this present study, the colour terms *black*, *white*, and *red* are investigated as being adjectival modifiers. Hence, the nouns or words at the position N-1 to the right of these colour terms are identified as their collocations and form noticeable collocational patterns.

2.2.2.1.1.2. Colligation Firth defines this term as "the co-occurrence of grammatical choices (Firth 1957, cited in Sinclair 2004:32). In other words, colligation is the grammatical relations or patterns of the node word and its set of collocates. For example, Sinclair discovered that prepositions like *with, to, by, from* tend to occur with *naked eye*. Accordingly, the grammatical class of preposition is a colligation of the phrase *naked eye* (ibid.). Hence, colligation is another step further in an abstraction than collocation. That means after the collocates of a node word/phrase are identified, grammatical relations between the word in question and its collocates are pinpointed.

2.2.2.1.1.3. Semantic preference relates closely with the idea of collocation in a way that a word tends to collocate with a particular set of words which belongs to the same semantic set. Sinclair (2004:33) pointed out that it is "another stage removed from the actual words in the text." He illustrates by making observations that the words *see* and *visible* are most frequently found co-occurring with *naked eye*. He also finds other words which are less frequent but occur in the same environment including verbs like *detect, spot, spotted, appear perceived, viewed, recognized, read, studied, judged*, and some adjectives like *apparent, evident, obvious*, and *undetectable* (p.33). According to Sinclair, to certain extent, these collocates share a semantic set of *visibility*. Hence, the analysis shows how the concept of semantic preference relates to the one of collocation in a sense that a particular lexical item collocates frequently with, not just one, but a series of other lexical items in the same semantic set.

The concept of semantic preference is developed further by Partington (1998:146) who studied what he terms "group preference". He looked at the collocational behaviour of lexical items called *maximizers* which is a subset of *amplifying intensifiers* (cf. Quirk *et al*. 1985). He indicated that the intensifiers *utterly, totally, completely,* and *entirely* are quite similar in a way that they share a large

number of collocates. That is, they collocate with lexical items in the same two sets of semantic preference; (1) "absence of a quality" or (2) some kind of "change of state." In the first category, the sample collocates are *unable, forgotten, hopeless*. In the second category, the shared collocates are *changed, destroyed, failed*. (pp.147-8).

In regards to this present study, the colour terms in question have three main groups of semantic preference for humans, clothings, and body parts. Some collocates, e.g. *dress* in the clothing group, which co-occurs with all three colour terms, display the collocational behaviour the way "group preference" is discussed above.

2.2.2.1.1.4. Semantic prosody was first used by Louw (1993) who developed the concept originally proposed by John Sinclair (1991). Since then, the notion has been used and elaborated by a number of scholars, e.g. Sinclair (2004), Stubbs (1996, 2001), Partington (1998, 2004), Tognini-Bonelli (2001), Baker (2006), Hunston (2007), and Stewart (2010). The key points made by Louw (1993) on this very issue are that semantic prosody is an attached meaning and it is a feature of the word in question. Moreover, it is generally discussed by ways of a binary distinction of 'good' and 'bad' or 'positive' and 'negative' or 'favourable' and 'unfavourable' (Stewart, 2010: 161).

Sinclair (2004:34) explained that a semantic prosody is "attitudinal and on the pragmatic side of the semantics/pragmatics continuum." It concerns how a word is put to use in a communication. As he puts it:

> "[It] is thus capable of a wide range of realization, because in pragmatic expressions the normal semantic values of the words are not necessarily relevant. But once noticed among the variety of expressions, it is immediately clear that the semantic prosody has a leading role to play in the integration of an item with its surroundings. It expresses something close to the 'function' of the item – it shows how the rest of the item is to be interpreted functionally. Without it, the string of words just 'means.'" (Sinclair 2004: 34)

As an example, Sinclair (2004) claimed that the phrase *naked eye* has a semantic prosody concerning 'difficulty' as the majority of its concordance lines display a collocation between the word *see* and words like *small, weak*, and *difficult.* Another example illustrated by Sinclair (2001) is *set in.* The subjects of this phrasal verb tend refer to unpleasant states of affairs. The main words that co-occur with *set in* are *rot, decay, ill-will, decadence, impoverishment, etc.* This state of keeping the 'bad company' of *set in* shows that some undesirable process is being described. Accordingly, with an unfavourable prosody, *set in* cannot be used in a favourable environment. As a result, Sinclair uses the term to refer to 'the consistent discourse function of the unit formed by the co-occurrence of the unit of meaning' (cf. Hunston 2007).

Hunston (2007) noted that there are some points of differences in the way the notion of semantic prosody is perceived and used. Sinclair (2004) and Partington (2004) have different viewpoints on the notion in that Partington considered semantic prosody as the property of a word, and as a feature that distinguishes near-synonyms. Sinclair, on the other hand, emphasized that "the word is only the core of a longer sequence of co-occurring items comprising a 'unit of meaning' to which semantic prosody belongs" (Hunston 2007:250).

Additionally, Partington relates prosody with a binary distinction between positive and negative attitudinal meanings. Sinclair, on the contrary, finds it difficult to find a specific characterisation for the semantic prosody, or attitudinal discourse function, which is not described simply as 'good' or 'bad.' They also differ on the point that Partington considered semantic prosody as gradable i.e. a word may have a 'more or less' favourable or unfavourable prosody which is dependent on how frequently it occurs in good, bad or neutral contexts. Sinclair considered semantic prosody as "an obligatory property of a unit of meaning, although it may be more or less explicit in any one example" (ibid.)

Hunston (2007:256) also proposed her own view on semantic prosody. She posited that describing semantic prosody to a word as having a positive or negative evaluation is "over-simplistic." This is because this evaluation is related directly to

point of view, one of the text producer, another one of the participants in the text. For example, the word 'persistent' in the line *'There were three young guys out to get him [the figure] and they were very persistent'* presents different viewpoints. In the view of the thieves (the three young guys), being persistent enables them to finally get the figure. However, for the keeper, the persistence of the thieves makes him unable to protect his item.

Another example illustrated by Hunston (2007) is the word 'budge.' It is shown as a counter-example of what is originally studied by Sinclair (2004). Hunston points out that if 'budge' is used with the pronoun subjects (first person) 'I' and 'we' it projects the sense of determination. However, when it occurs with the third person 'he' or 'she', it denotes the sense of frustration. According to Hunston, these two examples show that an attitudinal meaning of a word, which can be of a desirable or undesirable quality, may be changed if its immediate phraseology is also shifted. This proves Sinclair's point in that "semantic prosody is a discourse function of a sequence rather than a property of a word" (p.258).

Stewart (2010) who does a thorough study on semantic study and covers every feature ever proposed on this particular issue has a different view. He proposes that semantic prosody should not be preserved as one single concept and should be broken down into less broad concepts (p.160). At least, the various features of semantic prosody should fall into two categories: (1) those which primarily originate from Sinclair's work and influence; and (2) those from Louw's work and influence. Moreover, he posits that each linguist uses different interpretative strategies in order to infer prosodies from corpus data. This is partly because the concepts of semantic prosody is various and not straightforward, particularly the ones on collocation and semantic consistency which seem to be construed in very broad terms. Hence, according to Stewart (2010), when identifying the prosodies, linguists should consult their intuition and introspection alongside with using corpus data.

Not only the concepts of semantic prosody are varied, the terms for it are used differently. While Louw (1993) and Partington (2004) adhere to the term semantic prosody, Stubbs (2001:66) uses the term **discourse prosody** in order to maintain the

relation to speakers and hearers and to highlight its function in creating discourse coherence. Baker (2006: 87) followed Stubbs (2001) in claiming that the analysis under this particular category focuses on the relationship of a word to speakers and hearers and it contains patterns of attitudinal evaluation, which suggests that it can be categorized as discourse prosody.

This present study follows Stubbs (2001) and Baker (2006) in addressing the term discourse prosody throughout the research. However, the concept applied in this study is that of Sinclair's (2004) description of the notion as discourse function which is considered a feature of a unit larger than a single word or expression.

Last but not least, another issue that has been debated in regards to semantic prosody is register-specific. The most evident examples of the arguments concern the word *cause* (cf. Stubbs 2002, Hunston 2002, 2007). Hunston (2007) proposed that it is possible to say that *cause* is not associated with negative evaluation when it is used in 'scientific' registers/genres. Still, Hunston (ibid.) posits what she claims 'a more sustainable argument' i.e. "particular registers select one lexical phenomenon more frequently than another" (p. 263). To illustrate, the evaluative meaning affiliated with *cause* occurs only when 'caused entity' or 'what is caused' concerns animate beings. But when the 'caused entity' associates with an inanimate object, attitudinal meaning does not present. In this present study, this particular argument is applicable as some of the findings (e.g. *black hole*) reveals that register/genre plays an important role in identifying a specific meaning indicating the semantic prosody of the phrase

2.3 Concluding notes

This chapter elaborates previous studies on colour terminology which examines semantic aspects more than pragmatic ones of the colour terms. They are also introspection-based. This study, as a corpus-based, explores the use of English colour terms *black*, *white*, and *red* both in figurative and non-figurative uses. This is in order to discover the collocational patterns and the pragmatic meanings each colour term phrase may have. In so doing, the study applies the notion of 'extended units of

meaning,' proposed by Sinclair (2004). The next chapter illustrates in detail how this study is conducted methodologically.

Chapter III

Methodology

3.0 Introduction

This chapter discusses two key issues: (1) basic methods in Corpus Linguistics employed to identify the key colour terms and their collocates; and (2) the data taken for analysis. The basic methods concerns two essential concepts i.e. Word Frequency and Concordance. The data in this study are taken from two major sources: PIE and the BNC, whose overviews are given respectively. PIE provides the collocational patterns of the three colour terms, while the BNC provides two significant sets of data for analysis i.e. (1) collocational patterns which is discussed together with the statistical measurements used for extracting the patterns; and (2) concordances for analysis.

3.1 Basic methods in Corpus Linguistics

3.1.1 Word Frequency

To identify which colour term phrases are significant for analysis, this present study relies upon the concept of word frequency, which is considered one of the most important concepts in carrying out corpus analysis. The core to this notion is that "the more frequent the occurrence the greater the salience of the term" (Hays *et al* 1972, cited in Steinvall 2002: 65). In other words, the more frequent a word is, the more important it is in real use. Adding on to this respect, Philip (2003: 140) claimed that for connotation analysis, the more frequent a word is, the more meanings it is likely to generate.

The knowledge about word frequency is significant and useful in many aspects (Leech *et al* (2001: x). First, it is essential for pedagogic purposes. For example, teaching of languages can benefit from the frequencies of words as they offer vocabulary grading and selection. For language learning, word frequency is especially useful for syllabus design, materials writing, grading and language testing. Second, the knowledge about word frequency can be used for language technology.

For instance, in order to invent modern language-processing software e.g. speech recognizers or machine-aided translation packages, it is important to be able to identify the words which are more frequent than others. Third, word frequency can be applied to linguistic research e.g. the study of style and register, or psychological research that makes use of vocabulary frequency as evidence to understand how humans processes language. Lastly, the information about word frequency can be of interest to general readers. For example, why in the BNC is *man* more than twice as common as *woman*, while *women* is more common than *men*? These uses are worth considering and may eventually trigger a small research project.

Drawing on the concept of word frequency, the present study considers *black, white*, and *red* the key colour terms worth in depth analysis as they are the only three colours found to occur in the list of 100 most frequently-used adjectives in the BNC (Leech *et al*, 2001) (see Appendix 1). Based on frequency analysis, the study identifies the most frequent collocations of each colour term in question. This is completed by employing the database Phrases in English or PIE (see 3.2.1). Those most frequent collocations extracted from PIE contain individual collocates which are pinpointed as significant for investigation based on their frequency. That is, the collocates with a frequency of over 1.0 instance per million words are individually diagnosed, while the ones with frequency ratio less than 1.0 instance per million words receive less focus in this study.

3.1.2 Concordance lines

After the quantitative data of the most frequent phrases of each colour terms are retrieved, the investigation moves on to a qualitative aspect of the study, i.e. the analysis of **concordance lines**. This term refers to "every instance of a search word or phrase which is presented in the centre of the computer screen, with the words that come before and after it to the left and right. The selected word, appearing in the centre of the screen, is known as the **node word** (Hunston 2002: 39). Corpora analysis relies considerably on concordances and the interpretation thereof. Hunston (ibid.), as a matter of fact, argues that producing and interpreting concordance lines is the most basic way of processing corpus information. This corresponds with what Sinclair

(2003: xiii) claims: "the normal starting point for a corpus investigation is the concordance." Accordingly, this present research takes concordance lines as its main source of data for qualitative analysis as it allows the researcher to single out patterns and meanings, as well as the pragmatic implications of each colour term phrases.

Concordances in the BNC can be shown in two forms: (1) **KWIC view** and (2) **Sentence view**. **KWIC** or Key Word in Context shows the results of a search word which is centred to make it easier for identifying collocational patterns since it can be shown in alphabetical order. However, KWIC view does not show a full sentence of the search word, which sometimes makes the context incomplete and hence unhelpful for concordance interpretation. Accordingly, users resort to **Sentence view** which shows the word in the context of full sentences. It should be noted that this research employs both views in doing concordances analysis. To illustrate, Figure 3.1 (see below) shows the screenshot of BNC web query result of *black hole* in KWIC view, while Figure 3.2 displays the query result in Sentence view. The first 10 concordance lines of KWIC view and 5 concordances of Sentence view are presented.

Figure 3.1 Screenshot of BNC web query result of *black hole* in KWIC view

Figure 3.2 Screenshot of BNC web query result of *black hole* in Sentence view

3.2 The Data

As mentioned above, the data for analysis in this research are taken from two major sources-PIE and the BNC. Each is discussed in turn below:

3.2.1 PIE

The database *Phrases in English* or PIE became the first source of data after the three colour terms – *black, white*, and *red-* were selected. It provides a powerful interface with the BNC for studying English words and phrases. It allows users to extract recurrent sequences of words, specified by length (1 to 8) plus any combination of lexis and syntax as defined by BNC grammatical tags. It also helps users investigate the distribution of words and phrases in English. PIE is available at http://phrasesinenglish.org/.

With the above qualities and functions of PIE, this present research consults PIE for recurrent collocational patterns of the three colour terms. Table 1 below is a sample page of a search in PIE for the most frequent phrases containing the colour term *black* being tagged as adjective.

Table 1 Sample page of PIE search result of *black*

Displaying 2-grams		black and	1806	AJ0 CJC
Minimum frequency	20	black hole	537	AJ0 NN1
First item	1	black people	482	AJ0 NN0
Chunk size	1,000	black hair	466	AJ0 NN1
Order	descending frequency	black holes	258	AJ0 NN2
Word 1	black	black eyes	204	AJ0 NN2
POS 1	AJ?	black or	193	AJ0 CJC
		black women	191	AJ0 NN2
Showing 139 items, 1-139 of 139 matching this query		black pepper	168	AJ0 NN1
		black man	166	AJ0 NN1

To illustrate, the column on the left of Table 1 displays the query values needed for the search, which is set for 2-grams only. It should be noted that *N-grams* are sequences of *n* words. The *N* refers to length of words from 1-8, while words are the lexical entry in question. By using the *N-grams advanced* in PIE, the query interface sequences of *2-grams* means two words i.e. the colour term adjective+noun.

The word *black* is put in as the node word in search. It is also part-of-speech (POS) tagged as Adjective (AJ). The search result shows 139 most frequent collocations of *black* as adjective (see Appendix 2). The column on the right displays 10 out of 139 most frequent *black* phrases found in the BNC. The number in the middle column (e.g. 1806 for *black and*) stands for the total occurrences across the BNC. The codes in the last column (e.g. AJ0 CJC for *black and*) are the part-of-speech tags in the BNC, referring to Adjective (general or positive) and Coordinating conjunction (cf. http://bncweb.lancs.ac.uk/bncwebXML/Simple_query_language.pdf).

This same search technique using PIE is applied to the adjectives *white* and *red*. As a result, PIE produces 144 most frequent phrases of *white* (see Appendix 3) and 89 phrases of *red* (see Appendix 4). Drawing on the concept of collocation (see 2.2.2.1.1.1) and semantic preference (see 2.2.2.1.1.3), these most recurrent phrases are subsequently categorized into each group of noun collocates, e.g. *black hole* belongs to the group of nouns related to figurative use, *black people* is placed in the semantic set of nouns related to human beings, *black hair* is in the set of nouns related to body parts, etc.

The categorization shows that the three colour terms display similar collocational behavior in that they tend to occur with similar noun groups (see Tables 4.1.3, 4.2.3, 4.3.3) i.e. human nouns, body-part nouns, clothing nouns, nouns in figurative use, animal/plant/nature related nouns, material nouns, food and drink nouns, and assorted/miscellaneous nouns. Based on the number of collocates in each noun groups, only the four biggest and most distinctive groups of each colour's collocates are selected for investigation. They are as follows:

Black's four biggest and most distinctive groups of noun collocates are (1) human nouns, (2) clothing nouns, (3) nouns in figurative use, and (4) body-part nouns. *White*'s four biggest and most distinctive groups of noun collocates are (1) clothing nouns, (2) human nouns, (3) nouns in figurative use, and (4) body-part nouns. In actual fact, the noun group of materials in *white* constitutes the third biggest group, but as they are used purely descriptive and show no specific features, the nouns in figurative use are then selected instead in order to parallel the analysis with those of

black. *Red*'s the four biggest and most distinctive group of noun collocates are (1) nouns in figurative use, (2) body-part nouns, (3) clothing nouns, and (4) human nouns. As a matter fact, two other noun groups of *red* occur quite significantly i.e. food and drink nouns and assorted nouns. However, as they are used purely descriptive and do not show specific features, the clothing nouns and human nouns are selected instead in order to parallel the investigation to those of *black* and *white*. These four groups of collocates are later divided into two categories based on their uses i.e. (1) Figurative use, containing the group of nouns in figurative use; and (2) Non-figurative use, encompassing three noun groups i.e. humans, clothings, and body parts. Chapter 4 discusses these results in detail.

3.2.2. BNC

The majority of data presented in this study are retrieved from the British National Corpus or BNC. This general corpus was created by a group of scholars at Oxford University Press, dictionary publishers of Longman and Chambers, and researchers at the Universities of Lancaster and Oxford. It is the electronic collection of over 100 million words of modern British English, both written (90%) and spoken (10%), which became available in 1995. By the description of modern British English, it refers to the fact that all imaginative texts are dated from 1960 onwards, with 80% are from 1975 onwards; all informative texts dated from 1975 onwards; all spoken data are dated from 1991 onwards; over 93% of BNC texts are dated from the period 1985-94 (Leech, 2001: 1).

This corpus is considered a general corpus as it contains texts of many types and can be used to formulate reference materials for language learning and translation (Hunston, 2002: 15). The BNC is made up of 4,124 different text files, which can be a complete text, short related texts, or a large number of long texts.

The written component consists of two main types of text which are (1) imaginative—mostly fiction as well as some other literary texts e.g. poetry—and (2) informative—non-fictions. The imaginative types account for about 20%, while the informative texts for about 80% in the BNC. The BNC is publicly available at

http://bncweb.lancs.ac.uk/. A new user is required to register at http://bncweb.lancs.ac.uk/bncwebSignup/user/login.php.

Figure 3.3 Screenshot of BNC web: Standard Query

PIE produces the most frequent phrases containing the colour terms, as discussed in the previous section. After the phrases of each colour term are identified, they are taken into further investigation in the BNC, which as a result, provides two key sets of data for investigation i.e. (1) collocations of each colour term phrase; and (2) concordance lines of those collocations. Each is discussed in turn below:

3.2.2.1 Collocations and their measurements

As discussed in previous chapter, collocation refers to "the occurrence of two or more words within a short space of each other in a text" (Sinclair, 1991: 20). It shows the tendency of words to be biased in the way they co-occur (Hunston, 2002: 68) i.e. a word tends to co-occur with a particular word more frequently than with others. However, in the case of collocations, it cannot always be taken that frequency is the same as saliency (Baker, 2006: 101). This is because for some collocates, high frequency words may tend to be function words – which may not disclose much of interest (Baker, ibid.). Hence, a number of statistical tests have been designed or

adopted in order to systematically calculate the relationship between two words and identify the significant collocates.

In this research, two statistical tests of the BNC are applied to extract key collocates i.e. Mutual Information (henceforth MI) and Log-likelihood (henceforth LL).

MI is a statistical test for significant collocations (McEnery *et al* 2006: 56). In general, an MI score indicates the strength of a collocation, usually between two words. Its emphasis is on the probability of two words occurring together within a particular span of words (Biber 1998: 265). In other words, the MI-score measures the amount of non-randomness present when two words co-occur. An MI-score of 3 or higher can be taken to be significant (Hunston 2002: 71). One major problem with MI is that it tends to give high scores to relatively low frequency words, mostly content words which have a tendency not to occur very often (Baker 2006: 102). Therefore, another statistical test has been suggested in order to take the frequency of all collocates into account i.e. LL.

LL is a test for statistical significance (McEnery *et al* 2006: 55). It places more emphasis on grammatical words and doesn't give as much importance to very low-frequency words as MI (Baker, ibid.). The collocates extracted for this study are calculated by using both MI and LL. To illustrate, the collocates with MI score of 3.0 and higher are compared with the same amount of collocates from LL. As an example, Figure 3.4 below shows six collocates of the phrase *red tape* which are calculated by using MI. These collocates whose scores are higher than 3.0 are *bureaucratic, bureaucracy, cutting, cut, through*, and *government*. With LL, as shown in Figure 3.5, the top six collocates are *bureaucratic, cut, bureaucracy, cutting, through,* and *and*. These two sets of collocates are then compared and the result shows that there are altogether five collocates which occur in both MI and LL i.e. *bureaucratic,bureaucracy, cutting, cut* and *through*. These collocates are considered significant for the phrase *red tape*. Therefore, their concordances are essential for identifying the meaning and function of this phrase.

Figure 3.4 Screenshot of significant collocates of *red tape* calculated by MI

Collocation parameters:					
Information:	collocations		Statistics:	Mutual information	
Collocation window span:	3 Left - 3 Right		Basis:	whole BNC	
Freq(node, collocate) at least: 5			Freq(collocate) at least:	5	
Filter results by:	Specific collocate:		and/or tag: no restrictions	Submit changed parameters	Go!

There are 541 different types in your collocation database for "[word="red"%c] [word="tape"%c]". (Your query "red tape" returned 162 hits in 111 different texts)

No.	Word	Total No. in whole BNC	Expected collocate frequency	Observed collocate frequency	In No. of texts	Mutual information value
1	bureaucratic	916	0.007	11	11	10.6106
2	bureaucracy	1,301	0.010	5	5	8.9669
3	cutting	3,866	0.030	5	5	7.3957
4	cut	17,064	0.131	10	9	6.2536
5	through	81,050	0.623	10	10	4.0058
6	government	61,798	0.475	6	6	3.6601

Figure 3.5 Screenshot of significant collocates of *red tape* calculated by LL

Collocation parameters:					
Information:	collocations		Statistics:	Log-likelihood	
Collocation window span:	3 Left - 3 Right		Basis:	whole BNC	
Freq(node, collocate) at least: 5			Freq(collocate) at least:	5	
Filter results by:	Specific collocate:		and/or tag: no restrictions	Submit changed parameters	Go!

There are 541 different types in your collocation database for "[word="red"%c] [word="tape"%c]". (Your query "red tape" returned 162 hits in 111 different texts)

No.	Word	Total No. in whole BNC	Expected collocate frequency	Observed collocate frequency	In No. of texts	Log-likelihood value
1	bureaucratic	916	0.007	11	11	140.091
2	cut	17,064	0.131	10	9	67.0751
3	bureaucracy	1,301	0.010	5	5	52.2219
4	cutting	3,866	0.030	5	5	41.3574
5	through	81,050	0.623	10	10	36.8805
6	and	2,616,708	20.098	47	43	26.923

3.2.2.2 Concordances of the colour term phrases

After significant collocates of each colour term phrases are selected, their concordance lines are taken for reading. In general, the key collocates of each colour term phrase, i.e. the ones which occur more than 1.0 instance per million words, contain ample amount of concordances. For example, the five key collocates of *red tape* produce altogether 41 concordances. All of these concordances are investigated. However, for some infrequent phrases with the frequency ratio of less than 1.0 instance per million words, the present study opts to read for analysis of every

instance of its concordances, which sometimes are not many. For example, the phrase *black flag* only occurs 22 times across the BNC. Therefore, every concordance line from all key collocates of *black flag* has to be taken into account. Below is the sample of five random concordances taken from five key collocates of the phrase *red tape*. These collocates are *bureaucratic, bureaucracy, cutting, cut* and *through*, as bolded in each line:

(1) the 'reformist' left. His comprehensive law to cut **bureaucratic**	**red tape**	was similarly backed. Both initiatives have the active support of
(2) get on and find a way.' **Bureaucracy** and	**red tape**	make him angrier than almost anything else. 'Set up a
(3 local businesses to expand and invest by **cutting** down on	**red tape**	: 'If people in business try to expand it is very
(4) Volume totalled 9,489 lots. Small Business: **Cut** European	**red tape**	, says minister By ROBERT COLE TIMOTHY EGGAR,
(5) -on-one relationships that in a crisis can cut **through** miles of	**red tape**	. 'What exactly was going down at the farm?'

3.3 The conduct of the data analysis

3.3.1 Categorisation of the data

Before the data are taken for analysis, the categorization of the data into figurative use and non-figurative use should be mentioned first. The collocations with human noun phrases, body part phrases, and clothing noun phrases are straightforwardly classified in non-figurative use. This does not need a cross checking each phrase belongs in each group from its literal meaning. For example, *black dress* is obviously categorized in the group of clothing noun phrases.

However, the data validation is needed for the group of figurative use. This group of phrases is not straightforward as they present non-literal meanings. In order to group them in the figurative use, the BNC and dictionary (Collins Cobuild ALED, 2006) are consulted. In the BNC, each phrase with figurative meanings is checked by reading its concordances in passing in order to make sure that it really fits in the figurative group. It should be noted that only the phrases which are produced from PIE search are investigated. Some familiar and frequent phrases e.g. *white lie* which is not listed in the result of PIE search is not included in the discussion.

3.3.2 Data analysis

After the concordances of the key collocates of each phrase are collected, the analysis then begins. The concordances are put into groups as per the meanings they generate. For example, *black hole* (see 4.1.2.1.1.1) which is grouped in figurative use conveys at least two apparent meanings i.e. (1) areas in space; and (2) difficulty or hardship of a situation. The first meaning is obvious as its concordances display the texts which mainly belong in the domains of Natural and Pure Sciences and Applied Science and convey the meaning as mentioned above. The relevant concordance lines in this sense of meaning are randomly selected to present in this research. The second meaning of *black hole* is a hidden one and is considered the pragmatic meaning or discourse prosody. It is retrieved from the recurrent patterns of use of some collocates which help produce the meaning related to difficulty or problems. The concordance lines presented in the discussion of this sense of meaning of *black hole* are chosen because they contain the most relevant collocates which lead to the meaning discussed above.

Concordance lines of some phrases are divided according to the way they are used. For example, *red face* (see 4.3.2.2.1.2.1) in the BNC shows at least three obvious kinds of use i.e. (1) generic description of a face; (2) specific description pertaining to emotions; and (3) specific description relating to health and illness. The descriptions in categories (1) and (3) are generic and neutral. The relevant concordance lines are randomly selected to be presented in the research. However, the use in category (2) of *red face* projects a discourse prosody signifying rage when it collocates with words related to anger. The concordance lines presented in the discussion are chosen because of their relevancy to the signification of rage.

Obviously, there are some concordances of some phrases which may describe something else and not relate to the dominant way of use of the phrases. Still, this does not mean that those concordances do not exist. They can actually act as counter-examples to what is used prevailingly in a particular phrase. For example, the phrase *white men* (see 4.2.2.2.2.3) describes mainly aspects of relations between white men and other races e.g. black or American Indians. However, one of its key collocates i.e.

jump, as seen in concordances (1-2) below, describes a movie of the same name and is not relevant to way white men is predominantly used. Hence, it is not included in the discussion of *white men*.

(1)	he can beat Sid as good as anyone else, even though	**White Men**	Can't **Jump**, and the pair team up to lick all-comers
(2)	I wanna see er, what's he called? The	**White Men**	Can't **Jump**. Oh. Yeah, but how am I

3.4 Concluding notes

This chapter discusses methods and data used in this study. The primary methods are: word frequency which is used to identify the key collocates or collocational pattern of each colour term; and concordance analysis which helps discover their pragmatic meanings. In terms of the data, PIE provides initial collocational patterns or the most frequent phrases of each colour term in question, while BNC supplies the key collocates of each phrase and their concordance lines for interpretation of their discourse prosodies. With these methods and data, the next chapter reveals what has been unearthed from each colour term.

Chapter IV

The results

4.0 Introduction

This chapter presents the corpus findings of the three colour terms in question - *black*, *white*, and *red*. Each colour's profile is divided into two key parts i.e. distributional profile and collcational profile.

4.1 The profile of *black*

4.1.1 Distributional profile of *black* as an adjective across the BNC

The distribution information plays an important role in lexical semantics. That is, words can have different patterns of use and meaning when occurring in different text domains. In addition, distribution data relates strongly to contexts in which meanings of particular lexical items are based. The search result of *black* as an adjective in the BNC, as shown in Tables 4.1.1 and 4.1.2 below, reveal that this colour term is used commonly in English. This is shown by its frequency of 221.43 instances per million words, with a total of 21770 occurrences in the whole BNC. It is used more in the written text (229.08 instances per million words) than in the spoken text (156.85 instances per million words). The term is found most in the text domain of imaginative prose or fiction (382.44 instances per million words), followed by informative: arts (382.44 instances per million words) and informative: leisure (344.35 instances per million words). This information indicates that *black* as an adjective tends to be used in Art more than Science text domains.

Table 4.1.1 Written/Spoken of *black*

	Total Occurrences	Frequency (per million words)
WRITTEN	4625	229.08
SPOKEN	375	156.85
TOTAL	5000	221.43

Table 4.1.2 Text Domain of *black* in Written text type

Text Domain		
Category	Total Occurrences	Frequency (per million words)
Imaginative prose	1449	382.44
Informative: Arts	520	344.35
Informative: Leisure	865	308.91
Informative: Natural and pure sciences	198	225.75
Informative: Social Science	611	189.68
Informative: World Affairs	558	140.89
Informative: Applied Science	201	875
Informative: Belief & thought	83	118.97
Informative: Commerce and finance	140	83.03
TOTAL	4625	229.08

4.1.2 Collocational Profile of *black* as an adjective

As an adjective, *black* has a grammatical function of modifying the noun on the right position. Together they form noun phrases with *black* being the adjective. In order to identify the most frequent black phrases, PIE or the database of Phrases in English is looked at. The search result shows 139 items of 2-grams value of *black* as an adjective. These 139 items of the most frequent collocational patterns of *black* can be categorized in various groups as shown in Table 4.1.3 below

Table 4.1.3 Collocational patterns of *BLACK*

Black = ~	~+ Conj.	~+pronominal	~+humans	~+body parts	~+food	~+animals	~+Figurative	~+clothing	~+nature	~+materials	Misc
	~ and	~ one	~ people	~ hair	~ pepper	~ dog	~ hole	~ dress	~ forest	~ car	~ leather
	~ or	~ ones	~ women	~ eyes	~ olives	~ cat	~ holes	~ shoes	~ cloud	~ ink	~ plastic
	~ with		~ man	~ eye	~ pudding	~ horse	~ market	~ hat	~ clouds	~ watch	~ smoke
	~ as		~ community	~ beard	~ bread	~ panthers	~ death	~ coat	~ water	~ boxes	~ line
	~ &		~ children	~ face	~ coffee	~ cattle	~ comedy	~ tie	~ night	~ cab	~ mark
	~ in		~ kids	~ brows			~ music	~ lace			~ spot
	~ for		~ prince	~ head			~ magic	~ skirt			~ label
	~ on		~ youth	~ lashes			~ economy	~ bag			~ spots
	~ against		~ men	~ moustache			~ report	~ suit			~ paint
	~ to		~ workers	~ body			~ power	~ boots			~ majority
	~ but		~ woman	~ skin			~ humour	~ jacket			~ lines
			~ sportsmen				~ arts	~ trousers			~ patch
			~ population				~ orcs	~ shirt			~ shadow
			~ communities				~ dwarf	~ stockings			~ velvet
			~ child				~ widow	~ belt			~ Wednesday
			~ pupils				~ flag	~ jeans			~ fire
			~ families				~ boxes	~ cloak			
			~ girl				~ box	~ cloth			
			~ students				~ book	~ cap			
			~ person				~ swan	~ clothes			
			~ boy				~ sheep	~ tights			
			~ leaders					~ silk			
			~ youths					~ cotton			
			~ guy								
			~ family								
			~ parents								
			~ players								
			~ speakers								
			~ American								
			~ Americans								
			~ british								
			~ African								
			~ country								
			~ south								
			~ townships								
139	11	2	35	11	5	5	21	23	5	5	16
Total in %	7.91	1.44	25.18	7.91	3.60	3.60	15.11	16.55	3.60	3.60	11.51

It should be noted that the category of *Figurative* refers to a group of nouns with which *black* collocates and together they convey figurative/metaphoric meanings.

From the table, it can be seen that *black* has collocational patterns with various noun groups, i.e. human nouns, body-part nouns, food/animal/nature nouns, clothing

nouns, nouns related to figurative use, material nouns, and assorted or miscellaneous nouns. The figures from each noun group shows that the four biggest noun groups which collocate most frequently with *black* are (1) the human nouns, henceforth referred to as "*black* in collocation with human noun phrases," which constitutes 25.18%, followed by (2) the clothing nouns, henceforth referred to as "*black* in collocation with clothing noun phrases," which shares 16.55%. The third most frequent group is the nouns related to figurative use, henceforth referred to as "*black* in collocation with figurative noun phrases," which shares 15.11%. The fourth biggest group is the assorted or miscellaneous nouns which tend to be only for a descriptive purpose and, to certain extent, show no specific features. Hence, they are excluded from this investigation. Instead, this present study chooses the next group, body-part nouns, henceforth referred to as "*black* in collocation with body-part noun phrases," sharing 7.91%, to be part of the study.

These top four noun groups are categorized broadly into two groups i.e. (1) figurative use, containing only nouns related to figurative use; (2) non-figurative use, containing three noun groups i.e. human nouns, clothing nouns, and body-part nouns.

The analysis of these groups show that: (1) the pragmatic meanings of English colour terms are not restricted to their figurative use, but also extend to their non-figurative use; (2) these meanings materialize as a result of co-occurrence patterns between the colour terms and other lexical items, rather than through the occurrence of the colour terms alone.

4.1.2.1 Figurative use

4.1.2.1.1 "*Black* in collocation with figurative noun phrases"

Table 4.1.4 below displays the 21 most frequent collocates of *black* in figurative noun phrases. From the table, it can be seen that there are 5 *black* phrases (i.e. *black hole, black holes, black market, black box*, and *black sheep*) in this noun group that occur over one instance per million words. This means that these phrases are more frequent compared to the rest, which occur less than 1.0 instance per million words. Some of these less frequent phrases are proper nouns, i.e. *Black Orc (troop of*

warriors), Black Power (Movement-an organization*), Black Report* (an official report on health inequalities*), Black Death* (a disease), *Black dwarf* (a neutron star), *Black widow* (a spider), and *Black Swan* (a name of a pub, a restaurant, and a Choir), which will not be discussed in this research.

Table 4.1.4 Collocates of *black* in collocation with figurative noun phrases

Collocates	Total occurrences	Frequency (instances per million words)
black hole	536	5.45
black holes	258	2.62
black market	158	1.61
black box	108	1.10
black sheep	103	1.05
black death	75	0.76
black magic	65	0.66
black comedy	48	0.49
black swan	48	0.48
black music	46	0.47
black book	44	0.45
black economy	43	0.44
black report	43	0.44
black orcs	31	0.32
black power	30	0.31
black widow	27	0.27
black dwarf	26	0.26
black boxes	25	0.25
black humour	23	0.23
black flag	22	0.22
black arts	22	0.22

4.1.2.1.1.1 *Black* hole/*black* holes

Black hole(s) can refer to "areas in space where gravity is so strong that nothing, not even light can escape from them" (Collins Cobuild Advanced Learner's English Dictionary, 2006). The majority of the concordances of these two phrases reflect this scientific meaning. Not surprisingly, the texts mainly belong in the domains of Natural and Pure Sciences and Applied Science i.e. 74.58% (396 out of the total 531 occurrences across the BNC) for *black hole* and 84.11% (217 out of 258 occurrences) for *black holes*. The samples of concordances (1-9) are displayed down below:

(1) holes, which were formed in the early universe. These primordial **black holes** could be less than the size of the nucleus of an atom

(2) big bang in which the universe originated. Such 'primordial' **black holes** are of greatest interest for the quantum effects I shall

(3) of the galaxy. This would imply that the density of primordial **black holes** is less than 100 million per cubic light-year. It should be

(4) appears to be nearly neutral. Therefore only neutral rotating **black holes** are considered here. The space–time around such a star is

(5)	contributes to the contraction of sufficiently massive stars to	**black holes**	(see Section 9.4). Conservation laws for energy and mo
(6)	mass of only a billion tons — that is, a primordial	**black hole**	, roughly the size of a proton — would have a temperature
(7)	collapsing matter has a net angular momentum, the resulting	**black hole**	will be rotating and will preferentially emit particles that
(8)	Then, in 1971, I proved that any stationary rotating	**black hole**	would indeed have such an axis of symmetry. Finally, in
(9)	which probably contain gas swirling round a massive	**black hole**	. Looking beyond these, and hence further back in time,

Nevertheless, in other text domains which are less frequent e.g. Imaginative Prose (13.75%/8.14% for *black hole* and *black holes*, respectively), Arts (2.26%/2.71%), and Commerce and Finance (1.51%/1.16%), these phrases convey a different meaning. They do not refer to the scientific phenomenon. The corpus evidence shows that they rather express pragmatic meanings of difficulty, problems, hardship, misfortune or despair. Although this meaning may appear in other dictionaries, it is not found in the main dictionary used in this research (Collins Cobuild Advanced Learner's English Dictionary, 2006).

To illustrate, concordances (10-16) contain lexical items relevant to the sense of meaning above. Also, they are also apparent with negative items e.g. *plunging, recessionary, dragging* (line 10), *fallen apart, desperate* (line 11), *nothingness* (line 12), *sucked into, no job, no school, no training* (line 13), *threat, inexorably* (line 14) *risky, went wrong*, (line 15), *torn apart, crushed out* (line 16). All of these linear strings of words co-occurring with *black hole(s)* illustrate that the phrase has a negative pragmatic meaning or discourse prosody when describing the difficulty or hardship of a situation.

(10)	Germany were plunging that economy into a recessionary	**black hole**	and dragging most of the rest of the continent with it —
(11)	had completely fallen apart, the place had become a total	**black hole**	as far as The Firm knew, and they were desperate.
(12)	four years taken out of my life. That time was a	**black hole**	of nothingness. I had been an animal, not a reflective
(13)	year-olds, another 21,000 youngsters have been sucked into a	**black hole**	where there is no job, no school, no training and
(14)	baleful threat for the sovereign Britishers, who see it as a	**black hole**	which could draw EC members inexorably into the same
(15)	risky. If something went wrong and you landed up inside a	**black hole**	, I'd never be able to get you out. At
(16)	but this scenario doesn't work: If you jump into a	**black hole**	, you will get torn apart and crushed out of existence.

4.1.2.1.1.2 *Black* market

This phrase is used figuratively, denoting the place for selling and buying illegal products. Its most frequent collocates are (1) *currency*; (2) *rate* which often co-occurs with *unofficial*; (3) *on*, which constitutes into the prepositional phrase *on the black market*. The top two colloates -*currency* and *rate*- indicate that the illegal

product that is available on the black market is foreign currency with an unofficial rate. The third most frequent collocate, *on* (*the black market*), presents a distinct aspect in comparison to 'the market' in the literal sense which comes with the preposition - *in* (the market), while the figurative use of the phrase comes with the preposition - *on*. Accordingly, *black market* typically collocates with *on* and denotes the metaphoric meaning as discussed above. The concordances (1-10) down below show a number of negative lexical items which co-occur with *black market*. These, as underlined, include *scandal* (line 1), *unspecified charges* (line 2), *fluctuated* (line 3), *slaughtering* (line 4), *weapon* (line 5), *expensive* (line 6), *exorbitant* (line 7), *failed* (line 8), *notorious,* (line 9) *smuggling,* (line 10). All of these negative strings of words leads to an unfavourable use of *black market*.

(1) scandal The falling external value of the dinar had resulted in a	**black market**	in foreign currency with approximately 75 exchange
(2)said that 26 Iraqis had been executed on unspecified charges of	**black market**	currency trading. An international study, published on
(3) remained at US$1.00=6.5 kyats throughout the year, while the	**black market**	rate fluctuated between 50 and 75 kyats to the dollar.
(4) explained that slaughtering animals secretly and trading on the	**black market**	was simply bending the law a little and not really
(5) planned to take away the animals and sell the meat on the	**black market**	. 'We don't know what weapon was used by the
(6) of obtaining the necessary dollars or changing money on the	**black market**	, a very expensive option. There were always hundreds
(7) output were able to charge high prices. On the rampant	**black market**	prices were particularly exorbitant. Farmers had
(8) state against thieves who passed their finds to dealers on the	**black market**	and failed to report to the Commission on Antiquities
(9) at inflated prices — but still generally lower than on the	**black market**	. Most iniquitous of all are the notorious 'closed' shops
(10) large-denomination rouble notes in massive quantities on the	**black market**	, and had been smuggling them out of the country. He

4.1.2.1.1.3 *Black* box

The term *black box* involves one known meaning: 'an electronic device in an aircraft which records information about its flights' (Collins Cobuild ALED, 2006). The concordances of this phrase demonstrate this meaning, especially with its most frequent collocate i.e. *recorder*, which often occurs with *flight recorder* or *crash recorder* (seen in concordance lines 1, 2, 3, 7). As *black box* is used to provide evidence about accidents, its concordances are surrounded by accident-related words e.g. *accident, crash, name of airline, flight number,* and *amount of casualties* (lines 2, 5, 7). All of these seem to be under *investigation/acquisition* or being *analysed* (lines 3, 4). Altogether, these lexical items indicate unfavourable tone of use of the phrase.

(1) authorities' refusal to allow European investigators access to either the "	**black box**	" cockpit voice recordings or the digital flight recorder.
(2) be suspended. As a gesture of friendship Yeltsin returned the "	**black box**	" flight data recorder of the Korean airliner KAL-007,
(3) 5.3 per cent to 6.36p. The £33 million acquisition of '	**black box**	' crash recorder maker Penny & Giles last year added £

(4)	shocked to give any <u>account</u> of what had happened. The '	**black box**	' recorder was recovered and is <u>being analysed</u>. Expert
(5)	a preliminary <u>accident</u> report said yesterday. Data from the <u>accident</u> '	**black box**	' recovered from the destroyed <u>helicopter</u> has been
(6)	on Monday <u>killing</u> all <u>167 on board</u>. The plane's '	**black box**	' was found yesterday — but it will be weeks before it
(7)	after it <u>mysteriously crashed</u> with the loss of <u>81 lives</u>, the	**black box**	<u>flight recorder</u> of an Italian DC9 airliner has been

There is another figurative use of the phrase *black box*. Concordances (8-12) show that *black box* does not refer to the electronic device in an aircraft. It rather describes something mysterious or unknown. The concordance (line 11) even uses the word *abyss* to refer to *black box*. The context surrounding the phrase is also negative, with phrases or words like *things go in without anything coming out* (line 8), *painful dilemma, problem,* (line 9), *unexplicated* (line 10), *abyss, greedy* (line 11), *not efficient* (line 12). All of these indicate that black box has discourse prosody concerning mystery. For this particular use, there is a regular and noticeable pattern i.e. *like a/as a/ called the black box*, as underlined in each concordance below:

(8)	and the DEA. But the congressional intelligence committees are <u>like a</u>	**black box**	<u>. Things go in without anything coming out.</u> They never
(9)	a <u>painful dilemma</u> for the policy-maker between treating <u>a problem</u> <u>as a</u>	**black box**	which will not go away but whose size does not seem
(10)	about this is to think of a pragmatic theory <u>as a</u> "	**black box**	" (an as yet <u>unexplicated</u> mechanism), and to ask
(11)	container broods ominously behind the 'jelly stack', the '	**black box**	' or <u>'abyss'</u> into which 'those who are <u>greedy</u>
(12)	possible approaches: i) We can treat the brain <u>as a</u>	**black box**	into whose contents it is <u>not efficient</u> to enquire. We

4.1.2.1.1.4 *Black* sheep

Black sheep is used negatively to refer to "someone who is considered bad or worthless by other people in a family or group" (Collins Cobuild ALED, 2006). Concordances (1-9) display the use in this sense of meaning. Moreover, the phrase tends to keep company with negation, e.g. *not to* (line 2), *didn't quite fit in* (line 4), *didn't mix* (line 8), *no longer* (line 9), and words with negative meaning e.g. *jealousy* (line 1), *opposed* (line 3), *misfit* (line 5), *horror* (line 6), *weed out* (line 8). These elements show that *black sheep* has discourse prosody describing someone who is a misfit in their group. It should be noted that *black sheep* is repeatedly used with the prepositional phrase *of the family* (lines 2-4), which indicates that *black sheep* is mainly used in relation to 'family'.

(1)	means. Is is is is <u>jealousy</u> another power promoter <u>of family</u>	**black sheep**	. It is jealousy that pushes people into being [pause] black
(2)	discussing. But he has to be careful <u>not to</u> be the	**black sheep**	<u>of the family</u>. Mm. Mm. Mm. Yes.
(3)	must get out of your head is that you're the predestined	**black sheep**	<u>of the family</u>, that you and they are necessarily <u>opposed</u>.
(4)	who was a spiv, and he was considered to be the	**black sheep**	<u>of the family</u>, didn't quite fit in when everybody else

(5)	is treated as the odd man out, the <u>misfit</u>, the	**black sheep**	. It is commonly suggested that since faith depends on
(6)	That was my role in life. Then I became the	**black sheep**	and I found to my <u>horror</u> that everyone thought I was off
(7)	<u>didn't mix</u> with anyone outside the family. I was the	**black sheep**	, you see, and Aunt Pamela <u>didn't want</u> the neighbours
(8)	exactly, yes. It's my job to <u>weed out</u> the	**black sheep**	really, it's pretty straight forward. But you must get
(9)	Or he could say I was one I was one of the	**black sheep**	, but I'm <u>no longer</u>. I'm no longer,

4.1.2.1.1.5 Other phrases

The finding in the figurative use of "*black* plus figurative nouns" so far reveals a similar result. All five most frequent phrases of *black* in this group have negative prosody describing different meanings depending on different collocates that the adjective *black* occurs with. *Black hole(s)* describe hardships and problems, *black market* is a place for selling illegal products, *black box* is an electronic device in an aircraft and can also be used to describe mystery, and *black sheep* refers to someone who is a misfit in their family/group. Other phrases of *black* in this group tend to also have negative discourse prosody. These phrases include:

4.1.2.1.1.5.1 *Black magic* refers to "a type of magic that is believed to use evil spirits to do harmful things" (Cambridge Dictionaries Online). This negative sense of meaning is seen through the unpleasant collocates of the phrase, as shown in concordances (1-5) below. These include *frightening* (line 1), *persecuted* (line 2), *occult* (line 3), *devil* (line 4), *dabbled in* (line 4), *evil* (line 5).

(1)	of Darkness (Pan, £4.99 A, 13th) Witchcra<u>ft,</u>	**black magic**	and satanism today. A <u>frightening</u> book. John Canning 's Great
(2)	Europe until, in medieval times, it became associated with	**black magic**	and sorcery. For several centuries after this it was <u>persecuted</u>.
(3)	they dealt entirely with occult. With Mm. <u>occult</u> and with	**black magic**	and that kind of thing. Okay Sam, thank you for
(4)	be the <u>devil</u>. The court was told that she <u>dabbled in</u>	**black magic**	and tried summoning messages from the <u>spirit </u>world by using a
(5)	Blake realized that they were to be part of some <u>evil</u>	**black magic**	ceremony. There was the sound of a gong in the distance

4.1.2.1.1.5.2. *Black arts* is similar to *black magic* in terms of meaning and its collocations. It refers to harmful practices that are also believed to use unnatural power. Its collocates are mostly negative e.g. *meddled in* (line 1), *unsuccessful* (line 2), *dabbling in* (lines 3, 5), *unnatural* (line 3), *immersed in* (line 5). To a certain extent, these collocates are similar to those of *black magic*, e.g. *dabbling in*, whose meaning is not far from that of *meddled in* and *immersed in*. Hence, this is another *black* phrase with negative prosody.

(1)	Was he a prophet? Or a man who <u>meddled in</u> the	**black arts**	? Whatever, his prophecies about Alexander's death had
(2)	to Scotland. The site of this <u>unsuccessful</u> venture in the	**black arts**	is marked today by the few stony fragments of St Andrew's
(3)	of their alleged involvement in <u>witchcraft,</u> <u>dabbling in</u> the	**Black Arts**	as well as such <u>unnatural</u> vices as sodomy and the worship of
(4)	countryside and shivered. Or had he been <u>immersed in</u> his	**Black Arts**	, calling up a demon from hell in some lonely wood or
(5)	occasion he hired a Satanist, a monk who <u>dabbled in</u> the	**Black Arts**	. ' Ruthven looked at the party clustered round the church door

4.1.2.1.1.5.3 *Black flag* -The three colour terms in question occur with the word "*flag*." *White flag* (see section *White*) is the symbol of defeat or giving up. *Red flag* (see section *Red*) is a sign of danger. *Black flag* is not a straightforward phrase as it does not have any entry in dictionaries (Collins Cobuild ALED, 2006 and Cambridge Dictionaries Online). However, it can be inferred from some concordances of the phrase that *black flag* is a sign to stop or to mark the end of something, specifically in the context of car racing. The concordances (1-4) below show its collocates which enhance this sense of meaning. These are *the end of* (line 1), *finished* (line 2), *to stop* (line 3, 4), which indicate the pragmatic meaning describing the end of something.

(1)	have in my head Tristan und Isolde … ; with the "	**black flag**	" that flutters at <u>the end of</u> it I shall shroud myself
(2)	A few minutes after eight, as they watched, a	**black flag**	moved slowly up the post. The gods had <u>finished</u> playing with
(3)	than Mansell's failure <u>to stop</u> on the command of a	**black flag**	. Although guaranteed the drivers' championship, McLaren are
(4)	and had nothing to do with his failure <u>to stop</u> after a	**black flag**	was waved at him three times. Balestre criticised the media,

4.1.2.1.1.5.4. *Black comedy* refers to "a film, play, etc. that looks at the funny side of things we usually consider very serious, like death and illness" (Cambridge Dictionaries Online). Concordances (1-5) below, shown in Sentence view for full contexts, contains quite a few negative collocates e.g. *haunting and menaces* (line 1), *mercilessly swipes, angst, pressure, consumerism, generation gap* (line 2), *suicide* (line 3), *hell of alcoholism* (line 4), *sense of irony* (line 5). These collocates indicate the discourse prosody describing adversity in *black comedy*.

1. This <u>haunting</u> **black comedy** touches and <u>menaces</u> in equal parts.

2. THE ULTIMATE teen movie, a sharp-edged **black comedy** which <u>mercilessly</u> <u>swipes</u> at adolescent <u>angst</u>, peer <u>pressure</u>, <u>consumerism</u>, and that old favourite, the <u>generation gap</u>.

3. Christian Slater achieved teen-star status with his role in 'Heathers', a stylish and witty **black comedy** set in a high school where <u>suicide</u> appeared to be the latest fad.

4. A potent **black comedy** on the <u>hell of alcoholism</u>, and sequel to last festival's major success Vermin , 'Burbridge is to social realism what Harry Houdini was to Chubb locks' Evening Argus .

5. Already the blackest of **black comedy**, enriched by Verhoeven's European <u>sense of irony</u>, RoboCop is a self-parody that cannot be ridiculed.

4.1.2.1.1.5.5. *Black humour* refers to "a humorous way of looking at or treating something that is serious or sad" (Cambridge Dictionaries Online). The use of this phrase is similar to those of *black comedy* in that it keeps company with negative lexical items which reflect the sense of negative meaning. These collocates are *death, decay* (line 1), *violent, absurdist, sick* (line 2), *to bury the bodies* (line 3), *destructive* (line 4), *mirthlessly* (line 5). It is evident from these collocates that the pragmatic meaning of *black humour* is concerned with adversity, as is *black comedy*.

1. Favoured subjects are court portraiture, and allegorical images of <u>death</u>, <u>decay</u> and the transience of life, usually handled with the blackest of **black humour**.

2. His cartoons do not reflect their creator's peaceful psyche; they are <u>violent</u>, <u>absurdist</u> and occasionally <u>sick</u> frequently described as '**black humour**' so the press rarely publish them.

3. 'Good place <u>to bury the bodies</u>,' she joked with **black humour**.

4. It can be <u>destructive</u> as we see in the **black humour** centring round the image of the Jewish mother who with her <u>tears</u> <u>blackmails</u> her son's emotional life.

5. He laughed <u>mirthlessly</u>, hoping to persuade Lepine to share his **black humour**.

The findings of *black* phrases in figurative use complement to those of previous studies, e.g. Wyler (1992) and Allan (2009), who indicate that *black* has negative connotation and signifies darkness and evil deeds. The phrases above have shown the association to this signification. *Black hole(s),* for example, denotes the sense of difficulty, problems, hardship, or despair. *Black box* concerns mystery or the unknown, *black sheep* describes someone who is misfit to their group. *Black magic*, *black arts* are used unfavourably to refer to the dark arts which can do harmful things. *Black humour* and *black comedy* in the BNC are used to show adversity, which means the phrases are also negative. These findings of *black* phrases are found in their authentic contexts shown in corpus data and they are confirmed by linguisitic evidences that are not discovered in introspective data.

4.1.2.2 Non-figurative use

4.1.2.2.1 *Black* in collocation with human noun phrases"

This is the largest group of *black* collocates out of the four categories drawn for investigation and is presented as the first group of the non-figurative use domain. Table 4.1.5 below shows 35 collocates of *black* in human noun phrases. There are

seven collocates that occur more than 1.0 instance per million words. These are *black people*, *black women*, *black man*, *black community*, *black children*, *black kids*, and *black prince*. It should be noted that *black prince* will be omitted from this investigation as it refers specifically to *Edward, the Black Prince*. The rest as shown in the table above has the frequency ratio of less than 1.0 instance per million words, meaning that they are used and found less frequently. Only some of them will be drawn for discussion in this study.

Table 4.1.5 Collocates of *black* in collocation with human noun phrases

Collocates	Total occurrences	Frequency (instances per million words)	Collocates	Total occurrences	Frequency (instances per million words)
black people	485	4.93	black families	40	0.41
black women	191	1.94	black american	40	0.41
black man	166	1.69	black students	38	0.39
black community	129	1.31	black girl	38	0.39
black children	116	1.18	black person	35	0.36
black kids	115	1.17	black americans	34	0.35
black prince	100	1.02	black boy	33	0.34
black youth	77	0.78	black british	33	0.34
black men	73	0.74	black leaders	32	0.33
black workers	68	0.69	black youths	32	0.33
black woman	65	0.66	black african	31	0.32
black country	65	0.66	black guy	28	0.28
black sportsmen	64	0.65	black family	27	0.27
black population	61	0.62	black parents	26	0.26
black communities	57	0.58	black players	23	0.23
black child	48	0.49	black speakers	22	0.22
black south	45	0.46	black townships	21	0.21
black pupils	45	0.46			

4.1.2.2.1.1 *Black* people

Black people is the most frequent phrase in the category of nouns related to human beings and as a matter of fact is the second most frequent phrase of *black* as an adjective out of the four categories. It has the frequency ratio of 4.93 instances per million words with a total of 485 occurrences across the BNC and is second only to *black hole* (5.45 instances per million words with 536 occurrences). This means that *black people* is a significant phrase of *black* as an adjective. Its distributional data offers a different profile compared to *black* phrases in other categories. That is, while other *black* phrases occur most frequently in Imaginative Prose, *black people* is found frequently in Social Science (50.03%), Arts (13.70%), Leisure (10.92%), World Affairs (11.99%), Commerce and Finance (2.14%). Only 4.06% of *black people* is

found in Imaginative Prose. This shows that *black people* is used more in academic and non-fiction than in fiction text type.

The eleven most frequent collocates of *black people* are *discrimination, Africa, proportion, young, positive, treatment, among, Britain, black, against, towards*. Each of these collocates presents different issues under one united theme i.e. racial discrimination against dark-skinned people. This sense of meaning is shown in the concordances (1-5), which contain one concordance from each collocate. It is obvious that these group of collocation are filled with discrimination-related words e.g. *discrimination against* (line 1), *do not have the vote* (line 2), *a lot of this racism* (line 3), *physical assault, violent verbal expression* (line 4), *prejudice, hostility against* (line 5).

(1)	in British schools. Widespread racial **discrimination** against	**black people**	in the availability and allocation of housing has been ext
(2)	But apartheid is still intact. •Black women, like all	**black people**	in South **Africa**, do not have the vote. Worse,
(3)	if they've ever been left behind as regards the **treatment** of	**black people**	! Obviously a lot of this racism has seeped down from the
(4)	the media are merely the tip of the iceberg; for many	**black people**	in **Britain**, physical assault or violent verbal expressions
(5)	prejudice rather than creating an artificial tide of hostility **against**	**black people**	. For one thing, the negative associations of blackness

Other collocates e.g. *among* presents the issue of unemployment among *black people* as seen in concordances (6-7), while the collocates *proportion*, *young* and *black* convey the issue of aggression and violence, as shown in concordances (8-10). To certain extent, these issues are part of discrimination which happens to *black people*. This is seen in the negative lexical items surrounding *black people*, e.g. *unemployment* (line 6), *unskilled* (line 7), *violent, lawless* (line 8), *aggressive* (line 9), *riots, kill/killing* (line 10).

(6)	has led to sharp increases in unemployment, especially **among** young	**black people**	, and there has been a growth in black migration from
(7)	up, so the position altered. Now, unemployment **among** unskilled	**black people**	is six times higher than among whites, because emplo
(8)	violent and lawless group. The large **proportion** of law-abiding	**black people**	, for example, black health and social services workers,
(9)	and stepped inside. He was faced by about forty **young**	**black people**	, several very aggressive. Many had clearly spent the
(10)	Angeles riots — including the remark that "if **black** people kill	**black people**	every day, why not have a week killing white people?

All of these are, as Sinclair (2004) terms, "bad company" which *black people* keeps, and thus indicate that the phrase *black people* has negative discourse prosody concerning racial discrimination.

4.1.2.2.1.2 *Black* women

This is the second most frequent phrase of the noun group related to humans. Again, the phrase is not frequently found in Imaginative Prose, as is the case with other *black* phrases. As a matter of fact, it is not found being used in Fiction text type at all across the BNC. It occurs most frequently in Social Science (47.54%), Art (41.53%), and Commerce and Finance (3.29%). All of these text types are non-fiction. Its top nine collocates are *psychologists, feminist, writers, older, writing, white, men, black,* and *women*. Three out of nine collocates refer to careers (*psychologists, feminist, and writers*) that *black women* pursue. With these three collocates, it may look like the phrase *black women* occurs in a positive environment that describes the success of *black women* in good careers. However, the concordances (1-6) below do not show particularly positive nor negative lexical items co-occurring with *black women*.

(1)	race, imbalance in an egalitarian way, campaigning for more	**black women**	**psychologists**, and including contributions from black wom
(2)	help lesbians be accepted in feminist psychology. But as with	**black women**	**psychologists**, feminist psychology defines lesbian psychol
(3)	contributions from black women in anthologies. But where	**black women**	work in **feminist** psychology, their, race' often becomes,
(4)	double bind of being black and female, and the relationship of	**black women**	to the **feminist** movement' (1985: 35). Other
(5)	works while ignoring others. This is especially true of	**black women**	**writers**, who tend to be plucked out of context to lend
(6)	feel important. There are no jokes in two new novels by	**black women**	**writers**. Thulani Davis's excellent fictional début, 1959

What is dominant for *black women* is the rest of its top collocates i.e. *older, white*, *men*, *black*, and *women*. The contexts in which these collocates occur are still concerned discrimination, which shows disadvantages *black women* encounter. The concordances (7-11) below reflect this sense of use as they contain negative lexical items which underpin discrimination towards *black women*. These items include *worse, suffering* (line 7), *low socioeconomic status* (line 8), *unacceptable, struggles* (line 9), *unaddressed, abuse* (line 10), *fears, dismissed* (line 11). This particularly unpleasant environment has confirmed the negative discourse prosody concerning racial discrimination of the phrase *black women*.

(7)	and in policy analysis and research. The situation of **older**	**Black women**	is even <u>worse</u>, <u>suffering</u> as they do exclusion based on both
(8)	at done by white female psychologists. The fact that more	**black women**	than **white** women have <u>low socioeconomic status</u> may
(9)	recommendations from this report are <u>unacceptable</u> to many	**Black women**	and **men** who are involved in various other <u>struggles</u> to ove
(10)	they have left <u>unaddressed</u> the <u>abuse</u> and subjugation of	**Black women**	by **Black** men. All too often, says Hooks, Black
(11)	the police. It is <u>unacceptable</u> that **women** and particularly	**Black women**	's demands and <u>fears</u> should be so <u>dismissed</u> by the police.

4.1.2.2.1.3 *Black* **man**

Compared to *black people* and *black women*, *black man* is used more frequently in Imaginative Prose text type (30.97%). It is also found in Informative:Arts (18.58%) and in Informative: Leisure (20.35%). This shows that the meaning of *black man* that is going to be discussed is found in fiction. Concordances (1-5) show the full contexts of *black man* being under racial discrimination. A number of lexical items constitute unpleasant linguistic environment where *black man* occurs. These are *afraid, suffer* (line 1), *unwed, fatal risks* (line 2), *threats, resentment* (line 3), *killed* (line 4), *can't walk with* (line 5). Hence, *black man* corresponds with black people and black women in presenting the issue of discrimination.

1. New black immigration has long ago been stopped, but any **black man** or **woman** who wants to bring dependants over, or be visited by relatives from home, is now afraid of what these people will have to suffer.

2. Born to an unwed teenage mother in South Carolina, Jackson came of age when no **Black man** or **woman** would ever request a public cup of coffee, or enter a public bathroom, or undertake to register to vote, without calculating the easily fatal risks attached to such a simple act.

3. The racially inspired threats which Sterling told me he received after taking the title illustrated the resentment felt at a **black man being** a British champion.

4. In parts of the country, **a black man** between the ages of 15 and 25 is more likely to be killed than was an American soldier in Vietnam.

5. You can't walk with **a black man** here.

4.1.2.2.1.4 *Black* **community**

This phrase is found most frequently in non-fiction text domains e.g. Social Science (54.69%), Arts (13.28%), and World Affairs (21.09%). It collocates most frequently with *Britain*, referring to the situation of the community of black people in the UK. Concordances (1-4) below show that they lack opportunities in many respects, especially employment, resulting in high unemployment rate among the community. Again, this is part of racism they have to face. The phrase contains lexical items which relate to this sense of meaning, e.g. *limited opportunities* (line 1), *worst racism* (line 2), *unable, disillusioned, restless* (line 3), *unemployment* (line 4).

1. The limited opportunities in terms of employment, housing, or social mobility for **Britain**'s urban **black community**, following the Commonwealth immigration of the 1950s, was one unresolved feature of the period.

2. But Sister Souljah obviously strikes a chord in Liverpool, a city which contains both the oldest **black community** in **Britain** and some of the worst racism.

3. Britain's **black community** — especially young people unable to find employment — is becoming increasingly disillusioned and restless.

4. In the 1982 survey (Brown, 1984), the results of which provide much of the recent information about the **black community** in **Britain**, the <u>unemployment </u>rates are 13 per cent for whites, 25 per cent for West Indians, and 20 per cent for Asians, although there are large differences within the Asian group.

4.1.2.2.1.5 *Black* children

This phrase has a similar distributional data as of *black people* and *black women*. It occurs most frequently in Social Science (73.45%) and is found very minimally in Fiction text type (only 0.88%). Its top five collocates are *Asian*, *families*, *white*, *black*, and *care*. It is clearly seen from concordances (1-5) below that the context still relates to the issue of discrimination, and the environment in which *black children* occurs is rather negative. This is evident in the negative lexical items co-occurring with *black children* i.e. *learning difficulties* (line 1), *fault, does not* (line 2), *violence, victims, guerrillas, arrested* (line 3), *I'm not black, get teased, I don't want to* (line 4), *confronting, difficult issues* (line 5). Such linguistic evidences confirm that *black children* has negative discourse prosody concerning the issue of discrimination.

(1)	could be responsible for over-representation of **Asian** and	**black children**	in two acute categories of <u>learning difficulties</u>. His comments
(2)	?' In this view, the <u>fault</u> <u>does not</u> lie with	**black children**	or their f**amilies** but with white teachers who label <u>black child</u>
(3)	<u>violence</u> in which <u>victims</u> have included both **white** and	**black children**	. The president said 18 APLA <u>guerrillas</u> had been <u>arrested</u>
(4)	child saying 'I'm glad <u>I'm not **black**</u>, the	**black children**	<u>get teased</u>; but <u>I don't want</u> to be brown either
(5)	retreats from c<u>onfronting</u> the <u>difficult issues</u> which result in	**black children**	arriving in **care** in the first place. The contents of the

4.1.2.2.1.6 *Black* kids

Black kids occurs most frequently in non-fiction text type, particularly in Informative: Leisure (82.46%), followed by Arts (5.26%), and Social science (7.89%). This phrase presents a different tone of use to those of *black people*, *black women*, and particularly *black children*. Although *black kids* and *black children* share similar meaning, their tones of use are different. *Black children* is generally used in negative environment, while *black kids* is not. This phrase tends to occur with the collocates *sport, themselves*, and *many*. All of them points to the same sense of meaning that *black kids* seem to hold on to sports as a means of achievement or way of escaping from *inequalities* and *disadvantages* they encounter as part of discrimination. The concordances (1-5) display good linguistic company which *black kids* keeps and helps constitute a positive discourse prosody. These positive linguistic

items include *determination, abundance of energy, commitment, enthusiasm* (line 1), *achievement* (line 2), *immersing* (line 3), *commit* (line 4), *attainable* (line 5).

(1) <u>determination</u>? The <u>abundance of energy</u>, <u>commitment</u> and <u>enthusiasm</u> many	**black kids**	manifested in **sport** contrasted strikingly with the
(2) change your skin can they? Curt Nisbett, boxer I think	**black kids**	look towards **sport** as a means of <u>achievement</u>
(3) its <u>creative</u> dimensions. The reasons behind thousands upon thousands of	**black kids**	<u>immersing</u> **themselves** in sport may stem from
(4) beginning in chapter four with my version of why so many	**black kids**	<u>commit</u> **themselves** to sport, then moving, in
(5) uninteresting but <u>attainable</u> positions in society. Then why are so **many**	**black kids**	allowed to let their wilder notions run rampant and

The findings from the key collocations of *black* in collocation with human nouns so far have revealed that *black* in this semantic field portrays dominantly negative discourse prosody concerning a particular issue of racial discrimination towards black people. Although there is one phrase with different tone of use i.e. *black kids*, its pragmatic meaning is still concerned with discrimination. Hence, it can be said that *black* phrases in collocation with human nouns are hegemonic with the issue of racial discrimination, which presents clearly negative pragmatic meaning of the phrase. The findings in terms of the sense of meaning correspond to those of Allan (2009) who mentions that *black* contains dysphemistic connotations as it is used to refer to human colour skin and become a racial term representing negative attitude towards dark-skinned people (p.628).

The following discussion looks at other *black* phrases in this noun group, which have the frequency ratio lower than 1.0 instance per million words. This shows they are used and found less frequently in the BNC.

4.1.2.2.1.5 Other phrases

4.1.2.2.1.5.1 *Black* men occurs only 73 times across the BNC, and hence is not a frequent phrase. The phrase tends to collocate with *young*, *women*, and *two*. Their concordances (1-5) present the sense of meaning which relates to violence as part of discrimination. In most cases, as seen in the concordances, these *black men* are the theme or the victims of violence. Moreover, each concordance line contains quite a number of violence-related lexical items e.g. *guilty, manslaughter, killing, rioting* (line 1), *brutalized* (line2), *unaddressed, abuse, subjugation* (line 3), *hung dead* (line

4), *unease* (line 5). Accordingly, *black men* is another phrase with a discourse prosody concerning racial discrimination.

(1)	was found guilty of manslaughter over the killing of two **young**	**black men**	on a motorcycle in January. Three days of rioting by Mi
(2)	subtle. In 'Malcolm X for Beginners' we learn that	**black men**	and **women** 'were brutalised by the police and other
(3)	have left unaddressed the abuse and subjugation of Black **women** by	**Black men**	. All too often, says Hooks, Black feminists fail to
(4)	mob, a whole group of white men and women. **Two**	**black men**	hung dead from a tree. The lynchers were smiling. Me
(5)	dried porch roof, we are watched with unease by **two** old	**black men**	. After all, half-an-hour away in any direction there is a

4.1.2.2.1.5.2 *Black* person is similar to that of *black men* in a way that it portrays the sense of violence which is part of discrimination. This is evidently shown in each concordance lines (1-5) below which contain mainly violence and discrimination-related words e.g. *rioting,* (line 1), *apparently being whipped, death* (line 2), *racist* (line 3), *criminal, guilty* (line 4), *make life difficult* (line 5). Again, this is another phrase with a discourse prosody describing racism against black people.

(1)	the event which led to the rioting involved police-officers and **a**	**black person**	. At 7.00 a.m. on 28 September armed police entered
(2)	a loud noise in the yard, looked out and saw a	**black person**	apparently being whipped — as he thought, to death.
(3)	into making a racist statement by announcing that he had seen a	**black person**	outside the window two weeks ago, but all the const
(4)	majority of the black population are criminal, and believe that a	**black person**	is guilty until he can, if he can, prove his
(5)	handful of his neighbours urging them to make life difficult for a	**black person**	who has recently moved into the neighbourhood?

The results of investigation into "*black* in collocation with human noun phrases" have shown that most phrases are used in negative environment and thus contain the discourse prosody describing one united issue— racial discrimination against dark-skinned people. One phrase i.e. *black kids* may present a different tone of use, but its pragmatic meaning still concerns discrimination. Accordingly, the corpus findings give a clear picture of "*black* in collocation with human noun phrases" in way that it is used overwhelmingly in the context related to racial prejudice.

4.1.2.2.2 "*Black* in collocation with clothing noun phrases"

Table 4.1.6 below displays 23 most frequent collocation of *black* in the noun group related to clothing. From the table, it can be seen that there is only 1 phrase in this noun group i.e. *black dress* which occurs more than one instance per million words across the BNC. This means that another 22 phrases which have the frequency ratio of lower than 1.0 instance per million words are used and found less frequently.

The distributional data of *black* phrases in this noun group indicates that they are found most frequently in fiction, describing how a character is dressed, with a small amount of use in a variety of other text domains. To illustrate, *black dress* occurs in Imaginative prose or Fiction (73.45%), Leisure (13.27%), and Arts (4.42%).

Table 4.1.6 Collocates of *black* in collocation with clothing noun phrases

Collocates	Total occurrences	Frequency (instances per million words)	Collocates	Total occurrences	Frequency (instances per million words)
black dress	113	1.15	black trousers	34	0.35
black silk	67	0.68	black shirt	33	0.34
black shoes	59	0.60	black stockings	33	0.34
black hat	53	0.54	black belt	32	0.33
black coat	46	0.47	Black jeans	32	0.33
black tie	45	0.46	black cloak	31	0.32
black lace	39	0.45	black cloth	26	0.26
black skirt	44	0.45	black cotton	24	0.24
black bag	36	0.37	black cap	21	0.21
black suit	35	0.36	black clothes	21	0.21
black boots	34	0.35	black tights	21	0.21
black jacket	34	0.35			

As mentioned earlier, one of the main arguments of this research rests on the point that pragmatic meaning or discourse prosody of English colour terms is not restricted to the figurative use, but also extends to the non-figurative use. This is shown through the analysis of "*black* in collocation with clothing nouns."

4.1.2.2.2.1 *Black* dress

The phrase can be used to describe a normal dress with black colour and this may not show any significance. However, when *black dress* occurs with one of its most frequent collocates i.e. *little*, it presents a different tone of use. That is *little black dress*, or LBD for short is a simple and elegant dress for special occasions especially evenings. Concordance (line 1) particularly shows that LBD is for *sophisticated late suppers* or *distinctive dinner*. Concordances (1-7) manifest that *little black dress* collocates with quite a number of positive words and/or phrases which help enhance the sense of being simple and elegant of the dress e.g. *really hard to beat, slimline classic* (line 1)*, a staple of this season's wardrobe* (line 2)*, her genius* (line 3), *perfect* (line 4), *neat* (line 5), *classic* (line 6), and *couldn't go wrong* (line 7).

All of these constitute a positive discourse prosody concerning elegance of the phrase *little black dress*. This corresponds with what Allan (2009: 627) has claimed about LBD i.e. it is considered "a must for every woman's wardrobe."

(1)	For sophisticated late suppers it's really hard to beat the **little**	**black dress**	. This slimline classic had been given the distinctive dinner
(2)	for the day and show just how they would accessorize the **little**	**black dress**	that is a staple of this season's wardrobe. Come along
(3)	French chic. Responsible for Chanel No. 5 and the **'little**	**black dress**	', her genius has assured her name will never die.
(4)	matured into a designer capable of producing the perfect **little**	**black dress**	, and a mixture of easy pieces that reflect the quirky charm
(5)	he could say no more. Biddy, in her neat **little**	**black dress**	, was busy serving food. Old friends from the village were
(6)	into her dress. It was a version of the classic **little**	**black dress**	. Knee-length, it clung to her figure lovingly. The long
(7)	Elise said I couldn't go wrong with a **little**	**black dress**	.' 'Little's the word,' he said gruffly

4.1.2.2.2.2 Other phrases

As discussed above, *black dress* is the most frequent and the only phrase in this noun group which has the frequency ratio over one instance per million words. From the analysis above, it presents positive discourse prosody concerning elegance. Other phrases which possess similar pragmatic function are as follows:

4.1.2.2.2.2.1 *Black silk* is used most frequently to describe the word *dress*. In this description of *black silk dress*, there are a number of intensifiers which help strengthen the positive use of the phrase e.g. *striking* (line 1), *fabulous* (line 2), *shimmering* (line 3). Other lexical items which collocate with *black silk* are *pure* (line 4), *is looking good* (line 5), *luxuriantly* (line 6). These collocates evidently show that *black silk* has 'good company', hence has a positive discourse prosody concerning beautiful dressing.

(1)	into the compartment; the newcomer was wearing a striking	**black silk**	dress and black hat which were very reminiscent of the
(2)	girl in a fashion magazine. 'She's wearing a fabulous	**black silk**	sheath dress and satin shoes. Satin shoes. She looks me
(3)	in time to see his warm dark eyes rake down the shimmering	**black silk**	dress that whispered around her slender body. He smiled,
(4)	her splendid body was clothed from neck to toe in a pure	**black silk**	gown, the only concession to any alleviating colour being
(5)	air beside my cheek. She's looking good in a loose	**black silk**	jacket with a huge jewelled Butler and Wilson spider
(6)	blonde hair. A mere girl draped in her favourite nightgown of	**black silk**	sprawled luxuriantly on white sheets. A girl playacting.

4.1.2.2.2.2.2 *Black shoes* is another positive phrase describing good style of dressing. This is shown through positive and related lexical items in the concordances (1-5) below e.g. *shining* (line 1), *looking smart* (line 2), *was looking her best* (line 3), *gleaming* (line 4), *shiny, gorgeous* (line 5). Moreover, concordance (line 1) shows that *black shoes* can be part of a formal dress with *blue suit, white shirt and blue tie.*

(1)	would notice. The boy was wearing his <u>blue suit, shining</u>	**black shoes**	, <u>white shirt</u> and <u>blue tie</u> and his fair hair was oiled
(2)	<u>looked smart</u> enough in a navy-blue suit and highly polished	**black shoes**	, his hair well flattened and combed down. But he was
(3)	glance in the mirror as she thrust her feet into high-heeled	**black shoes**	revealed that <u>she was looking her best</u>. She needed every scrap
(4)	starched white shirt with ruffles, a black bowtie and <u>gleaming</u>	**black shoes**	. I felt quite pleased with myself, I must say,
(5)	with a black belt at his waist and a pair of <u>shiny</u>	**black shoes**	. And Agnese was quite right — he looked far more <u>gorgeous</u>

4.1.2.2.2.2.3 *Black hat* is used as part of official and/smart dress. This is shown through concordances (1-3) below e.g. *respectable, official* (line 1), *smart dress* (line 3). As the phrase is used for official dress, concordance (line 2) contains the phrase *wrongly dressed* because *black hat* and *coat* are not usually used as part of casual dress. Hence, *black hat* is another positive phrase which is used in a positive environment, particularly in formal dressing style.

(1)	and everyone judges them by their appearance. Dark-blue suit,	**black hat**	, <u>respectable official</u> — like Hans — or Steinmark. <u>Smart</u>
(2)	waiting at Charing Cross station and I'm <u>wrongly dressed</u> in a	**black hat**	and coat, whereas I should have come in jeans and a
(3)	now wearing a <u>smart dress</u> in cherry-red shantung, and	**black hat**	with a saucy feather. She came into the studio, apologising

4.1.2.2.2.2.4 *Black coat* is another positive phrase which is used with positive lexical items e.g. *best* (line 1), *excellently cut* (line 2), *elegant, well-cut* (line 3).

(1)	on Sundays, when he wore <u>his best</u>, which was a	**black coat**	and trousers, his pointed face above this ensemble roughly
(2)	age. Hope had changed his cravat and put on <u>his best</u>	**black coat**	, <u>excellently cut</u>. But it was Mary whose bold appearance
(3)	Thoughtfully she watched his <u>elegant</u> figure in the <u>well-cut</u>	**black coat**	, his hair streaming in the wind and shining like molten gold

4.1.2.2.2.2.5 *Black tie* is worn in formal events. This can be seen through its use in concordances (1-5) below which consist of relevant lexical items like *formal party* (line 1), *awards dinner* (line 4), *presidential banquet* (line 5). These events are regarded as formal and special as they involve some important people e.g. *a senior member of the staff* (line 3), *the prince* (line 4). The finding corresponds with what Allan (2009:627) has mentioned, that is *black tie* "is a dressing code for 'formal social gathering.'

(1)	there will be dancing at 10.30 pm. The heavy engraving indicates	**Black Tie**	. It's a <u>formal party</u>. If you want to enjoy
(2)	age. He was <u>decorously dressed</u> in a navy-blue overcoat, a	**black tie**	and a dark suit. He seized Peter's hand and pumped
(3)	US Embassy and film <u>a senior member of the staff</u>, in	**black tie**	and dark suit, as he slowly wound up the folding door
(4)	firm owns several games shops, was wearing a dinner jacket and	**black tie**	as he left an <u>awards dinner</u> at a Marble Arch hotel.
(5)	dazzling <u>presidential banquet</u> in South Korea today. <u>The prince</u>, in	**black tie**	, referred to his wife twice during a speech toasting South

4.1.2.2.2.2.6 *Black suit* collocates with evident positive adjectives e.g. *well-cut* (line 1), *neat* (line 2), *beautifully tailored* (line 3), *tidy* (line 4), *best* (line 5). These show that *black suit* is part of a good dressing style and is often used positively.

(1)	sobered up, shaved, scrubbed and polished, in <u>well-cut</u>	**black suit**	and shining black shoes, looked quite the man about town.
(2)	a popular nostalgic show in lower Manhatten . What with her <u>neat</u>	**black suit**	, white blouse, rimless spectacles and greying hair, Ella
(3)	had been cut by Vidal Sassoon and she wore a <u>beautifully tailored</u>	**black suit**	relieved only by a little white flounce at the neckline. In
(4)	's son, home from schooling back East. Wearing a <u>tidy</u>	**black suit**	, Palance throws his carpetbag negligently into the back of
(5)	telescope, lying in the wreckage on yellow sand wearing <u>her best</u>	**black suit**	, with a small, travelling hat, surrounded by the charred

The findings above have shown that "*black* in collocation with clothing noun phrases" are used in a positive environment. They evidently portray positive discourse prosodies describing elegance (e.g. *little black dress*, *black silk dress*), good dressing style (e.g. *black shoes*, *black suit*), and formality (e.g. *black shoes*, *black hat*, *black coat*, *black tie*). Some of them even share the same positive collocates e.g. *best, well-cut* in the cases of *black coat* and *black suit*. These qualities help strengthen their positive discourse prosodies. As mentioned above, the discovery has shown that the pragmatic meaning does not only retain within the figurative use of the colour terms, but also encompasses the non-figurative use. Moreover, it shows that different collocations contain different discourse prosodies as seen in the discussions of "*black* in collocation with human noun and clothing noun phrases."

4.1.2.2.3 "*Black* in collocation with body-part noun phrases"

Table 4.1.7 below displays the eleven most frequent collocates of *black* in collocation with body-part nouns. From the table, *black hair* is the most frequent phrase with a frequency of 4.75 instances per million words across the BNC. *Black eyes* is second most frequent, with 2.07 instances per million words. The rest of *black* phrases in this noun group occur less than 1.0 instance per million words, meaning they are used and found less frequently. Similar to what has been found in "*black* in collocation with clothing nouns", the distributional data of "*black* in collocation with body-part nouns" indicates that they are mostly found in fiction with a smaller amount of use in a variety of other text domains.

Table 4.1.7 Collocates of *black* in collocation with body-part noun phrases

Collocates	Total occurrences	Frequency (instances per million words)
black hair	476	4.75
black eyes	204	2.07
black eye	75	0.76
black beard	41	0.42
black face	39	0.40
black head	30	0.31
black skin	27	0.27
black brows	25	0.25
black lashes	24	0.24
black moustache	24	0.24
black body	22	0.22

Again, the analysis of "*black* in collocation with body-part nouns" can show that the pragmatic meaning is not restricted to the figurative use of English colour terms, but also expands the non-figurative use, to which this noun group of body parts belongs. Moreover, it endorses another argument of this research in that the connotative properties of the colour terms cannot be fixed and can be different depending on their occurrences with other lexical items, which is shown through the analysis below.

4.1.2.2.3.1 *Black* hair

Based on the frequency information, *black hair* is the third most frequent phrase of the adjective *black* in all categories. It occurs 467 times (4.75 instances per million words) across the BNC, compared to 536 times (5.45 instances per million words) for *black hole*, the most frequent phrase, and 485 times (4.93 instances per million words) for *black people*, the second most frequent phrase. This indicates that *black hair* is a significant phrase and is used frequently in British English. The phrase is found significantly in Fiction text type (80.76%), in which it occurs as a narration of how the hair of a character looks or is described.

Black hair tends to collocate mostly with *wavy*, *dyed*, *mop*, *curly*, *complexion*, *greasy, jet*, *thick*, *shining*, *brown*, *eyes*, *long*, and *short*. All of these except *dyed* and *greasy*, contain positive discourse prosodies describing the beauty of *black hair*. Concordances (1-11) below display one concordance from each top collocate of the

phrase. It can be seen that *black hair* keeps company with positive lexical items e.g. *gracefully* (line 1), *liberally sprinkled* (line 2), *very attractive* (line 3), *handsome* (line 4), *magnificent* (line 5), *lovely* (line 6), *energetic* and *beautiful* (line 7), *good-looking* (line 8), *smooth* (line 9), *enchanting* (line 10), *well-built* and *fine* (line 11). These items function as positive modifiers of *black hair* and help strengthen the positive discourse prosody describing the beauty of black hair.

(1)	slowly in his direction, a tall girl with long, **wavy**	**black hair**	came gracefully out of the door which led into the
(2)	six feet and sported a warm smile beneath a curly **mop** of	**black hair**	liberally sprinkled, like his beard, with grey. He shook
(3)	woman was very attractive with a dark **complexion** and thick	**black hair**	tied in a pony tail. Her face was made up,
(4)	eating her dinner, in walked a handsome man, with **curly**	**black hair**	and brown eyes, wearing a black hat and corduroy suit.
(5)	striking dark brown eyes and long thick lashes. And her **jet**	**black hair**	was magnificent. 'Yes?' she said, her smile
(6)	'Who's the boss' — he's got lovely **thick**	**black hair**	. WHAT DO YOU THINK OF THE CURRENT HAIR
(7)	a skinny, energetic schoolgirl with a flower in her s**hining**	**black hair**	, who quickly grew into a beautiful woman and whose
(8)	get the accident off his mind. He is good-looking with floppy	**black hair**	, **brown** eyes and a lean muscular body. He turns off
(9)	as beautiful. He had dark, fawn's **eyes** and wavy	**black hair**	; his skin was smooth and the colour of dark gold;
(10)	Summer was such a special season. She tossed back her **long**	**black hair**	, and her enchanting almond eyes shone merrily. He
(11)	a well-built woman with a high-coloured, sculptured face, **short**	**black hair**	and fine legs. My aunts were bewildered by her.

As mentioned above, two top collocates of *black hair* e.g. *dyed* and *greasy* display different tones of use. That is, when *black hair* collocates with *dyed* and *greasy*, the surrounding linguistic environment tends to be negative. This is evident in concordances (12-14) of the collocate *dyed* and in concordances (15-17) of the collocate *greasy*. These lines accommodate negative lexical items e.g. *emaciated* (line 12), *absolutely horrible* (line 13), *looked like cotton wool dipped in liquid boot polish* (line 13), *pallor* (line 14), *insolent* (line 15), *fat* (line 16), *bizarre* (line 17). This apparently shows that when *black hair* collocates with *dyed* or *greasy*, it contains negative discourse prosody describing the hair with no beauty quality and is used in an unpleasant environment.

(12)	Dowd's right, her face emaciated beneath a confection of **dyed**	**black hair**	. Alice Tyrwhitt, Dowd guessed. 'That's the problem
(13)	woman, dismayed. She was absolutely horrible. She had **dyed**	**black hair**	that looked like cotton wool dipped in liquid boot polish,
(14)	give her something. The boy who opened the door had **dyed**	**black hair**	, which heightened the pallor of his face, and his jeans
(15)	any casual passer-by. You only had to look at her **greasy**	**black hair**	, her insolent stare and her creased and spotted uniform.
(16)	was a short, fat man in his early fifties with **greasy**	**black hair**	and thick pebble glasses. The passenger door opened
(17)	the voice was equally bizarre. Short and square, with **greasy**	**black hair**	and a Van Dyke beard, he wore a sea-green smoking-

This discovery corresponds with what Hunston (2007) proposes i.e. the prosody of a node word/phrase can shift if its immediate phraseology changes, which

at the same time endorses the argument of this research in that the pragmatic meaning is influenced by the occurrences of a linguistic item with other lexical items.

4.1.2.2.3.2 *Black eyes* **and** *black eye*

Black eyes is another significant phrase in the noun group related to body parts. It is second most frequent with the total occurrences of 207, or 2.07 instances per million words. Similar to what has been discovered in *black hair*, the phrase is found to occur most frequently in Fiction text type (74.75%). It is used to narrate or describe a character's eyes. The phrase collocates most frequently with *glittering, narrowed, sharp, bright, hair, deep, black, her, two*, and *his*. The context in which these collocates occur shows that *black eyes* is used in association with negative emotions e.g. frustration, fury, fear, and hatred.

To certain extent, these emotions give the sense of the fierce or intense look of the eyes. Apparently, it tends to be used in an unpleasant environment, i.e. surrounding by negative lexical items e.g. *hated enemy* (line 1), *maliciously* (line 2), *frustration* and *fearsome snarl* (line 3), *dead* and *stringy* (line 4), *dark like a gypsy* (line 5), *weak* and *couldn't stick to anything* (line 5), *fury and hatred* (line 6), *restless, sly, cunning* (line 7). All of these indicate that *black eyes* has negative discourse prosody describing fierce/intense look of the eyes and tends to be used in a negative linguistic environment.

(1)	other end of the corridor he found himself looking into the **glittering**	**black eyes**	of his hated enemy, Angel One. The man was staring
(2)	'You don't think ?' Rainald's small	**black eyes**	**narrowed** maliciously. 'You had better make sure, lady,
(3)	leaping over to the terrace. She barked in frustration. Her	**black eyes**	were **bright**, her lips curled back in a fearsome snarl that
(4)	snorted. 'I've got a dead white face, staring	**black eyes**	, stringy **hair** and I need a shave,' she announced
(5)	, you know, but tall. Dark like a gypsy,	**black eyes**	, **black** hair. Weak character, couldn't stick to anything
(6)	The fires of fury and hatred were smouldering in **her** small	**black eyes**	. 'Matilda!' she barked. 'Stand up!
(7)	face were large enough for the body of a giant. **His**	**black eyes**	were restless, sly, and cunning; his mouth and chin

The discussion above displays the use of *black eyes* in literal sense. However, this phrase is also found in figurative use particularly when it collocates with the numerical adjective *two*. Concordances (8-11) below show the use of *black eyes* collocating with *two* and referring to injury of the eyes. It is obvious that the phrase is surrounded by lexical items, mostly phrases, which relate to injury e.g. *fractured two*

ribs, punctured a lung, a dislocated shoulder (line 8), *cuts and bruises* (line 9), *face is badly beaten* (line 10), *a bloody nose, a front tooth missing* (line 11).

(8)	leg, fractured two ribs and punctured a lung, received two	**black eyes**	, a dislocated shoulder, and more recently he smashed
(9)	wife Jackie was left covered in cuts and bruises and with two	**black eyes**	after being kicked and punched for three hours. Judge
(10)	last time. His face is badly beaten and he has two	**black eyes**	. Christopher says he surprised intruders in his flat and
(11)	playground battle, and went home with a bloody nose, two	**black eyes**	and a front tooth missing.' Her sherry-coloured eyes

The above meaning of *black eyes* relates directly to the phrase *black eye* which is the third most frequent phrase in the noun group related to body parts. This phrase particularly portrays the meaning of eye's injury especially when it collocates or is used with generic article *a*. The meaning of injury to the eyes is also shown through injury-related lexical items which co-occur with *black eye* e.g. *a bloodied nose* (line 12), *suffering, a cut* (line 13), *bruises* (line 14), *suffered, bruises, minor cuts* (line 15), as seen in concordances (12-15) below:

(12)	without thought for the consequences. For his pains he received a	**black eye**	, a bloodied nose, a split lip, two skinned knees
(13)	she was dazed for three days following the attack, suffering a	**black eye**	and a cut on her forehead. She brought an assault
(14)	somehow I hit the corner of the wardrobe and got myself a	**black eye**	and one or two other bruises … ' 'He doesn't
(15)	been beaten up in prison. The 50-year-old child killer suffered a	**black eye**	, bruises and minor cuts as she sat down for a meal

The discussion so far has focused on the most frequent phrases in the noun group related to body parts e.g. *black hair* and *black eye*(s). *Black hair* has a mixed pragmatic meanings depending on its different collocates. That is, when *black hair* collocates with *wavy*, *mop*, *curly*, *complexion jet*, *thick*, *shining*, *brown*, *eyes*, *long*, and *short*, it contains positive discourse prosody describing the beauty of *black hair*. But when it collocates with *dyed* and *greasy*, it projects a negative discourse prosody describing the hair with no beauty quality. *Black eyes* in literal use has negative discourse prosody describing the intense look of the eyes and tends to occur in an unpleasant linguistic environment. This is also the case for *black eyes* in figurative use as it describes the injury of the eyes. This is also true for the meaning of *black eye* in singular form which particularly denotes the eye's injury and demonstrates negative pragmatic meaning.

4.1.2.2.3.3 Other phrases

The rest of the phrases in this noun group is much less frequently found and used as they occur less than 1.0 instance per million words. These phrases are *black beard*, *black face, black head, black skin, black brows, black lashes, black moustache*, and *black body*. Each has a small number of concordances presented across the BNC which makes it rather difficult to identify whether they contain pragmatic meanings. Their available concordances are not consistent in terms of their pragmatic indications. For example, *black beard* can have one concordance (line 1 below) which shows that it occurs in a negative environment, but another concordance (line 2) rather demonstrates a positive environment in which it occurs. In the end, it is not so certain what *black beard* really describes as there is no dominant sense of meaning which comes out of its collocational patterns.

| (1) | wound in my leg.' He looked really fierce with his | **black beard** | and long black hair. His wound was covered lightly with a |
| (2) | He was a tall, handsome man, with a full | **black beard** | . After we had washed and changed our clothes, he brought |

What happens with *black beard* is also the case with other phrases e.g. *black head* which seems to refer to the dark coloured head of animal, e.g. a seal, a dog, a bird etc. However, when it co-occurs with *coach* (5 out of the total 30 concordances), it refers to a person. The content of *black head coach* touches slightly on the racial issue. Still, it's not dominant and clear that it concerns racial discrimination as more concordances are needed. *Black Skin* with the capitals is a proper noun for a video called *Black Skin, White Masks*. *Black body* tends to refer to an animal (a fish), a bass guitar, or a leotard (tight-fitting clothing).

All in all, there is only *black face* which conveys a noticeable sense of racial prejudice. Its concordances (3-5) describe coloured people and the way they are discriminated. This is shown through negative lexical items, mostly negations and phrases, which co-occur with *black face* e.g. *never, do not* (line 3), *blacks are generally persuaded to go elsewhere* (line 3), *you realize you don't fit* (line 4), *enough to cause stares* (line 5). Accordingly, it is evident that *black face* contains negative discourse prosody describing discrimination.

(3)	and <u>never</u> will be. People <u>do not</u> want to see a	**black face**	under a bearskin<u>. Blacks are generally persuaded to go elsewhere.</u>
(4)	I mean you look at yourself and you've got a	**black face**	and a Cockney accent and <u>you realize you don't fit</u>.
(5)	white-dominated areas where the mere appearance of a	**black face**	in a pub or at a crag is <u>enough to cause stares</u>

In summary, "*black* in collocation with body-part nouns" tends to be used mostly in unpleasant environment. Most of the frequent phrases i.e. some parts of *black hair*, *black eyes* and *black eye*, have negative discourse prosodies. This is also the case with the less frequent phrase *black face* which concerns racial discrimination. *Black hair* is the only phrase which is used in a positive environment. Still, this happens when it occurs with most, not all, of its collocates. Some collocates i.e. *dyed* and *greasy* of *black hair* do convey negative sense of use.

4.1.3 Concluding notes

Black phrases in collocation with four different noun groups present different discourse prosodies. "*Black* in collocation with figurative noun phrases" present dominantly negative tone of use. This is also the case for "*black* in collocation with human noun phrases" which has a discourse prosody concerning racial discrimination. "*Black* in collocation with body-part noun phrases" also mainly contains negative discourse prosody describing negative feelings especially with *black* eye/*black* eyes. However, "*black* in collocation with clothing noun phrases" maintains strongly positive discourse prosody describing elegance, good dressing style, and formality. These findings have shown that (1) discourse prosodies or pragmatic meanings are not only found in figurative use of the colour terms, but are also discovered in non-figurative category; (2) different collocations present different discourse prosodies as shown, in particular, in "*black* in collocation with clothing noun phrases" and the other three noun groups.

4.2 The profile of *White*

4.2.1 Distributional profile of *white* as an adjective across the BNC

As mentioned in the profile of *black*, distribution information plays an important role in lexical semantics. That is, words can have different patterns of use and meaning when occurring in different text domains. In addition, distribution data relates strongly to contexts in which meanings of particular lexical items are based on.

Tables 4.2.1 and 4.2.2 below display the distribution data of the adjective *white* across the BNC. The data is similar to those of *black*. That is, *white* is found far more frequently in Written Text (208.70 instances per million words, in total of 18,353 occurrences) than Spoken Text (135.15 instances per million words, in total of 1,407 occurrences). The information on different text domains are also not so different to those of *black*; *white* is also found most frequently used in Imaginative Prose/Fiction (373.96 instances per million words), followed by Leisure (327.72%), and Arts (217.59%). Similar to the case of *black*, this indicates that *white* as an adjective tends to be used in Art more than Science text domains.

Table 4.2.1 Written/Spoken of *white*

	Total Occurrences	Frequency (per million words)
WRITTEN	4,644	208.79
SPOKEN	356	135.15
TOTAL	**5,000**	**200.99**

Table 4.2.2 Text Domain of *white* in Written text type

Text Domain		
Category	Total Occurrences	Frequency (per million words)
Imaginative prose	1,561	373.96
Informative: Leisure	1,011	327.72
Informative: Arts	362	217.59
Informative: Social science	598	168.50
Informative: Natural and pure sciences	162	167.65
Informative: Applied science	219	120.66
Informative: World affairs	507	116.19
Informative: Belief & thought	79	102.78
Informative: Commerce and finance	145	78.06
TOTAL	**4,644**	**208.79**

4.2.2. Collocational profile of the adjective *white*

The search result in PIE for collocational patterns of *white* reveals 144 lexical items with which *white* most frequently collocates. Drawing on the concepts of semantic preference (see 2.2.2.1.1.3.) and collocation (see 2.2.2.1.1.1), Table 4.2.3 below shows different noun groups which co-occur most frequently with *white*.

Table 4.2.3 Collocational patterns of *white*

~+ Conj.	~+pronominal	~+humans	~+body parts	~+food/ drink	~+ place	~+animals/ Plants	~+materials	~+clothing	~+nature	~+Figurative[2]	Misc
~ and	~ one	~ man	~ face	~ bread	~ room	~ horse	~ marble	~ shirt	~ water	~ collar	~ light
~ with	~ ones	~ people	~hair	~chocolate	~ wing-	~ fish	~ paint	~ coat	~ sand	~ house	~ line
~ or		~ men	~ teeth	~ flour	bar	~ worm	~ plastic	~ cotton	~ clouds	~ paper	~ lines
~ as		~ women	~ blood	~ icing	~ walls	~ rabbit	~ powder	~ silk	~ stone	~ papers	~ background
~ in		~ population	~ cells	~ sauce	~ wall	~ horses	~ metal	~ dress	~ cloud	~ elephant	~ china
~ on		~ woman	~ beard	~ rump	~ space	~ cat	~ photograph	~ cloth	~ stones	~ heat	~ white
~ for		~ girl	~ skin	~ wine	~ city	~ plumage	~ sheet	~ linen	~ sands	~ hole	~ patch
~ to		~ minority	~ cell	~ wines	~ park	~ clover	~ car	~ blouse	~ cliffs	~ noise	~ patches
~ as		~ workers	~ hand	~ spirit	~ tower	~ rose	~ card	~ coats	~ star	~ knight	~ Christmas
~ but		~ boy	~ head	~ fondant		~ roses	~ van	~ satin	~ dwarf	~ flag	~ cross
~ of		~ person	~ faces			~ flowers	~ chalk	~ gloves		~ hot	~ foam
		~ settlers					~ label	~ trousers			~ spot
		~community					~ sheets	~ lace			~ spots
		~working-						~ socks			
		class						~ T-shirt			
		~ society						~ striped			
		~ areas						~ apron			
		~ south						~ stripes			
		~ racism						~ fur			
								~ shirts			
								~ tie			
								~ handkerchief			
								~ jacket			
								~ shorts			
								~ suit			
11	2	18	11	10	8	11	13	25	10	12	13
7.64%	1.39%	12.50%	7.64%	6.94%	5.56%	7.63%	9.03%	17.36%	6.94%	8.33%	9.03%

It should be noted that the category of *Figurative* refers to a group of nouns with which *white* collocates and together they convey figurative/metaphoric meanings.

From the table, it can be seen that *white* has collocational patterns with various noun groups e.g. human nouns, body-part nouns, food/drink nouns, nature/plant/animal nouns, clothing nouns, nouns related to figurative use, material nouns, and assorted or miscellaneous nouns. The figures from each noun group shows that the biggest noun groups which collocate most frequently with *white* are (1) clothing nouns, henceforth "white in collocation with clothing noun phrases," which constitutes 25%, followed by (2) human nouns, henceforth "*white* in collocation with human noun phrases," sharing 12.50%. The third biggest groups are material and assorted or miscellaneous nouns. However, as they are used purely descriptive and

display no specific features, particularly pragmatic meanings, nouns related to figurative use, henceforth "*white* in collocation with figurative noun phrases," sharing 8.33%, is chosen as their replacement. Also, another purpose to take in this group is to parallel the investigation with those of *black*. The fourth biggest group is body-part nouns, henceforth "*white* in collocation with body-part nouns," sharing 7.64%.

There is an obvious point of difference between *black* and *white* in terms of their collocational patterns. That is, while *black* collocates most noticeably with human nouns; *white*, on the other hand, does with clothing nouns.

The abovementioned top four noun groups are categorized broadly into two groups i.e. (1) figurative use, containing only nouns related to figurative use; (2) non-figurative use, containing three noun groups i.e. human nouns, clothing nouns, and body-part nouns. Each is discussed in turn below.

4.2.2.1 Figurative use

4.2.2.1.1 "*White* in collocation with figurative noun phrases"

Table 4.2.4 below displays 12 collocates of *white* in figurative noun phrases. From the table, there are 3 collocates which occur more than 1 instance per million words. They are *white paper* (11.27 instances per million words), *white house* (7.62 instances per million words), and *white collar* (1.28 instances per million words). The rest occurs less than 1.0 instance per million words. Some of these will be discussed in passing. It should be noted that *white house* is not included in the discussion as it is the proper noun for the official home of the US President. It can also refer to the US government.

Table 4.2.4 Collocates of *white* in collocation with figurative noun phrases

Collocates	Total occurrences	Frequency (instances per million words)
white paper	1108	11.27
white house	749	7.62
white collar	126	1.28
white papers	69	0.70
white flag	49	0.50
white heat	38	0.39
white elephant	36	0.37
white hot	34	0.35
white hole	32	0.33
white knight	30	0.31
white noise	27	0.28
white holes	26	0.27

4.2.2.1.1.1 *White* Paper

White paper is the most frequent *white* phrase in this noun group and is the top collocate of the total 144 *white* phrases included in the investigation. Out of a total of 1,108 concordances, 887 lines (80.05%) of *white paper* appear with capitals W and P. *White Paper* is "an official report which describes the policy of the Government on a particular subject" (Collins Cobuild ALED, 2006). The top collocates of *White Paper* as shown in concordances (1-6) below are *proposals* (line 1)*, published/publication* (line 2)*, outlined* (line 3)*, government* (line 4)*, expenditure* (line 5)*, environment* (line 6). Apparently, these collocates reveal the nature of a *White Paper* in that it is official and proposed by certain Governments or organizations to take action or deal with some national or big-scaled issues e.g. environment, health care, expenditure, defense, or economy.

(1)	be planned on a city region scale. The <u>proposals</u> in the	**White Paper**	would prevent this from happening in the future. 'The
(2)	for the greening of all Whitehall departments through a	**White Paper**	to be <u>published</u> next year and set a target on the recycling
(3)	The government's proposals for rented housing, <u>outlined</u> in a	**White Paper**	in 1987, were given legislative form in the Housing Act
(4)	of its report, also in 1963, the <u>Government</u> in a	**White Paper**	accepted all the basic recommendations on the enlargement
(5)	issues embodied (or concealed) in the annual <u>expenditure</u>	**White Paper**	, the first of these reports being the Fifth Report of the
(6)	this nettle — it's one that the Conservative Party in its	**White Paper**	on the <u>environment</u> avoids noticeably — we have to grasp

More samples of random concordances (8-15) below also show that *white paper* deals with *law, policy, reform* which concerns public services e.g. *Family*

Services (line 9), Civil Service (line 11). This means that *White Paper* is not only official but also important paper and involves the general public.

(8)	at the stage when the <u>Government</u> publishes a	**white paper**	on the future of water and sewerage services. Mr Geddes added
(9)	of <u>Child Care</u> Law' (DHSS, 1985a) and a	**White Paper**	on 'The <u>Law</u> on Child Care and <u>Family Services'</u> (
(10)	eyes it came to rank on a par with his <u>Education</u>	**White Paper**	of 1943. In the Summer of 1958 the Home Secretary served
(11)	The <u>government's</u> reply was contained in a	**white paper**	— Cmnd. 8616: Efficiency and Effectiveness in the <u>Civil Service</u> .
(12)	' From case to care management The 1989	**white paper**	on <u>community care</u>, Caring for People , took the implementation of
(13)	kind not seen since the end of the war. The	**White Paper**	, <u>London-Employment</u>: <u>Housing</u>: Land (Cmnd 1952, 1963)
(14)	9 the Danish <u>government</u> published a 251-page	**White Paper**	outlining its options after the June <u>referendum's</u> rejection of ratification
(15)	it was worthwhile proceeding with <u>the reforms</u>. A	**white paper**	setting out the reforms is due to be published in June or

All evidence presented above manifests that the environment in which the phrase occurs expresses the sense of being official and important of the phrase. Hence, *white paper* has a discourse prosody describing 'officiality'.

4.2.2.1.1.2 *White* collar

The phrase conveys figurative meaning of skilled office workers who are involved in intellectual and professional jobs such as *teachers, nurses* (line 1), *book-keepers* (line 2), *managers* (line 3), *shopkeepers* (line 4). There are quite a number of positive phrases or words which co-occur with *white collar*. These are *to earn the best return* (line 2), *skilled* (line 5), *aspiring* (line 7), *fruitful* (line 9), *growth* (line 10). Concordances (1-10) are the evidence:

(1)	may nowadays be much more varied but the type of workers	**white collar**	unions organise remains the same e.g. <u>teachers</u>, <u>gardai</u>, <u>nurses</u>,
(2)	<u>to earn the best return</u>. The same sense is induced in	**white collar**	**workers** such as <u>book-keepers</u>, who are manipulating symbols
(3)	per cent of the the population are employers, <u>managers</u> or	**white collar**	workers with just under six per cent unskilled labourers.
(4)	for example, while the men in their families might have	**white collar**	jobs or be <u>shopkeepers</u>. In most cases these families are poor
(5)	manual jobs with a 'careerless' orientation. Those from	**white collar**	and <u>skilled</u> manual backgrounds benefited rather more from
(6)	years. Now 26 he decided to make a major <u>leap</u> into	**white collar**	work. Stan became an <u>insurance man</u> with The Prudential. It
(7)	do-it-yourself enthusiast might represent the <u>aspiring</u>	**white collar**	working class. The work is, however, clearly intended to
(8)	employment was mainly urban, of the <u>senior management</u> '	**white collar**	' type, and involved 20 to 25 miles travel each day
(9)	the public sector has been a relatively <u>fruitful</u> domain for '	**white collar**	' union organisation since the early years of the present century.
(10)	this was also a problem among girls. The marked <u>growth</u> of	**white collar**	employment in the period offered respectable, if not always

White collar is also used in the sense that these types of jobs or workers have better conditions than others. Often, the phrase is used in comparison to the *blue collar* which has a lower status and working conditions as shown through some lexical items as underlined in the full concordances (11-12). These items signify a more privilege the *white collar* has over the *blue collar*.

(11) <u>Blue collar workers lost ten days</u> a year in manufacturing and services, compared with <u>five days for</u> **white collar workers** in manufacturing, and six days for those in service industries.

(12) The report demonstrated that the 1980s austerity measures had <u>disproportionately affected blue collar workers</u> in comparison with **white collar workers**.

Accordingly, *white collar* tends to be used in favourable linguistic environment and has a discourse prosody describing superiority of working status.

4.2.2.1.1.3 Other phrases

The section above discusses two most frequent phrases in "*white* in collocation with figurative noun phrases" i.e. *white paper* and *white collar*. Both phrases express favourable tone of use. The section below discusses other less frequent phrases which have comparatively low frequency (less than 1.0 instance per million words). For those which present in both singular and plural forms, the investigation will be done in pairs. Otherwise each phrase will be discussed individually.

4.2.2.1.1.3.1 *White* flag occurs only 49 times (or 0.50 instance per million words) across the BNC (100 million words). This figure is made up of 47 times of Written text and two times of Spoken text, which shows that *white flag* is not a frequent phrase especially in conversation. As for the Written text, *white flag* is found most frequently in World Affairs (53.19%). This distribution data initates a question, which will be answered later: why is this phrase used most frequently in World Affairs?

In terms of its meaning, *white flag* refers to "a flag that is waved to show that you accept defeat or do not intend to attack" (Cambridge Advanced Learner's Dictionary-online). Concordances (1-5) below are in support of the meaning and clearly display that *white flag* has a semantic preference for accepting defeat. This is shown through a number of collocates which denote the same meaning as *white flag* e.g. *surrendered* (line 1), *giving in* (line 3), *capitulate* (line 4), *acknowledging defeat* (line 5). Obviously, not only the meaning of *white flag* is negative, its semantic preference also constitutes a negative discourse prosody describing surrender.

(1)	their weapons on the holed-up gang. But the men <u>pulled</u> a	**white flag**	and later <u>surrendered</u> in the presence of a priest. More
(2)	control over the timetable and repeatedly <u>running up</u> the	**white flag**	before crucial votes. Thus, at the end of April,
(3)	stop We're <u>giving in</u>. Vic-- er prisoner of war Er	**White flag**	Take over bid. Hands up. Hostage. Something to do
(4)	further desertions, voted by 24 to 15 to <u>capitulate</u>. The	**white flag**	was thereupon hoisted on the city walls and Durand led
(5)	of this was too much for her; she <u>ran up</u> a	**white flag**	, <u>acknowledging defeat</u>. 'Oh, Finn, why did you

As for the question about the frequent use of *white flag* in World Affairs text domain, concordances (1-5) also reveal that the contexts in which *white flag* occurs seem to relate mostly to politics e.g. election (line 2), prisoner of war (line 3), election and a political party (Durand – line 4). These examples clearly show that corpus evidence can give more information about the way a word/phrase is used. A dictionary can only provide the meaning and some indication of use. However, it does not provide the information that *white flag* is frequently used in politics text type. This knowledge is useful because it is indicative of the figurative aspect of *white flag*, as the phrase may not convey the same meaning in other contexts.

4.2.2.1.1.3.2 *White* heat and *white* hot are an interesting pair of *white* phrases because they are not a typical pair to compare. The collocate *heat* is a noun while *hot* is its adjective form. The two phrases are not only grammatically connected, but also semantically related.

White heat is an infrequent phrase and only occurs 38 times across the BNC. It refers to "extreme (very great in degree) and intensity" (Collins Cobuild Advanced Learner's Dictionary, 2006). *White heat* has a semantic preference for *technogical/scientific revolution,* and *technology*. It also tends to be used in favourable linguistic environment containing positive lexical items e.g. *dawned, famous* (line 1), *exciting, new, cheap, clean* (line 2), *better look* (line 3), *proudly present* (line 4), *lightning speed, drastic simplications*. Hence, *white heat* has a positive discourse prosody describing something new or better and is used frequently in association with technological revolution.

(1)	minded technocrat had <u>dawned</u>. Harold Wilson's <u>famous</u> phrase 'the	**white heat**	of the scientific revolution' struck a chord. The concept
(2)	<u>exciting new</u> source of energy that nuclear power had become. The	**white heat**	of nuclear technology promised to bring <u>cheap, clean</u>
(3)	<u>better look</u>. The CEGB was part of Harold Wilson's '	**white heat**	' of British technology. For those times it was an envi
(4)	catalogue, pal! And, as a fitting tribute to the	**white heat**	of technology (and slaying dragons) we <u>proudly present</u>
(5)	differing virtues. Whilst everything that Becker did was at	**white heat**	and <u>lightning speed</u>, with <u>drastic simplications</u>,

White hot presents two patterns of use: (1) IT'S WHITE HOT, has a usual semantic preference for flame, fire, or heat denoting "extremely hot"; (2) WHITE HOT + various NOUNS, meaning "extreme or super". The various nouns that are modified by *white hot* in the second pattern of use are *deals, technological revolution, holiday*. The sense of meaning (1), shown in the concordances (1-5) is rather descriptive, while the sense of meaning (2), seen in concordances (6-8) portrays clearly a favourable tone of use and leads to a postive discourse prosody of the phrase. This is evidently shown in positive lexical items e.g. *absolutely no surcharges* (line 6), *super savings* (line 7), *technological revolution* (line 8).

(1)	of quicklime was held in the tip of the <u>flame</u> it became	**white hot**	and glowed brilliantly. An engineer, Thomas Drummond
(2)	freighters were ripped apart in great swathes of <u>flame</u>, sending	**white hot**	metal and sprays of burning oil through the cavern. The
(3)	and you would die in the Time <u>Fire</u>. It is	**white hot**	. It is so fiery that you would shrivel instantly. The
(4)	The rod is <u>heated</u> to almost 2000 degrees centigrade in the	**white hot**	coke, then it's forged by hammering on the anvil.
(5)	early universe should have been very hot and dense, glowing	**white hot**	. Dicke and Peebles argued that we should still be able to
(6)	will be <u>absolutely no surcharges</u> on the price of your	**White Hot**	<u>holiday</u>. Conditions of the club Price Promise and Fair
(7)	range of <u>super savings</u> to interest anyone travelling on a budget —	**White Hot**	<u>Deals</u>. Check out the White Hot Deals section at the other
(8)	comprehensive schools, and the national need to embark upon a '	**white hot**	<u>technological revolution</u>'. Both presupposed open policies

The discussion above presents a distinct feature of *white* in that it acts as an intensifier of *heat* and *hot* and signifies something 'extreme or super' which tends to be positive things e.g. technological revolution or selling deals.

4.2.2.1.1.3.3 *White* elephant occurs only 36 times (or 0.37 instance per million words) across the BNC, in which 35 times (97.22%) are in Written text and only 1 in Spoken text (2.78%). That means *white elephant* is infrequent and hardly found in conversation. The phrase conveys a negative meaning of "something that has cost a lot of money but has no useful purpose" (Cambridge Advanced Learner's Dictionary-online).

The corpus data, as shown through concordances (1-7) reveals that not only does the phrase have a negative meaning, it also occurs in unpleasant linguistic environments that enhance the negative sense of use of the phrase. These lexical items are *quickly became little more than a stopping off point* (line 1), *expensive, ultimately scrapped* (line 2), *created a lot of stress* (line 3), *being too far away and too cold* (line 4), *wasted* (line 5), *ridiculous* (line 6), *useless*, *dangerous* (line 7). This indicates that

the items which become *white elephants* are expensive to build or construct, but turn out to be impractical to use. All of these items indicate unfavourable discourse prosody of the phrase describing expensive but useless items.

(1)	the Theatre Royal opened in 1982 it was widely regarded as a	**white elephant**	, which quickly became little more than a stopping off point
(2)	and with no other customer, the project became an expensive	**white elephant**	and was ultimately scrapped by the succeeding Conservative
(3)	and taking it down every day, so really it was a	**white elephant**	from the beginning. The whole thing created a lot of stress
(4)	and courtesy to her, and regarded the house as a	**white elephant**	, being too far away and too cold for weekend breaks
(5)	throne. Admirable as it was architecturally, it was a vast	**white elephant**	; the £23,000 spent on its rebuilding was wasted, partly
(6)	Anyway, the whole thing was ridiculous, maintaining that	**white elephant**	when every school child knew that the Cold War was over
(7)	amount to £23,000 million on a useless, dangerous military	**white elephant**	? Does the Secretary of State accept that there has not been

4.2.2.1.1.3.4 *White* hole(s) occurs most frequently in the text domains of Applied Science (87.4%) and Natural and pure sciences (12.5%). This information relates to their scientific meanings. Both phrases have no lexical entries in the general-use dictionaries employed in this study (Collins Cobuild Advanced Learner's Dictionary, 2006 and Cambridge Dictionaries Online), but it can be inferred from concordances (1-5) that the phrases refer to a cosmic phenomenon which can be described as "a galactic gamma-ray burst." Obviously they are used purely descriptive denoting a scientific term.

(1)	white holes? Our simple model of 1975 showed that **a**	**white hole**	with the mass of a star can explain a galactic gamma-ray burst
(2)	familiar only with black holes, this behaviour of a	**white hole**	comes as a surprise. But it is based on a reasonable
(3)	is often found in gamma-ray bursts. The concept of a	**white hole**	was mooted in the early 1960s. Why has it not caught
(4)	black holes not work equally well for their direct counterparts,	**white holes**	? Is There Such A Thing As Antigravity? Earlier we talked
(5)	important to that presently accorded to black holes. What are	**white holes**	? To answer this question we first recall the standard

4.2.2.1.1.3.5 *White* knight refers to "a person or an organization that recues a company from difficulties such as financial problems or an unwelcome takeover bid" (Collins Cobuild Advanced Learner's Dictionary, 2006). This meaning relates to the distribution data of the phrase in that it is used most frequently in the text domain of Commerce and Finance (46.67%), which is almost half of the total occurrences. Corpus evidence, shown through concordances (1-5) below, is in support of this fact. It discloses the business contexts in which *white knight* occurs. This is reflected through lexical items like *to industrialise* (line 1), *Cadbury Schweppes* (a company, line 2), *directors* (line 5). Additionally, concordances show that the phrase tends to occur in a favourable environment filled with positive lexical collocates relating directly to the meaning of the phrase e.g. *to save* (line 1), *to form* (line 2), *friendly*

rescuer (line 3), *friendly offer* (line 5). Apparently, these collocates help constitute the positive discourse prosody of *white knight*.

(1)	a further £50 million from Mrs Thatcher) De Lorean was the	**white knight**	who would <u>save</u> British efforts to industrialise Ulster. His sleek,
(2)	, it was suggested that Cadbury Schweppes should act as a	**white knight**	to Rowntree, in order <u>to form</u> a <u>strong</u> British company able
(3)	1985, attempted to merge with Guinness, using it as a	**white knight**	(ie a <u>friendly rescuer</u>) in an attempt to thwart this
(4)	crock of gold, then Peter had to be cast as the	**white knight**	, <u>saving her</u> from the dreaded dragon! Forcing herself to be
(5)	hostile because it goes over the heads of the directors. A	**white knight**	could come along and make a more <u>friendly offer</u>, but this

4.2.2.1.1.3.6 *White* noise refers to "sound, especially of a loud, continuous, or unpleasant kind that seems to have no pattern or rhythm" (Collins Cobuild ALED, 2006). This meaning is relevant to its semantic preference for *disturbance, distortion, and distraction* as seen from concordances (1-8) below. Other linguistic items which add on to its semantic preference are *frantic* (line 1), *haunting* (line 4), *won't soothe* (line 5), *loud* (line 6), *fractious* (line 7). All of these words project negative meaning, hence, leading to discourse prosody describing disturbance of a sound of *white noise*.

(1)	or something. this soon tangles itself in a web of	**white noise**	and <u>frantic</u> improvisation which eventually has a hypnotising
(2)	do in fact occur over and above those attributable to	**white noise**	<u>disturbances</u>. How do they account for this apparent non-
(3)	amplitude measured to indicate the <u>severity of the distortion</u>.	**White noise**	is not a good simulator of music, which contains more energy
(4)	screechy.' Despite the layers of guitar feedback and pure	**white noise**	that swathe the <u>haunting</u> sound of Curve, both guitarists
(5)	the January issue). However, according to Egnell Ameda,	**white noise**	<u>won't soothe</u> a baby if she really needs attention — because
(6)	on selective attention. <u>Loud noise</u> (usually delivered as "	**white noise**	" — a wide-band mixture of tones, sounding like a monoto
(7)	something like a vacuum cleaner or hair dryer — so-called '	**white noise**	' — often sends a <u>fractious</u> baby to sleep, or at
(8)	Yet the hostility of takeovers is a <u>distraction</u>, a sort of	**white noise**	. In a market in which mergers and takeovers are possible

In summary, "*white* in collocation with figurative noun phrases" presents diverse discourse prosodies. *White paper* has a discourse prosody describing officiality, *white collar* describes superiority of working status. They both are used positively in favourable linguistic environment. This is also the case with *white heat* and *white hot* when *white* acts as an intensifier and signifies something "extreme or super." Another clear positive phrase is *white knight*, which denotes a hero, particularly from a business crisis. Although *white* is marked with positive connotations, it has negative discourse prosody when collocating with some particular items and form idiomatic expressions which are used negatively. These are *white flag, white elephant*, and *white noise*. All of these indicate that *white* by itself is not connotative. Its pragmatic meaning is shown when collocating with other lexical items.

This is the point of difference to previous studies as Wyler (1992) claimed that *white* has both positive and negative connotations, while Allan (2009) indicated that *white* has more euphemistic connotations than others, but can also be used dysphemistically. The corpus findings have shown that *white*'s connotative properties come in phrases, not in *white* itself. More importantly, the phrases shown in this analysis are not listed out from introspective data, but are taken from authentic use.

4.2.2.2 Non-figurative use

4.2.2.2.1 "*White* in collocation with clothing noun phrases"

Table 4.2.5 below displays 25 collocates of *white* in collocation with clothing nouns. As mentioned earlier, this is the biggest set of *white* collocates. In general, these collocates are used descriptively especially in the Imaginative/fiction text domain with the purpose of describing how a character is dressed. The two most frequent collocates are **white shirt** and **white coat** which occur more than 1.0 instance per million words. The rest occur less than once in a million words. Some of these less frequent phrases will be discussed in passing.

Table 4.2.5 Collocates of *white* in collocation with clothing noun phrases

Collocates	Total occurrences	Frequency (instances per million words)	Collocates	Total occurrences	Frequency (instances per million words)
white shirt	193	1.96	white striped	38	0.39
white coat	130	1.32	white T-shirt	37	0.38
white cotton	80	0.81	white socks	37	0.38
white silk	77	0.78	white apron	34	0.35
white dress	67	0.68	white stripes	31	0.32
white cloth	58	0.59	white fur	25	0.26
white linen	58	0.59	white shirts	25	0.26
white blouse	53	0.54	white tie	25	0.26
white coats	45	0.46	white handkerchief	24	0.25
white satin	40	0.41	white jacket	21	0.22
white gloves	39	0.40	white shorts	20	0.21
white trousers	39	0.40	white suit	19	0.20
white lace	38	0.39			

4.2.2.1.1 *White* shirt

White shirt is the most frequent phrase in this noun group, with the frequency of 1.96 instances per million words, in total of 193 occurrences in across the BNC. Its

top collocates are *crisp* (meaning fresh and immaculate), *tie, suit, trousers*. These collocates indicate formality especially in the case of *suit* and *tie*. When investigated further, *white shirt* collocates quite noticeably with positive words or words with positive meanings, shown in concordances (1-10) below. These include *very fresh, smart* (line 1), *impeccable* (line 2), *gleaming* (line 3), *spotless* (line 5), *handsome than ever* (line 6), *neat* (line 7), *starched* (line 9). This collocational pattern suggests a pragmatic meaning of the phrase in that *white shirt* is associated with neatness, tidiness and good dressing style. *White shirt* can be part of a uniform showing formality especially when collocating with *suit* and *tie*. These are shown in the concordance lines (1-10) below. However, there is one exception to this sense of meaning. When the phrase collocates with *jeans*, it represents a casual style of dressing or something unofficial, as shown through the words like *wasn't officially, casually* in concordance line (10):

(1)	sooth-shaven. He looked <u>very fresh</u> and <u>smart</u> in a <u>crisp</u>	**white shirt**	open at the throat and charcoal-grey trousers, exquisitely cut.
(2)	brow. And the style was <u>impeccable</u> — Next trousers, **a**	**white shirt**	under a Fair Isle sweater. She turned in search of Luke
(3)	and dark <u>tie</u> firmly attached with a gold clip to a <u>gleaming</u>	**white shirt**	. His face was thin and emaciated, drawn together as if
(4)	worn with a waistcoat and loose jacket. Or add a <u>crisp</u>	**white shirt**	and waist-spanning belt <u>for the office</u>. BEACH-COMBER
(5)	alert. He wore an expensive check sports jacket, a <u>spotless</u>	**white shirt**	, <u>blue tie</u> with a regimental tie clip sporting the symbol of
(6)	and <u>looked more handsome than ever</u> in a grey <u>suit</u> with a	**white shirt**	. 'Would you like to go to the dance at the
(7)	in a <u>neat</u> grey flannel <u>suit</u>, with a <u>tie</u>, a	**white shirt**	, and <u>beautifully polished</u> shoes. In the back of the car
(8)	a hot day. He wore the <u>elegantly cut suit</u> over a	**white shirt**	and an old Etonian <u>tie.</u> He was impressively built; thin
(9)	the American <u>executive</u>. A chalk grey <u>suit</u>, a new <u>starched</u>	**white shirt**	, a <u>tie</u> with diagonal stripes, the shirt with a button-down
(10)	<u>wasn't officially</u> on duty she dressed <u>casually</u> in <u>jeans</u>, a	**white shirt**	and a long, navy blue knitted coat bright with appliquéd scar

Drawing on the concept of discourse prosody (2.2.2.1.1.4), *white shirt* displays a favourable tone of use by a speaker or writer. This is evident in the way *white shirt* collocates with various positive words as shown above. Hence, the phrase has a positive discourse prosody describing neatness, tidiness, and formality of dressing. This is perceived throughout its linear string of collocates displayed in the concordances.

4.2.2.1.2 *White* coat

White coat is the second most frequent phrase in this noun group, with the frequency of 1.32 instances per million words, in total of 130 occurrences in the whole BNC. Displayed below are 20 concordance lines of *white coat*. It is quite

obvious that the phrase collocates frequently with words related to medical professions e.g. *doctor, hospital workers, hospital attendant, pharmacist,* and other professions e.g. *scientist, researcher.* Personnel of these professions wear *white coat* as part of their uniform. These are all considered prestigious careers, thus suggest a favourable tone of use. Out of these 20 concordance lines, 11 of them refer to doctors. These are lines 1, 2, 5, 7, 8, 13, 16, 17, 18, 19, 20. Accordingly, it suggests that *white coat* has a main semantic preference for the medical profession and is viewed as its typical symbol.

(1)	cases in which a hospital porter appears in court after donning a	**white coat**	, insinuating himself into the operating theatre, and setting to
(2)	again. 'A scientist perhaps? I see him in a	**white coat**	. No, no, I think he must be a doctor
(3)	deliberate pace; the gown and wig of the barrister; the	**white coat**	of the hospital workers. I still remember my surprise at the
(4)	disturbed Williams who by this time was wearing a researcher's	**white coat**	complete with name tag, the court heard. He insisted he
(5)	lifted his eyes and seen Rufus Fletcher. Rufus was wearing a	**white coat**	and had a stethoscope hanging round his neck. He was
(6)	the whole experiment was supervised by an authority figure in a	**white coat**	, who informed the 'torturers' that they should continue even
(7)	intern for a few more months, doing my rounds in my	**white coat**	with stethoscope dangling round my neck (and feeling very
(8)	we were alone he asked if the fair doctor in the short	**white coat**	was my boyfriend. 'No. He's a great friend
(9)	the fighters later became a club steward, and dressed in a	**white coat**	with a red armband was officially hired to sort out the
(10)	the branch of service: for infantry officers, white. The	**white coat**	was worn with white trousers, without additional white
(11)	hospital attendant. I've tried to explain that anybody in a	**white coat**	looks like a hospital attendant, but they keep demanding
(12)	Then came a larger beetle. He was dressed in a	**white coat**	— the sort that scientists wear. By his side was an
(13)	you move, as a doctor, through society, with your	**white coat**	, your black bag, the eyes of others seek you upward
(14)	pellets of Zyklon B and entrusted them to the pharmacist in his	**white coat**	. Next, the facade of the Sprinkleroom, the function of
(15)	so. She feared hospitals. She distrusted the uniform of the	**white coat**	. And then she might meet another one like the one today
(16)	for space in the already bulging pockets of the junior doctor's	**white coat**	. Selected Books: Surgery Operative Manual of Endoscopic
(17)	for.' Lindsey slipped the stethoscope into the pocket of her	**white coat**	as they headed back to reception. 'He'll be fine
(18)	off. But she couldn't stop thinking of David in his	**white coat**	, visiting the patients, touching them, and this was where
(19)	daft question. You're the doctor. You've got a	**white coat**	on.' With that problem out of the way, he
(20)	not know the road as we do.' Someone in a	**white coat**	came up to them. 'I'm a doctor. Do

4.2.2.1.3 Other phrases

The two most frequent *white* phrases in the clothing noun group*,* as discussed above, are *white shirt* and *white coat*. *White shirt* has a noticeably favourable prosody as it suggests a pragmatic meaning of neatness, tidiness and formality as part of a uniform. *White coat* is a symbolic attire and uniform for several prestigious careers, hence has a positive discourse prosody. So far, a negative tone of use has not been discovered in this clothing noun group of *white*.

This section will explore other phrases which have relatively low frequency of use (less than 1.0 instance per million words) but do show some essence which

particularly relates to semantic preference and discourse prosodies. It should be noted that only some phrases will be included in the discussion. This is because some of them contain too little information to make any generalization about their characteristics.

4.2.2.1.3.1 *White* **silk** occurs only 77 times across the BNC. It collocates most frequently with *blouse, scarf, shirt*, and *dress*. This means that *white silk* is frequently used to modify these 4 types of clothes. Concordances (1-8) display two sample lines from each collocate. They are prominent with positive lexical items expressing the sense of beauty and fineness of *white silk*. These are *fine* (line 1), *beautiful* (line 2), *extraordinarily classy* (line 2), *irreplaceable* (line 3), *shining* (line 4), *devastatingly attractive* (line 5), *spectacularly attractive* (line 6). Thus, these elements help constitute a positive discourse prosody describing beauty and fineness of the phrase. Additionally, *white silk dress* associates with the context of wedding as shown in the words *bride* (line 7), and *wedding* (line 8).

(1)	know will be very good indeed.' He lifted out a	**white silk**	**blouse** trimmed with <u>fine</u> lace, felt the fabric and handed it
(2)	was holding. A light blue wrap-around skirt and a <u>beautiful</u>	**white silk**	**blouse**. Casual and yet somehow <u>extraordinarily classy</u>.
(3)	and that was when I woke up and remembered. My	**white silk**	**scarf**; <u>the irreplaceable</u> Mobius scarf, the gift of Darren
(4)	I woke breathless, imagining there was a **scarf** — <u>shining</u>	**white silk**	looped in a half-twist — tightening round my neck. 'It
(5)	<u>devastatingly attractive</u> in expensively tailored beige silk suit,	**white silk**	**shirt**, cream and gold patterned silk tie. She found her
(6)	<u>spectacularly attractive</u> in a lightweight grey suit with a	**white silk**	**shirt** striped in Cambridge blue, open at the throat.
(7)	with luxurious corded lace bodices make a <u>beautiful</u> <u>bride</u>	**White silk**	taffeta **dress** with corded French lace bodice and matching
(8)	assume that every Victorian woman went round dressed in a	**white silk**	<u>wedding</u> **dress**, because they didn't. I actually have at

4.2.2.1.3.2 *White dress* has a semantic preference for beauty which is attached to the attractive qualities of *white dress* itself. This is portrayed through a number of collocates e.g. *beautiful* (lines 1, 4), *stunning* (line 2), *radiant* (line 3), *neat* (line 5), *attractive* (line 6)*,* as seen in concordances (1-7) below. Again, these collocates are semantically similar to the ones of *black dress* e.g. *neat*. In a way, *white dress* is also considered an elegant dress for special occasion when it is associated with the context of getting married or wedding, as seen through some phrases and words e.g. *leaning on her father's arm* (line 3), *the man waiting for her at the altar* (line 4), *church* (line 4), *the bride* (line 7). Thus, *white dress* is another phrase with a discourse prosody concerning elegance and beauty.

(1)	student, compares a snow-covered landscape to a <u>beautiful</u>	**white dress**	, describing the sunshine on the sea and the joys of love-
(2)	His mother had been married once before in a <u>stunning</u>	**white dress**	, which Karl thinks may have been made by Doucet — one
(3)	wedding, so often pictured herself, <u>radiant</u> in a long,	**white dress**	with train, <u>leaning on her father's arm</u>, advancing with
(4)	aisle of a dimly lit <u>church,</u> the only reality the <u>beautiful</u>	**white dress**	she was wearing and <u>the man waiting for her at the altar</u>
(5)	smiling gaze for the first time took in the <u>neat</u>, wide-belted	**white dress**	, topped by a dark cardigan. 'Of course, I
(6)	him out when Jill appeared, smiling and <u>attractive</u> in her	**white dress**	. 'Nice timing! I'm just off for a coffee
(7)	the USA. Remember the days when a big do was a	**white dress**	made by <u>the bride,</u> the luxury of one bridesmaid and a

4.2.2.1.3.3 *White* **cloth** describes a pleasant atmosphere or environment particularly when having picnic or dining. This is shown in lexical items co-occurring with *white cloth*. These are *dining chamber* (line 2, 5), *garden, picnic* (line 3). Moreover, the context of the phrase is associated with food items e.g. *food* (line 1), *champagne and strawberries* (line 2), *homemade bread and jam, a fresh apple tart* (line 3). These collocations express the sense of a pleasant environment when the phrase *white cloth* is used.

> 1. It was **covered** in a **white cloth**; there were some flowers, plates, the metal things that Marcus picks his <u>food</u> up with, sparkling glasses.
>
> 2. In the linen-panelled <u>dining chamber</u>, the table had been specially laid, **covered** by a **white cloth** of lawn with gold embossed candlesticks placed at either end.
>
> 3. He would turn up at her <u>garden</u> with a <u>picnic</u> in the late afternoons, laying out **a white cloth**, <u>champagne and strawberries</u> under the shadow of the tower block and the bemused scrutiny of the local youth.
>
> **4. A white cloth** was spread on the table, <u>homemade bread and jam</u>, a <u>fresh apple tart</u>.
>
> 5. In the linen-panelled <u>dining chamber</u>, the table had been specially laid, covered by **a white cloth** of lawn with gold embossed candlesticks placed at either end.

4.2.2.1.3.4 *White* **blouse** occurs only 53 times across the BNC. Its top four collocates are *skirt, suit, blue*, and *black*. When *white blouse* collocates with *blue* or *black,* which are also colour terms, it describes another article of clothing with which *white blouse* goes as part of the full attire e.g. *blue jacket/suit* and *white blouse*, *black suit/pants* and *white blouse*. As a whole, the context in which *white blouse* occurs tends to be associated with neatness of dressing as seen through the related collocates in concordances (1-7). These collocations are *attractive* (line 1), *polished shoes* (line 2), *stylish, wonderful* (line 3), *gleaming* (line 4), *neat* (lines 5, 6). Additionally, *white blouse* can express formality as part of a uniform, shown through concordance lines (2 and 7) with the word *uniform* or *school uniform*. All of these show positive environment for *white blouse*, thus leads to its discourse prosody describing neatness and formality in dressing.

(1)	already a war widow, a sensual, <u>attractive</u> woman in	**white blouse**	and black skirt. She had once been Heydrich's secretary and
(2)	Saturday for three years I put on my black skirt, my	**white blouse**	, my newly <u>polished shoes</u> and my <u>uniform</u> white frilly apron.
(3)	even <u>stylish</u> in a discreet way, in her tweed suit and	**white blouse**	. 'Daddy looks <u>wonderful</u>. I hope I'm not too
(4)	Salmon's cream buns. Charlie stared at her <u>gleaming</u>	**white blouse**	and dark blue pleated skirt. Her smart blue blazer sported a
(5)	show in lower Manhatten . What with her <u>neat</u> black suit,	**white blouse**	, rimless spectacles and greying hair, Ella Shields looked more
(6)	and eggs for breakfast. She dressed trimly for work; <u>neat</u>	**white blouse**	, tight black skirt, bright seventeen-year-old eyes: no ladders in
(7)	with long hair. She was wearing a <u>school uniform</u> with	**white blouse**	and black shoes when she disappeared. Parties call for political

4.2.2.1.3.5 *White gloves* Similar to what has been found for *white shirt*, *white gloves* has a discourse prosody concerning formality or being formal and official. This concerns special occasions or particular event which includes a parade or a procession. These are shown through relevant collocates e.g. *best uniform* (line 3)**,** *special occasions* (line 4)**,** *black ties* (line 7), *marched* (lines 2 and 6), *feast* (line 6). Some concordances contain words that relate to people from royal family e.g. *the Emperor* (line 5), *her escort* (line 1) which further strengthens the sense of formality. All of these help create a discourse prosody describing formality of the phrase.

(1)	she had said again, <u>to her escort</u>, who wore	**white gloves**	, of course, because it was evening, but whose name
(2)	a bright red band, white blouses, navy blue skirts and	**white gloves**	. They <u>marched</u> in pairs through the west door, made a
(3)	near Hamilton Street station. They will be in <u>best uniform</u>,	**white gloves**	… ' and so on. Sure enough, I went over
(4)	you had <u>your latest uniform</u> — be out on Sunday with	**white gloves**	, and on <u>special occasions</u>. You had them for quite a
(5)	to appear again before <u>the Emperor</u> and was given a pair of	**white gloves**	to put on before he took the Royal pulse; he pronounced
(6)	<u>feast</u> when the 'men only' members <u>wearing blue sashes</u> and	**white gloves**	<u>marched</u> with a band to the church for a service followed by
(7)	comment. Then, while the waiters in their <u>black ties</u> and	**white gloves**	were serving the meal, she noticed the man at the adjoining

To sum up, "*white* in collocation with clothing noun phrases" contain prominently positive discourse prosodies. That is, it has a pragmatic meaning concerning formality as part of a uniform which is shown in the phrases *white shirt, white coat, white blouse*, and *white gloves*. It also signifies neatness and tidiness of dressing especially in the cases of *white shirt* and *white blouse*. *White silk* and *white dress* concern elegance and fineness. Moreover, they are associated eminently with the context of weddings especially in the case of *white silk* and *white dress*. *White cloth* signifies joyful times as it is associated with dining and food items.

As far as the findings concerned, negative discourse prosody has not been discovered in "*white* plus clothing nouns." In a way, this corresponds with what Allan (2009) (cf. 2.1.2.1) claims about the connotations of *white*. That is *white* "mostly has positive connotations and is rarely used dysphemistically" (Allan 2009: 626, 629).

However, Allan did not specifically mean *white* in collocation with clothing nouns. He only meant connotative properties of *white* in general. In a way, Allan cannot be specific because he did not have corpus data to support his argument. This study using authentic data is able to argue that what Allan claimed can be specifically applicable to *white* in collocation with clothing nouns.

4.2.2.2.2 "*White* collocation with human noun phrases"

Table 4.2.6 below displays 18 collocates of *white* in collocation with human nouns. From the table, it can be seen that there are 3 phrases which occur more than 1.0 instance per million words. They are *white man* (2.06 instances per million words), *white people* (1.51 instances per million words), and *white men* (1.20 instance per million words). Each will be investigated in detail. The rest are less frequent phrases and occur less than 1.0 instance per million words. Therefore, only some of them will be included in the investigation.

Table 4.2.6 Collocates of *white* in collocation with human noun phrases

Collocates	Total occurrences	Frequency (instances per million words)
white man	203	2.06
white people	148	1.51
white men	118	1.20
white women	68	0.69
white population	55	0.56
white woman	52	0.53
white girl	34	0.35
white society	28	0.28
white south	28	0.28
white minority	27	0.27
white workers	26	0.26
white areas	26	0.26
white boy	25	0.25
white person	25	0.25
white settlers	25	0.25
white community	21	0.21
white working-class	21	0.21
white racism	20	0.20

In comparison to the collocates of *black* in the same noun group of humans, *white* has much less collocates, almost half of what *black* has. That is, *black* contains 35 collocates in human noun phrases, *white* only has 18 collocates. More importantly, *black* presents strong discourse prosody describing racial discrimination, while *white* is mostly used to describe aspects of relations between white people and *black* as well as other ethnic minorities such as Asians and American Indians. In this comparison, the sense of racism is not as strong as the one found in *black*.

4.2.2.2.2.1 *White* man

One of the most frequent collocates of *white man* is the word *black*. It is found in concordances (1-4) shown in Sentence View that the phrase is used to describe aspects of relations between *black* and *white* people. For example, concordance 1 describes a prospect of peace for *white* and *black* people, concordance 2 concerns inter-racial and cross-sexual relationship between a white man and a black transvestite, concordance 3 depicts power related to white and black man, and concordance 4 accounts for liability offered for white and black people. In these concordances, there is no presentation of either pleasant or unpleasant linguistic environment of the phrase *white man*, particularly with relation to the issue of racial discrimination. In fact, it is rather used descriptively.

1. Both The Wretched of the Earth and Black Skin, White Masks close with affirmations made in the knowledge of exactly what threatens them — that being, after all, what both books are about, and what powerfully pre-empts the charge of humanist sentimentality: 'I can already see <u>a **white man** and a **black** man hand in hand'</u> (Black Skin , 222).

2. It is an inter-racial cross-sexual <u>love affair between a **white man** and a **black** transvestite</u>.

3.I have found a power I can rely on, not the **white man** or the **black** man, but some power greater than white and greater than black.

4. That is why it is so terrible that what we offer, by and large, is a limited liability Christianity which is little more than a modern social convenience and more convenient to the **white man** than the **black**.

However, the sense of racial discrimination is expressed through another frequent collocate of *white man*, i.e. the article *a*. The phrase *a white man* in concordances 5-8 below is used in comparison to *black man* describing inequality between white man has over black man. Obviously, the negative pragmatic meaning of the phrase is constituted from the negative lexical items surrounded the phrase. These are *death, murder, rape* (line 5), *black man is being held back* (line 7), *the first*

thing they jump on is colour (line 8). Still, this is considered one aspect of description of white and black man relation and is not dominant in the phrase *white man*.

> 5. Three blacks sentenced to <u>death</u> on <u>murder</u> charges were hanged yesterday while **a white man**, condemned for <u>rape</u>, was granted a last-minute reprieve.
>
> 6. I want a government where <u>there is no difference between</u> a black man and **a white man**.'
>
> 7. Before his defence in 1980, against Carlos Herrera, he announced: 'This is **a white man**'s country and <u>the black man is being held back</u>.'
>
> 8. also think that a lot of black kids think that this is **a white man**'s country and, when any little thing goes wrong, a set-back, <u>the first thing they jump on is colour</u>.

Another frequent collocate of *white man*, i.e. *the* describes the relationship between *the white man* and the Native Americans or the American Indians. Concordance (line 10) indicates mistreat of American Indians by the *white man* which refers to white people.

> 9. Most young readers, and I was one of them, were bored by the seeming ponderousness of so much of the narration and probably gave up too soon to grasp the understanding of <u>the American Indian</u> mind it offers and the rapport that can be achieved with an understanding **white man**, here **the** legendary 'Hawkeye'.
>
> 10. Kevin Costner's Dances With Wolves is a deeply moving tale about how **the white man** <u>mistreated</u> <u>American Indians.</u>
>
> 11. If **the white man** wants to live in peace with <u>the Indian</u> he can live in peace.

All in all, *white man* is clearly used to describe the aspect of relations *white man* has with other races e.g. black people or the American Indians. Part of the descriptions are associated with racism as some concordances are indicative of the issue. However, this is not dominant as *white man* tends to be use rather descriptively.

4.2.2.2.2.2 *White* people

The phrase collocates most frequently with the word *black*. In this collocation, again, *white people* is used to describe the relations between black and white people. Concordance (line 2) specifies sexual relations, concordances (lines 3, 4, 5) depict the relation in general, concordance (line 4). Concordances (lines 1, 6, 7, and 8) describe the relations which touch upon the sense of discrimination. This is indicated by lexical items co-occurring with white people e.g. *to offer better deals to white people than black* (line 1), *racism* (line 6), *racist* (line 7), *all black people were dirty, racialist-type thoughts* (line 8). From the concordances, it can be seen that half of the most frequent collocation of white people describes the relations in general between black

and white people, while another half describes this relation in association with the issue of racism, which leads to a negative discourse prosody of the phrase.

1. Car dealers are found <u>to offer better deals</u> to **white people** than **black**.

2. In one particularly telling scene between Kathie and her mother Nell (Brenda de Banzie), the issues of sexual relations between **Black** and **White people**, and 'mixed race' children are brought out into the open.

3. It has been contended elsewhere that the reality of the social process is quite different from its appearance: we need to go beyond the misleading surface appearance of relations between **Black** and **White people**, to re-think difference and to recognise the composite nature of the reality of those relationships.

4. It raises questions as to the type of relationship which exists between **black** and **white people** and, furthermore, the type of society that those involved in the practice are creating.

5. People with different religious beliefs , **black**, **white people** — different races, anybody.

6. She grows up in a household which defies the law by bringing **black** and **white people** together, one in which the challenging of <u>racism</u> is a 24-hour living presence and is the only thing that really matters.

7. How the fuck can they say we're <u>racist</u> when we bring **black** and **white people** together?'

8. We children were always told to emphasise the "full" of the wash lest people think we were dirty, and given that most **white people** thought <u>all **black** people were dirty</u> it was a counter to any <u>racialist-type thoughts</u> that people might be harbouring.

4.2.2.2.2.3 *White* men

The phrase collocates frequently with *black*, *women*, and *two*. In these collocations, *white men* is used in various ways. With *black*, it describes in general the relations of white men and a black woman (concordance 1) and of black men and white men (concordance 3), while concordance (2) mentions the intra-racial rape.

1. Three **white men** and a **black** woman were travelling home from a nightclub when their Nissan Pathfinder was rammed by a gang driving a pickup truck.

2. Most rape is done by individual men, not gangs, and by a man to a woman he knows, not a total stranger; most rape does not involve weapons and is intra-not inter-racial, in that black men usually rape **black** women and **white men** rape white women, while rape across racial groups is unusual.

3. Black men and **white men** who care for the country, and for their children's future, are working at it.

In collocation with *women*, *white men*, is also used to describe the relations in general between white men and women with no specific meaning.

4. Do they have ballads about transporting the two **white men** dressed as **women** up to the great watery anaconda to the south, or however they might put it?

5. She had a picture of a Southern lynch mob, a whole group of **white men** and **women**.

In collocation with *two*, *white men* is used in association with negative things e.g. *death* (line 6), *flee* (or *fled* in line 7), and *was thrown out* (or *threw* in line 8). In this respect, when used without relation to other races, the people who are called or termed as *white men* tend to be associated with bad deeds as shown in concordances (6-8). Hence, this particular use leads to a negative discourse prosody of the phrase.

6. He suggested instead that perhaps one of the **two white men** to see her alive last may have had something to do with her <u>death</u>.

7. The **two white men** <u>fled back</u> to the settlements.

8. We <u>threw</u> the **two white men** <u>out of the meeting</u>.

In summary, the three most frequent phrases of *white* in collocation with human nouns describe aspects of relations between *white men* and other races e.g. black or American Indians. The descriptions in relation to races can be general and descriptive, while partially touch upon the issue of racial discrimination as seen in the investigation of *white man* and *white people*. When *white men* is used without being related to other races, it displays a negative discourse prosody as people who are called *white men* seems in involved in bad deeds, as seen in the investigation of *white men*.

4.2.2.2.2.4 Other phrases

This section discusses other phrases which occur less frequently in the group of human nouns. Some of them will be discussed in passing.

4.2.2.2.2.4.1 *White* women and *white* workers collocate with the word *black*. Again, the phrases are used to describe the relations between black and white women as well as black and white workers. For *black* and *white women*, concordances (1-3) describe their differences in socioeconomic status (line 3), in class relationship (line 2), and the way they are trying to resolve their differences (line 1). The description tends to be general and does not point to either positive or negative way of use. For *black* and *white workers*, concordances (4-6), again, describe their differences particularly in the issues of earnings and employment. However, the description tends to minimize the differences by showing that *black* and *white workers* can be treated equally, as shown in some lexical items e.g. *in an exactly similar way* (line 4), *to arrange for equally qualified* (line 6). Hence, the use in this respect leans towards a positive use of the phrase.

1. Good to see **Black** and **white women** <u>coming to terms with</u> our 'difference'; but most importantly our one overriding similarity.

2. Black and **white women**'s relationships to class are different.

3. The fact that more **black** women than **white women** have <u>low socioeconomic status</u> may contribute to this marginalization, but it does not explain it.

4. The mainland economy has only recently opened up with the growth of tourism: nor has it opened up to women and men (or indeed **Black** and **white workers**) <u>in an exactly similar way</u>.

5. When discussing <u>differences in earnings</u> between **black** and **white workers**, we noted that <u>it was important to look at a number of factors</u>, for example, the age structure of the two groups and the kind of industry in which they worked.

6. One standard way of establishing the degree of discrimination in employment is <u>to arrange for equally qualified</u> **black** and **white workers** to apply for the same job.

4.2.2.2.2.4.2 *White* **society** collocates most frequently with the preposition *into* and describes the assimilation of black people and an ethnic minority i.e. Pakistanis into *white society*. This assimilation as shown in concordances (1-4) is explained in descriptive way with only a few negative words insight e.g. obstacle (line 2), effect (line 3). Hence, the phrase is used descriptively.

1. Although, as we saw for Pakistanis in Rochdale, the culture of immigrants may separate them out from the white community, the children of immigrants will gradually become assimilated **into white society**, into the wider working class and some, by upward mobility, into the middle classes.

2. To the extent that black people are not assimilated **into white society**, the <u>obstacle</u> will be the way that they preserve a separate cultural identity.

3. The sociological question here, then, is the way that black people are integrated **into white society** and the <u>effect</u> that their separate cultural identity has on the rate of integration.

4. The political implication is that blacks should be self-assertive and proud of their black identity and not rely on well-meaning attempts to assimilate them **into white society**.

4.2.2.2.2.4.3 *White* **racism** displays a clear discourse prosody describing racial discrimination by white people against other races e.g. black and ethnic minorities. Concordances (1-5) contain evident lexical items with negative meanings and are related to discrimination issue e.g. *the blame, inequalities* (line 1), *disadvantages, discriminatory practices, racial discrimination* (line 2), *disadvantaged* (line 3), *problem, unequal opportunities* (line 4), *unhealthy relationship, high crime rates* (line 5). These collocations show that *white racism* tends to occur in unpleasant environments concerning racial discrimination.

1. A Commission under Governor Kerner of Illinois placed <u>the blame</u> squarely on **white racism and** on the social and economic <u>inequalities</u> which were its direct results.

2. The other view essentially starts from the proposition that the problem is caused by whites, and the <u>disadvantages</u> suffered by black people are the result of **white racism and** the <u>discriminatory practices</u> of <u>racial discrimination</u> that flow from it.

3. Ethnic minorities are <u>disadvantaged</u> both by **white racism and** by their position in the class structure.

4. Here was an admission that it was not so much an issue of transforming alien black cultures, but a <u>problem</u> of cultures **and** practices of **white racism** leading to <u>unequal opportunities</u>.

5. The <u>unhealthy relationship</u> between the police and the Afro-Caribbean population has its roots both in **white racism** towards blacks **and** the historically <u>high crime rates</u> in black areas.

4.2.2.2.2.4.5 *White* **population** collocates most frequently with the word *than*. This collocation shows the comparison between *white population* and ethnic minority. The context of the comparison indicates that ethnic minorities face bad things more than the *white population*. These include *the fall in the relative income* (line 1), *higher rates of unemployment* (line 2), *recruitment* (with racial discrimination, line 3).

Hence, the use of the phrase leads to its discourse prosody concerning differences between white population and ethnic minority.

1. The age and household composition of <u>ethnic minority communities</u> means that they have been more affected by <u>the fall in the relative income</u> position of households with children during the 1970s and 1980s **than** the **white population**.

2. It will be observed that the <u>disparities</u> occur at different levels of overall <u>unemployment</u>, and that all <u>ethnic minorities</u> experienced <u>higher rates of unemployment</u> **than** the **white population** in the 1980s.

3. Given the original form of <u>recruitment</u> of black workers and the operation of <u>racial discrimination</u> it is not surprising that a much larger proportion of black employees are manual workers **than** the **white population** in Britain.

In conclusion, "*white* in collocation with human noun phrases" describes aspects of relations between *white people* and other races e.g. black and ethnic minority. These relations can be rather descriptive and can touch upon the issue of discrimination as seen in the investigation of white man, white people, white men, as well as white women, white workers and white population. The obvious phrase which expresses discourse prosody concerning racial discrimination is white racism.

In comparison to "*black* in collocation with human noun phrases", "*white* in collocation with human noun phrases" has a much weaker sense of discrimination. This is because it is rather used to describe aspects of relations between white people and other races which are inclusive of other races not just black people. This use, hence, dilutes the sense of racism which is found directly applied against black people in the investigation of *black* in collocation with human nouns.

In relation to previous studies, Allan (2009: 628) mentioned briefly that "[I]n an arrogant expression of racism, to be a *white man* was to be honourable and square-dealing- especially in the United States of America." This may correspond only partially with the findings present above. The corpus data from BNC do not show the strong sense of racism as mentioned by Allan. However, the results may become otherwise if an American corpus e.g. COCA is investigated on this particular issue.

4.2.2.2.3 "*White* in collocation with body part noun phrases"

Table 4.2.7 below presents 11 collocates of *white* in collocation with body-part nouns. From the table, it can be seen that the top three collocates which occur more than 1 instance per million words are *white face* (1.54 instances per million words), *white hair* (1.29 instances per million words), and *white teeth* (1.16 instances

per million words). The rest occurs less than one instance per million words. It should be noted that some collocates e.g. *white blood* (from *white blood cells*), *white cell(s)* are used purely descriptive and will not be included in the discussion.

Table 4.2.7 Collocates of *white* in collocation with body-part noun phrases

Collocates	Total occurrences	Frequency (instances per million words)
white face	151	1.54
white hair	127	1.29
white teeth	114	1.16
white blood	66	0.67
white cells	36	0.37
white beard	34	0.35
white skin	34	0.35
white cell	27	0.27
white hand	26	0.26
white head	23	0.23
white faces	22	0.22

4.2.2.2.3.1 *White* face(s)

White face is found most frequently in Fiction (79.60%). Both singular and plural forms of the phrase are similarly used to describe the look of a character's face in fiction. This description is remarkably co-occurs with lexical items related to *fear* and *terror* as well as other negative feelings e.g. *pain, anxiety, sadness*, and *death*. Their collocates which explicitly support this claim are shown in concordances (1-17) below. They are, for example, *dead* (line 1), *hollow* (line 2), *scared* (line 3), *pain* (line 4), *hate* (line 5), *burning* (line 6), *saddened, alarmed* (line 7), *fear* (line 8), *terror* (line 9), *rigid* (line 12). This set of semantic preference clearly leads to negative discourse prosody concerning fear and terror expressed through *white face*(s).

(1)	like?' Gillian snorted. 'I've got a <u>dead</u>	**white face**	, staring black eyes, stringy hair and I need a shave
(2)	all his weight, he looked <u>hollow</u>. Anne touched his dead	**white face**	, and felt nothing that had been alive. 'No,
(3)	saw a face in one of the windows — a queer,	**white face**	… It <u>scared</u> me — I don't know why. But
(4)	Cummings followed him. Craig looked into his mother's	**white face**	and saw lines of <u>pain</u> etched around her mouth. 'What
(5)	of annihilation. When Joyce sat down, Cecil recalled, his	**white face**	was 'luminous with <u>hate</u>'. The chairman invited questions,
(6)	since the morning he'd returned from Starr Hills. His	**white face**	, his <u>burning</u> eyes, the sense of <u>barely suppressed</u> <u>violence</u>
(7)	kept me away.' She was <u>saddened</u> and <u>alarmed</u> by the	**white face**	and big dark eyes that stared back at her from a thinner
(8)	again, after them. Barbara stepped down to Jimmy, her	**white face**	frozen in <u>fear</u>, and seized his arm. 'Oh God
(9)	pretending to be an innocent one. There was <u>terror</u> in her	**white face**	as she saw this. She could not stand, and he

(10)	Oh … ' And lay still. He looked at her	**white face**	and the <u>dark fear</u> in her eyes and felt a brute.
(11)	to follow her like Hitler, Himmler, and the marching	**white faces**	of all the <u>dead</u> men. 'Just an animal, I
(12)	, who approached now with the other Women. The	**white faces**	looked fixed and <u>rigid</u> — <u>locked ever more tightly</u> into their

4.2.2.2.3.2 *White* hair

Similar to what has been found with *white face*, *white hair* is used most frequently in Fiction (77.5%). The phrase is used to describe a person, particularly the look of his or her hair. More specifically and dominantly, the phrase is descriptive of an old or aging person which conforms to the tradition that *white hair* is a symbol of aging. Concordances (1-12) below displays the semantic preference for aging or being old of the phrase *white hair*. The eminent collocates are *old* (lines 2, 3, 5, 6, 7, 11, 12), *his sixties* (line 1), *elderly* (line 8), *grandmother* (line 10).

(1)	the kerb. In <u>his sixties</u>, he had a mane of	**white hair**	and a <u>kindly expression</u>. His face was lined after years of
(2)	in her bed. She is a <u>pretty old woman</u> with pure	**white hair**	and clear blue eyes, and skin that crinkles only slightly about
(3)	moonlit street. She saw a tall, <u>handsome old man</u> with	**white hair**	coming along the street, and a shorter, younger man walking
(4)	the Burke reports, sat a <u>professorial man in his sixties,</u>	**white hair**	oiled to his scalp. Dowd knew his name from Godolphin's
(5)	of dust and leather, kept by the bent <u>old man</u> whose	**white hair**	seemed to be falling off the back of his head, leaving
(6)	single room like an open cave, where an <u>old man</u> with	**white hair**	stood behind a counter that held a pair of scales and boxes
(7)	went in without waiting for an invitation. An <u>old man</u> with	**white hair**	was sitting at a table. Papers and books covered the table
(8)	of the road. One of them was <u>an elderly man</u> with	**white hair**	which had turned out to be a wig, and the CID
(9)	said of him in 1816, 'his <u>great age</u>, his	**white hair**	, contrast strongly with his vivacity and his energy; he has
(10)	reward was to be allowed to brush <u>grandmother's</u> long <u>silken</u>	**white hair**	.' A Buckinghamshire village boy 'liked best to go and
(11)	Hall. He was an <u>old man</u> with a red face and	**white hair**	. He had two hobbies. The first was arguing. He
(12)	and it was the face of an <u>extremely old man</u> with	**white hair**	. Little Billy could see this clearly despite the fact that the

These collocates may contain negative connotations. However, the whole text in each concordance does not express negative discourse prosody. This is because some concordances show the way the collocate *old* keeps company with positive words e.g. *kindly expression* (line 1), *pretty old woman* (line 2), *handsome old man* (line 3), *professional man in his sixties* (line 4), *or great age* (line 9). With these positive components, *white hair* does not project the negative discourse prosody. Accordingly, while the dominant use of *white hair* in the BNC is descriptive, part of it is used positively and expresses a discourse prosody concerning good old age.

4.2.2.2.3.3 *White* teeth

Again, this phrase is found most frequently in Fiction (94.69%,). It is used to describe the look of *white teeth* denoting a healthy set of teeth. This positive

description can be seen from lexical items which connote favourable sense of use. These collocates are *grin, gleaming* (line 1), *flashing* (line 2), *bright blue, perfect* (line 3), *beautiful, strong* (line 4), *even, shining* (line 5), as shown in concordances (1-5) below. The semantic preference for words with positive meanings makes *white teeth* present itself with positive discourse prosody showing favourable tone of use.

(1)	Despite all, he was able to grin, his	**white teeth**	gleaming through the shaggy beard. 'Don't worry,
(2)	was still there. A grin of flashing	**white teeth**	was all he got for his trouble. During the first hour
(3)	blond hair, his bright blue eyes and his perfect	**white teeth**	. Narcissus's parents just did not know what to do with
(4)	liked Peter Müller. He had beautiful, strong	**white teeth**	. He squeezed her hand for a moment and then let it
(5)	the way to Morocco?' he asked, with his even	**white teeth**	shining as he smiled and dived down like a dolphin

4.2.2.2.3.4 Other phrases

The three most frequent phrases in "*white* in collocation with body part noun phrases" present different discourse prosodies. *White face* shows unfavourable tone of use and has a discourse prosody concerning terror and fear. *White hair* is rather descriptive but partly contains positive components in a favourable tone of use potentially leading to a positive discourse prosody. *White teeth* is evidently positive. The findings so far show that although *white* by itself signifies positive things e.g. purity, innocence (cf. 2.1.2.1), when it collocates with other words, it can express different pragmatic meanings or discourse prosodies. This demonstrates that the pragmatic meaning not property of a word but words collocating with the node word in question.

The section below discusses other phrases which have relatively low frequency (less than 1.0 instance per million words).

4.2.2.2.3.4.1 *White* beard is found most frequent in Fiction (46.87%). This phrase should be analysed together with *white hair* as it is similarly used to describe a look of an old or aging person. The main collocates are also the same as those for *white hair* e.g. *sixty-eight* (line 1), *old* (lines 2, 6), *elderly* (line 5), which are shown in concordances (1-6) below. Concordance lines (4-5) contain *Father Christmas* (line 3) and *Santa* (line 4) which is the typical figure with *white beard*. Concordance (line 2) specifically contains words with positive meanings e.g. *distinguished, gentleman*. Accordingly, *white beard* is, like *white hair* used rather descriptively.

(1)	thin man of about <u>sixty-eight</u>. He had a neatly trimmed	**white beard**	and used a pince-nez for reading. He had the appearance of
(2)	— looked <u>distinguished</u> with his <u>white hair</u> and small	**white beard**	, a stickler for accuracy and forever telling me that my father
(3)	to be found there, hovering in the background, his full	**white beard**	reminding me of <u>Father Christmas</u>. A third son did, I
(4)	day. STRIPPED to his shorts, <u>Santa</u> had only his long	**white beard**	to save his blushes at one of Britain's most exclusive women-
(5)	corner, by the window, was an <u>elderly man</u> with a	**white beard**	, wearing what looked like a cut-down fez. Next to h
(6)	a chair. The <u>old man</u> had long white hair and a	**white beard**	. He must be a magician Mum nine. Tim said to

4.2.2.2.3.4.2 *White* skin occurs very minimally at 34 times across the BNC. However, the use of it is clearly positive. *White skin* is often used in connection with *blue eyes* and *blond hair* (line 4), which signify preferable features particular for women. Additionally, it is found to keep company with positive lexical items e.g. *extraordinarily* (line 1), *fine* (line 2), *beauty, glamour* (line 3), *striking* (line 5). Therefore, *white skin* has a positive discourse prosody describing a preferable skin colour.

(1)	Boy himself. It had the same dark hair**,** the same	**white skin**	and the same <u>extraordinarily</u> inviting eyes. But the face was
(2)	indeed, no more than twenty-three. She had <u>fine</u>,	**white skin**	, not opaque and dull, but translucent and <u>bright</u>, with
(3)	you don't have (like <u>beauty</u>, or money, or	**white skin**	) but <u>want to have</u>. The <u>glamour</u> adverts are about what
(4)	because they did not have <u>blue eyes</u> and <u>blond hair</u>,	**white skin**	or, that vaguest, and because most vague, most potent
(5)	a way,' replies a <u>striking</u> young man of white,	**white skin**	, black hair, black eyes (black Irish and he's

In conclusion, "*white* in collocation with body part noun phrases" presents a mixture of positive and negative discourse prosodies. *White face* is evidently negative and associates with the sense of fear and terror. *White hair* is rather descriptive, but partly expresses a positive discourse prosody for good old age. *White teeth* is also used positively to refer to a health look of teeth. *White beard* is similar to *white hair* and they tend to be used together. *White skin* is another positive phrase describing a preferable skin. All in all, the findings demonstrate that *white* is not always marked with positive connotative property as this particular property is not attached to *white* itself but to the collocations co-occurring with it.

In relation to previous studies, both Wyler (1992) and Allan (2009) did not have a list of body part noun collocations. Allan (2009: 628) mentioned briefly that "[A]nglos are *white* skinned and, as already remarked, until the 20th century, sunburned whites were looked down upon as toilers in the open air and definitely inferior to the refined and pale gentry. To be lily-white is complimentary." This may be one of the drawbacks of using intuition which can be limited with certain

knowledge. This study relies on corpus data collected from authentic uses which show significant use of *white* in collocation with body-part nouns.

4.2.3 Concluding notes

Similar to what has been found from *black*, *white* in collocation with four different noun groups express different discourse prosodies. These prosodies are even diverse within each noun group itself. This is clearly evident in the findings "*white* in collocation with figurative noun phrases" and "*white* in collocation with body-part noun phrases" which maintain both positive and negative discourse prosodies. "*White* in collocation with human noun phrases" presents dominantly negative pragmatic meanings, while "*white* in collocation with clothing noun phrases" is used strongly positive. These findings eminently mark that the connotative property of *white* does not lie in *white* itself, but in the lexical items occurring with it. This means that this connotative property comes in phrases, not in an individual word of each colour term. Moreover, the findings from *white* show that pragmatic meanings are found significantly in non-figurative use of the colour term, particularly in collocation with clothing noun phrases.

4.3 The profile of *Red*

4.3.1 Distributional profile of the adjective *red*

Tables 4.3.1 and 4.3.2 below display the distribution data of the adjective *red* across the BNC. *Red*, with the frequency of 147.94 instances per million words is the least common of the colour terms analysed, compared to *black* (221.43 instances per million words), and *white* (200.99 instances per million words). Still, there is one unique feature of *red* which is quite distinct from *black* and *white*. That is, *red* is used in Written Texts (148.88 instances per million words) almost as frequently as in Spoken Texts (139.99 instances per million words). The discrepancies of use in these two different types of texts are more obvious in the cases of *black* (229.08 for Written VS 156.85 for Spoken) and *white* (208.79 for Written and 135.15 for Spoken). For written texts, *red* is not only popular in the domain of Fiction (256.21 instances per million words); it is also used frequently in Informative Leisure (241.45 instances per million words) as well as in Informative Natural and Pure sciences (202.61 instances per million words).These figures indicate that *red* is used commonly in both written texts and conversation. Moreover, it is used across text domains quite evenly i.e. Art (Fiction and Informative Leisure) and Science (Informative Natural and Pure sciences).

Table 4.3.1 Written/Spoken of *red*

	Total Occurrences	Frequency (per million words)
WRITTEN	4,499	148.88
SPOKEN	501	139.99
TOTAL	**5000**	**147.94**

Table 4.3.2 Text Domain of *red* in Written text type

Text Domain		
Category	**Total Occurrences**	**Frequency (per million words)**
Imaginative prose	1,453	256.21
Informative: Leisure	1,012	241.45
Informative: Natural and pure sciences	266	202.61
Informative: Arts	325	143.78
Informative: Applied Science	328	133.01
Informative: World Affairs	621	104.75
Informative: Belief and thought	79	75.65
Informative: Commerce and finance	153	60.62
Informative: Social Science	262	54.34
TOTAL	**4,499**	**148.88**

4.3.2 Collocational profile of the adjective *red*

Table 4.3.2 below displays the collocational profile of *red* based on the search result from PIE. The PIE search that looks into the collocational patterns of *red* produces 89 lexical items with which *red* most frequently collocates. Drawing on the concept of collocation (see 2.2.2.1.1.1) and semantic preference (see 2.2.2.1.1.3), these items belong to different noun groups. Interestingly, *red* shows a different collocational behaviour to those of *black* and *white*. That is, while *black* collocates most frequently with human nouns, and *white* with clothing nouns, *red* collocates most evidently with nouns in figurative use.

Table 4.3.3 Collocational patterns of *RED*

red = ~	~+ Conj.	~+materials	~+humans	~+body parts	~+food +drinks	~+animals	~+pronominal	~+clothing	~+nature +flowers	3 ~+Figurative	Misc
	~ and	~ ink	~ indians	~hair	~ meat	~ deer	~ one	~ velvet	~ star	~ cross	~ glow
	~or	~car	~ indian	~ blood	~pepper	~ lion	~ ones	~dress	~	~tape	~ colour
	~ in	~ paint	~ queen	~ face	~peppers	~rhino		~silk	sandstone	~ hot	~ spots
	~ with	~ ball		~ eyes	~cabbage	~squirrel		~shoes	~ rock	~ herring	~ stripe
	~ as	~plastic		~ cell	~berries	~bitch		~ coat	~ rose	~ carpet	~label
	~ for	~ button		~cells	~ wine			~jacket	~ roses	~herrings	~ lipstick
	~ from	~ brick		~nose	~rum			~leather	~flowers	~alert	~ line
	~to			~ hand	~ wines			~hat		~ shift	~ poll
				~ lips						~light	~ kite
				~ kidney						~ flag	~ kites
				~ faces						~book	~ house
										~arrows	~fort
										~ rag	~ lights
										~ flags	
										~ army	
										~ dwarf	
										~ lights	
										~card	
										~ riding	
89	8	7	3	11	8	5	2	8	6	18	13
Total in %	8.99	7.86	3.37	12.36	8.99	5.62	2.25	8.99	6.74	20.22	14.61

It should be noted that the category of Figurative refers to a group of nouns with which *red* collocates and together they convey figurative/metaphoric meanings.

Similar to what has been found for both *black* and *white*, the table above shows that *red* has collocational patterns with various noun groups e.g. material nouns, human nouns, body-part nouns, food/drink nouns, nature/plant/animal nouns, clothing nouns, nouns related to figurative use, , and assorted or miscellaneous nouns. The figures from each noun group shows that the biggest noun groups which collocate most frequently with *red* are (1) nouns in figurative use, henceforth "*red* in

collocation with figurative noun phrases," (2) body-part nouns, henceforth "*red* in collocation with body-part noun phrases." The third biggest groups are food/drink nouns and clothing nouns. However, it is found from preliminary investigation that food/drink nouns are used rather descriptively, therefore clothing nouns, henceforth referred to as "*red* in collocation with clothing noun phrases" is selected for examination. This is also to parallel the investigation to those of *black* and *white*. For the same reasons, *red* in human nouns, henceforth referred to as "*red* in collocation with human noun phrases" is chosen as the fourth group for the analysis, although it consists of only three collocates.

4.3.2.1 Figurative use

4.3.2.1.1 "*Red* in collocation with figurative noun phrases"

As mentioned above, *red* and its collocates related to figurative noun phrases, compared to those of *black* and *white*, is the biggest set of the four. This is shown by the figure of 20.22% or 18 phrases of the total 89 *red* phrases. As shown in Table 4.3.3 below, there are 5 phrases which occur more than 1 instance per million words. They are *red cross*, *red light*, *red army*, *red tape*, and *red hot*. *Red Cross* and *Red army* will not be included in the discussion as they are proper nouns referring to, respectively, a charitable organization and the largest Russian armed force. The rest of another 13 phrases are not so frequent and occur less than 1.0 instance per million words across the BNC. Hence, only some of them will be discussed in passing.

Table 4.3.4 Collocates of *red* in collocation with figurative noun phrases

Collocates	Total Occurrences	Frequency (instances per million words)	Collocates	Total Occurrences	Frequency (instances per million words)
red cross	454	4.62	red carpet	43	0.44
red light	238	2.42	red alert	42	0.43
red army	198	2.01	red shift	35	0.36
red tape	162	1.65	red arrows	33	0.34
red hot	133	1.35	red dwarf	31	0.32
red card	65	0.66	red riding	31	0.32
red herring	56	0.57	red herrings	26	0.26
red flag	56	0.57	red rag	25	0.25
red book	50	0.51	red flags	20	0.20

4.3.2.1.1. *Red* light

In general, this phrase conveys a literal meaning i.e. "a red traffic signal that tells drivers to stop" (Cambridge Advanced Learner's Dictionary online). However, when the phrase collocates with *district* and *area*, it does generate idiomatic meaning. A *red light district/area* is "an area where prostitutes work" (Collins Cobuild, ALED, 2006). Some concordances of the phrase contain negative words like *prostitutes* (lines 2 and 3), *notorious* (line 4) which clearly show this sense of meaning and do constitute negative discourse prosody of the phrase. It should be noted that the phrase the plural form *red lights* do not express this same meaning. It only conveys literal meaning as mentioned above. Examples are as follows:

(1)	in the area? I think by tradition every city had a	**red light**	**district**. And again looking back through history, Nottingham's
(2)	CID Voice over Carol Clark, a <u>prostitute</u> who worked the	**red light**	**district** of Bristol, was found dumped in the Gloucester to
(3)	from other <u>prostitutes</u> who, like Carol, worked in Bristol's	**red light**	**area**. Because of the sensitive nature of the police inquiries,
(4)	fun, MrMooncult stormed down to Paris' <u>notorious</u>Pigalle	**red light**	**area** and proceeded to lob his 'ammunition' at puzzled transves
(5)	The <u>dead </u>woman lived at weekends in a flat in Bristol's	**red light**	**district** and there police have found papers, including a diary,

4.3.2.1.2 *Red* tape

Red tape is considered another frequent phrase in this noun group. It has the frequency ratio of 1.65 instances per million words in total of 162 occurrences. The phrase refers to "official rules and processes that seem unnecessary and delay results" (Cambridge Dictionary Advanced Learner's online). This sense of meaning is shown through the patterns of use of *red tape*. The phrase contains top collocates which include *bureaucratic, bureaucracy, cutting, cut, through,* and *government*. These collocates indicate well of the nature of *red tape* which typically concerns something official like *government* and *bureaucracy*.

However, they may not show much of how the phrase is used. Rather, the connection to 'inefficiency' of *red tape* is shown in its further collocates as displayed in concordances (1-10). These collocates include *immobilized, anarchic chaos* (line 1), *obstacles, morass, sloth, corruption* (line 2), *strangling* (line 3), *crisis* (lines 4 and 10), *restriction* (line 5) *battles, burdens* (line 6), *wastage, inefficiency* (line 7), *unnecessary, destroy* (line 8), *difficulties, excessive, problems* (line 9). These words

are unpleasant when they are used as they create unfavourable meanings. That means *red tape* tends to keep bad company, hence leading to its negative discourse prosody.

(1)	and the organisation becomes <u>immobilised</u> in <u>bureaucratic</u>	**red tape**	; <u>too little</u>, and the organisation descends into <u>anarchic chaos</u>.
(2)	by the <u>obstacles</u> to creating joint-stock companies, the <u>morass</u> of	**red tape**	, bureaucratic <u>sloth</u> and <u>corruption.</u> In those few cities
(3)	small businesses and to cut out some of the <u>bureaucracy</u> and	**red tape**	which is <u>strangling</u> us.' Mr Wilson was accompanied by the
(4)	one-on-one relationships that in a <u>crisis</u> can cut through miles of	**red tape**	. 'What exactly was going down at the farm?'
(5)	for an operation to save her life. The British Government lifted	**red tape**	<u>restrictions</u> so that a charity here could fly in the eight-month
(6)	of Trade. Former rally driver Jean Denton is <u>battling</u> to reduce	**red tape**	and bureaucratic<u>burdens</u> on small firms and start-ups. Maxen
(7)	rural and urban enterprises; to reduce <u>wastage</u>, <u>inefficiency</u> and '	**red tape**	' and to promote the 'entrepreneurial' spirit in order to
(8)	dealt with in Community countries. It would impose <u>unnecessary</u>	**red tape**	and above all it would <u>destroy</u> jobs.' Field 'out
(9)	by industrial relations <u>difficulties</u>, restrictive practices, <u>excessive</u>	**red tape**	or other <u>problems</u> of the 1970s.' (March 1990)
(10)	assistance, which could not be guaranteed in the present <u>crisis</u>.	**Red tape**	set to delay SA return The readmission of South Africa to

4.3.2.1.3. *Red* hot

The phrase contains two idiomatic meanings: (1) something extremely hot or (2) something extremely new, popular and exciting. These two senses of meanings of *red hot* are expressed through its collocates *poker, and,* as well as a number of grammatical marks e.g. the expression mark (*!*), the comma (*,*) and the full stop (.). The meaning sense (1) of 'something extremely hot' is shown through concordance lines (1-5). It should be noted that words related to the heat or fire e.g. *heated* (lines 1 and 5), *burning fuel* (line 2), *fire* (line 3), *firework* (line 4) co-occur quite noticeably with the phrase. As mentioned in Chapter 2, *red* is linked with *fire* which sometimes refers to trouble or problems.

However, as *red hot* is not frequent in the BNC, the concordances are not so evident in showing this sense of meaning in relation to trouble. Concordance line (3) contains the word *trouble* and line (2) has the word *impossible*, which both are negative. However, they are not strong evidence of negative connotation as they are not found in other lines. As a result, it cannot be said whether *red hot* in this sense tends to be used in a negative environment.

(1)	John in one last cup of mulled wine, <u>heated</u> with a	**red hot**	poker and spiced with cinnamon, before they reclaimed their
(2)	out the <u>burning fuel</u> with scaffolding poles. The poles became	**red hot**	And <u>impossible</u> to handle. Over the night of Thursday 10
(3)	In the process the wiring had become overloaded and was almost	**red hot**	by the time the <u>trouble</u> was diagnosed. A major <u>fire</u> was
(4)	miraculous escape last night after a <u>firework</u> exploded and sprayed	**red hot**	fragments into her face. Ambulance crews who treated the
(5)	were drunk on vodka. They <u>heated up</u> pokers until they were	**red hot**	**,** and branded him. They wanted Nowak to confess. They

The meaning sense (2) of someone or something very popular and exciting is shown in concordance lines (6-9) below. Someone in this sense refers to *she* (line 7) and *Denis* (line 9), while something refers to *race* (line 6), and *albums* (line 8). Each concordance line contains positive words like *blistering* (line 6), *fair sizzled* (line 7), *cool* (line 8). Hence, *red hot* in this meaning tends to be used in a positive environment.

(6)	forms are flooding in and ClubCall's telephone vote line is	**red hot**	— and already two men are setting a <u>blistering</u> pace in the
(7)	I just told you that. In our courting days <u>she</u> was	**red hot**	. She <u>fair sizzled</u>!' He paused, then said very
(8)	We've teamed up with record giants EMI to give away 200	**red hot**	<u>albums</u> in a competition worth a <u>cool</u> £3,000. Among the prizes
(9)	Year title two years ago, also admitted: '<u>Denis</u> is	**red hot**	at the moment and I think he is definitely the one to

4.3.2.1.4 Other phrases

The top *red* phrases in "*red* in collocation with figurative noun phrases" demonstrate different discourse prosodies. *Red light* with its two collocates *district* and *area* portrays unfavourable tones of meaning. This is also the case with *red tape* which tends to keep bad companies. *Red hot* has a tendency to be used negatively and positively. However, the concordances do not show clearly its use in a negative environment. There are another thirteen phrases in this noun group which are less frequent and occur less than 1.0 instance per million words across the BNC.

Out of these thirteen phrases, four of them are excluded from the discussions i.e. *red shift*, *red dwarf*, *red arrows*, and *red riding*. *Red shift* is used purely descriptive and is a scientific term referring to a galaxy phenomenon. *Red dwarf* is a proper noun referring to a type of star. *Red arrows* is a proper noun for an aerobatic team who performs flying airshows. *Red riding* is derived from *Little Red Riding Hood*, a fairy tale for children. Using the analysis discussed above as a parameter, the other nine phrases will be investigated in a similar way to see what sense of meanings they convey and how they are used.

4.3.2.1.4.1 *Red* card has limited occurrences (only 65 times across the BNC) because it is used only in area of sports particularly football. *Red card* refers to the punishment to the players who commit offences and are sent out of the game. It collocates with a number of words which are relevant to its meaning e.g. *out, against*

(line 1), *sent off* (line 2), *serious offences* (line 3), *disarray, foul* (lines 4 and 5), *opponent* (line 6), *dreadful* (line 7). This group of collocations contains negative meanings which accordingly indicate the negative discourse prosody of the phrase. Concordances (1-7) are shown below:

(1)	The Viking' Thorstvedt (Spurs) is <u>out</u> because of his	**red card**	<u>against</u> Poland and also Fjortoft is not at his best — he
(2)	got <u>sent off</u> in my own backyard. I remember seeing the	**red card**	and looking up, there was 30,000 people <u>jeering</u> and I could
(3)	the amnesty would not cover players who had been shown the	**red card**	and <u>sent off</u> for <u>serious offences</u> during qualifying games.
(4)	then San Marino were in total <u>disarray</u>. Guerra was shown the	**red card**	for a <u>foul</u> on Erik Meijer in the 58th minute and Ronald
(5)	the chance of facing his boyhood idols had <u>disappeared</u> with his	**red card**	for a professional <u>foul</u> at Runcorn two weeks ago. But W
(6)	caps and a star of three World Cup campaigns, received the	**red card**	for <u>slicing down</u> an <u>opponent</u> in front of just 4,194 fans at
(7)	's Gareth Hall was <u>sent off</u>. The right-back was shown the	**red card**	in the 63rd minute after a <u>dreadful,</u> two-footed tackle on

4.3.2.1.4.2 *Red* herring(s) means "a fact, idea or subject that takes people's attention away from the central point being considered" (Cambridge Dictionary Advanced Learner's online). This sense of meaning is reflected through the pattern of co-occurrences with lexical items which have relevant meanings e.g. *misguided, disturbing* (line 1), *refused to* (line 2)*, deliberately falsified* (line 3), *disposed quickly of* (line 4), *pain, suffering* (line 5), *awful* (line 6). It is obvious that these lexical items are unpleasant company and do create negative linguistic environment for the phrase. Hence, *red herring* has a discourse prosody concerning distraction. Samples of uses are shown through concordances (1-6) below:

(1)	justifications, is <u>misguided</u>. I find it particularly <u>disturbing</u> that this	**red herring**	has become so prominent in current discussions about,
(2)	had <u>refused to</u> discuss an issue which to many was becoming a	**red herring**	in an attempt to win Presbyterian and, more importantly,
(3)	word … with massive implications.' 'It could be a	**red herring**	,' Manville pointed out. '<u>Deliberately falsified</u> informa
(4)	three or four chapters before the end. She <u>disposed quickly of</u>	**red herrings**	, usually sought out the least probable suspect and rarely
(5)	your specialist and GP feel that your vasectomy operation is a	**red herring**	with regard to the <u>pain</u> which you are <u>suffering</u>.
(6)	for for a moment cos I think it's a bit of	**red herring**	[pause] er, to some degree. Pretty <u>awful</u>! It will stand

4.3.2.1.4.3 *Red* flag(s) in the BNC is used in two senses of meanings: (1) as a symbol of revolution, and (2) as a sign of danger. As a symbol of revolution, *red flag* collocates with words like *army units* (line 1), *left-wing* (line 3), *workers, communists, strikes* (line 4), *to abolish* (line 5). These collocates are all relevant to the meaning of *revolution*.

(1)	released from jail. Fighting broke out between <u>army units</u>. The	**Red Flag**	**was** hoisted over Madiun town hall. Sukarno proclaimed a state
(2)	Ho read a declaration to a vast assembled crowd: The new	**red flag**	with its yellow star was hoisted and among those saluting and
(3)	a number of small <u>left-wing groups</u>, including Bandera Roja ("	**Red Flag**	") and Tercer Camino ("Third Way"),

(4)	be country-wide <u>strikes </u>involving all classes of <u>workers</u>.' The	**Red Flag**	<u>Communists</u> did not threaten: they acted. On 13 January a
(5)	<u>to abolish</u> the legal anomaly which required a man with a	**red flag**	to walk in front of what was classified as a 'locomotive

As a symbol of danger, *red flag* is used less frequently compared to the first meaning. There are a few key words which relate to danger e.g. *to warn, to frighten* (line 6*), reverted to normal* (line 7), *monster* (line 8).

(6)	car had been heralded by walkers. All we needed was a	**red flag**	<u>to warn</u> the locals that we might be about to <u>frighten</u> the
(7)	and as soon as the supply <u>reverted to normal</u> again, the	**red flag**	was removed. In the preparation of the details themselves in the
(8)	Code together just about control the <u>monster</u>. We are at the	**Red Flag**	stage with IT, and it is hardly possible to anticipate how

Both group of *red flag*'s collocations reflecting the senses of revolution and danger are rather unpleasant. They constitute negative environment and hence lead to an unfavourable discourse prosody of the phrase *red flag*.

4.3.2.1.4.4. *Red* book has no entries in the general-use dictionaries employed in this research (Collins Cobuild ALED, 2006, and Cambridge Dictionary Advanced Learner's online). This may be because it is not a frequent phrase; only occurs 50 times in the whole BNC. In this corpus, *red book* refers to 'an official financial report or budget summaries', as seen from concordance lines (1-3). It can also refer to 'an intelligence summary or report' (lines 4-5). There are two other instances (lines 6-7) which talk about Chairman Mao's *Little Red Book* outlining the policies for China. In all of these concordances, there are not evidently repeated positive or negative collocates which can be added to the phrase' s pragmatic meaning. Hence, *red book* is rather used descriptively to describe particular official reports.

(1)	These payments are found in what GPs call the '	**red book**	' — <u>a statement of fees and allowances</u> payable to medical
(2)	the problems is spelled out with embarrassing clarity in the '	**Red Book**	', <u>the publication that underpins the Budget</u>. The spending
(3)	<u>economic policy</u> will accompany the traditional <u>financial</u>	**Red Book**	. Improving inner cities We will reverse the unfair treatment
(4)	the product of the <u>current intelligence</u> groups and compile a '	**Red Book**	' of summaries which, the following day, is circulated to
(5)	a week ministers will get their <u>intelligence summary</u> in the '	**Red Book**	', all the trouble spots in the world, and one
(6)	's been their secret? Male speaker <u>Chairman Mao</u> and his little	**red book**	actually sort of advocated table tennis because it didn't take up
(7)	of sugar-coated bullets,' warned <u>Chairman Mao</u> in his Little	**Red book**	, not realising that today's politics is tomorrow's pop platitude

4.3.2.1.4.5 *Red* carpet refers to 'special treatment given to an important or honoured guest' (Collins Cobuild ALED, 2006). Concordances (1-6) show relevant collocates to the phrase's meaning e.g. *special guests* (line 1), *spectacular fashion* (line 2), *honour* (line 3), *treat* (line 4), *treatment* (line 5), *welcome* (line 6). All of

these collocates express favourable sense of use and help strengthen the phrase's meaning. Accordingly, *red carpet* has a favourable prosody. There are two intransitive verbs which form regular patterns of use with the phrase i.e. *to roll out the red carpet*, or *to lay out the red carpet*.

(1)	the day with Direct Banking DIRECT Banking <u>rolled out</u> the	**red carpet**	**for** two <u>special guests</u>. Chris Law of Internal Audit, Regent
(2)	Sheephaven Bay where the local junior club <u>laid out</u> the	**red carpet**	in <u>spectacular fashion</u> for an international select side.
(3)	twice a year. When she did, Raine would have the	**red carpet**	<u>rolled out</u> in <u>her honour</u>. She respected her stepdaughter's
(4)	on padlocks, and for <u>a birthday treat</u> for him today the	**red carpet**	was <u>laid out</u> for him at the Chubb Lock Factory in Wolver
(5)	lavour A GROUP of Japanese customers were given the	**red carpet**	<u>treatment</u> when they visited [gap:name] 's Buckiemaltings in
(6)	<u>triumphant</u> cricketers this week returned home to their second	**red carpet**	<u>welcome</u> within months. In March they were received as

4.3.2.1.4.6 *Red* alert is described as "the state of being ready to deal with a sudden situation or emergency" (Cambridge Dictionary Advanced Learner's online). This sudden situation or emergency can refer to accident, diseases, attack, floods, terrorists etc. Although the phrase is associated with unpleasant situation, concordances (1-4) show that the phrase tends to be used in a favourable environment. This is shown in positive lexical items which co-occur with *red alert* e.g. *permanent* (line 1), *ready* (line 2), *resurgent* (line 3), and *motherly instincts* (line 4). Accordingly, *red alert* has a favourable discourse prosody.

(1)	Mechanic because he fixes the neighbours' cars, is on <u>permanent</u>	**red alert**	over his brother's reputation. He complained once about
(2)	the first call at 8.20. By 8.30 the hospital was on	**red alert**	, with doctors <u>ready</u> in the accident and emergency receivi
(3)	match at Auckland in 1975. Green light has <u>resurgent</u> North on	**red alert**	for deciding match. By Janet Ruff THE North, with two
(4)	heart full of foreboding and with all her <u>motherly instincts</u> on	**red alert**	, Ashley sprang forward. She needed to get to Thomas

4.3.2.1.4.7 *Red* rag occurs only 25 times across the BNC. Out of this number, 64%, or 16 instances, occur in the form of a fixed expression *a red rag to a bull*. The phrase may derive from the act of bull provocation by using *red rag*, in order to provoke or infuriate the bull to attack. Hence, the phrase refers to "a provocation or something that will inevitably make somebody angry or cross" (Cambridge Dictionary Advanced Learner's online). Concordances (1-4) below display collocates of the phrase which contain negative meaning e.g. *raids, lost* (line 1), *refused* (line 2), *insult, injure* (line 3), *counterattack* (line 4). These collocates constitute a negative discourse prosody of *red rag*.

(1)	recent <u>raids</u> on the city. Their uniform 'acted like a	**red rag**	to a bull' on the population; people had <u>lost</u> all
(2)	was expected to drop him forthwith. Naturally this was like a	**red rag**	to a bull and I <u>refused</u> to even consider such a course
(3)	— this is a college', which were once like a	**red rag**	to a bull to me, no longer <u>insult</u> or <u>injure</u> as
(4)	with faith and morals. Such developments were, for Draper,	**red rag**	to a bull — hence his recourse to history for the <u>counterattack</u>

In summary, "*red* in collocation with figurative noun phrases" express more unfavourable than favourable tone of use. *Red light* collocates with negative lexical items and hence contains negative discourse prosody. This is also the case with *red tape, red card, red herring, red flag, red rag* which occur in unpleasant linguistic environment. Still, there are a few phrases which express positive discourse prosody e.g. *red hot* (in the sense of someone or something very popular), *red carpet*, and *red alert*. The concordances of these phrases show that they are used favourably and with positive meanings. These results indicate that the use of corpus data provides two key sets of information which will not be found in dictionaries. That is, the corpus data shows the linguistic environments in which a lexical item occurs; and the discourse prosodies of how that particular item is used.

4.3.2.2 Non-figurative use

4.3.2.2.1 "*Red* in collocation with body-part nouns phrases"

Table 4.3.5 below displays eleven collocates of the adjective *red* in body-part noun group. It is considered the second largest noun collocates of *red* phrases. The two most frequent collocates are *red hair* (2.24 instances per million words) and *red blood* (1.02 instances per million words). The rest occurs less than 1.0 instance per million words, which indicates that the use of these phrases is quite limited.

Table 4.3.5 Collocates of *red* in collocation with body-part noun phrases

Collocates	Total Occurrences	Frequency (instances per million words)
red hair	220	2.24
red blood	100	1.02
red face	72	0.73
red eyes	61	0.62
red cell	52	0.53
red cells	48	0.49
red nose	43	0.44
red hand	42	0.43
red lips	35	0.36
red kidney	22	0.22
red faces	22	0.22

It should be noted that *red blood, red cell, red cells*, *red nose*, *red hand*, and *red kidney* will not be included in the discussion. This is because their uses are purely descriptive and only occur in specific text domains. To elaborate, *Red blood* only collocates with *cells* and becomes *red blood cells* referring to any of the cells that carry oxygen around the body. This is the same meaning to *red cell(s)*. These three phrases only occur in Natural and Pure sciences text domain. *Red nose* collocates with *day* and becomes *Red Nose Day,* referring to a proper noun for a fund raising day for charity. *Red hand* collocates with *commando* and becomes *Red Hand Commando* referring to a proper noun for an outlawed group in Ireland. *Red kidney* in the BNC is only used in Leisure text domain under the genre of cooking. It collocates only with *beans* and becomes *red kidney beans* referring to a kind of beans.

4.3.2.2.1.1 *Red* hair

As mentioned above, *Red hair* is the most frequent phrase in this semantic set. It occurs 220 times across the BNC. It is found most frequently used in Fiction (74.88%). This shows that *red hair* is used in the description of a character's hair in a novel. Concordances (1-10) below manifest that *red hair* has a semantic preference for *flame, fire*, and *blaze* which intensify the meaning of *red hair*. This is shown through a set of words with similar meaning e.g. *blaze, burning, flare, flame, beacon, inflamed, fiery, fire*. As a matter of fact, this corresponds with what Allan (2009) has suggested i.e. *red* signifies fire.

(1)	to the door, Tony.' Jenny stepped forward, long	**red hair**	a<u>blaze</u> of colour against her translucent Celtic skin. The door
(2)	' Rachel broke off, seeing the <u>blaze</u> of Jenny's	**red hair**	against Jamie's black evening suit. They were dancing very,
(3)	who started it. Bruce was a short, stocky man with	**red hair**	and a <u>burning</u> ambition. Comyn had a reputation, even in
(4)	of corn blowing in the wind. The minister, who had	**red hair**	and <u>fire</u> in his eye, started on an upbeat note.
(5)	colleagues Vanessa was an exotic creature with her <u>flare</u> of	**red hair**	and highly individual nature. When she became engrossed in
(6)	had tinted the dark hall with amber light. The girl's	**red hair**	<u>burned</u> against the mildewed wallpaper. She'd replaced the
(7)	neck of the jacket, and the way the boy's <u>flaming</u>	**red hair**	curled against it. 'I see. And these — garments
(8)	spine. Despite her fears, she tossed her head, the	**red hair**	swirling like the <u>flames</u> of a fire. 'You'd better
(9)	wind or the carelessly squandered words of a song. Her	**red hair**	was a <u>beacon</u> in the night — a <u>flame</u> in which he
(10)	?' Cobalt's liquid blue eyes went to her. His	**red hair**	was <u>flame</u> in the lamplight, but there was no colour in

Although *red hair* presents a clear semantic preference, it does not do the same with its discourse prosody. In concordances (1-10), it is not evident whether *red hair* has favourable or unfavourable prosody. The term is used rather descriptively.

However, concordances (11-14) below do display disapproval tone of use of *red hair* when it has a semantic preference for anger and fury as seen through its collocates—*angry, fierce, furious.*

(11)	her. 'Stop right there!' she commanded, her	**red hair**	flashing in a tumble of <u>angry</u> waves. 'You tested me
(12)	I think a lot of these Roman people had never seen	**red hair**	before, people who looked quite so <u>fierce</u>. And even
(13)	He wears a brown rucksack on his back. He has	**red hair**	and he looks <u>furious</u>. 'What do you boys think you
(14)	standing on the shore and they were very very<u>fierce,</u> bright	**red hair**	some of them had and beards. I think a lot of

Nonetheless, the above statement is only partial for *red hair*. Concordances (15-25) below demonstrate the positive discourse prosody of *red hair*. This is because the concordances do indicate that *red hair* is an admirable and preferable type of hair. These can be seen from the clauses, or phrases, or compound nouns which co-occur with *red hair* and help constitute the favourable tone of use of the phrase. Hence, the phrase has a positive discourse prosody describing the beauty of *red hair*. Samples of prominent collocates are *most beautiful* (line 15), *I wish I had* (line 16), *I'd like my children to have* (line 17), *attractive woman* (line 18), *every eye had turned to gape at her long* (line 19), *novelty* (line 20), *beautiful, wonderful* (lines 21, 22), *enchanted* (line 23), *attractive* (line 24), *fashionable* (line 25).

(15)	My closest friend actually, she's got really straight,	**red hair**	—it's the <u>most beautiful</u> hair I've seen. WHAT
(16)	act of collaboration with the Nazis. '<u>I wish I had</u>	**red hair**	,' Samantha said to her mother, inspecting herself as she
(17)	I'd rather [unclear] <u>I'd like my children to have</u>	**red hair**	, actually. Well, not red head, [unclear] isn't
(18)	parents). She was a small, <u>attractive woman</u> with	**red hair**	. She had not had any idea of leaving her family in
(19)	time, and <u>every eye had turned to gape at her long</u>	**red hair**	and golden earrings as she swept into the assembly-hall wearing
(20)	on her face. 'You are <u>a novelty</u> with your dark	**red hair**	and your grey eyes. See that they do not sparkle with
(21)	because they were a striking couple. He had	**red hair**	and she was <u>beautiful</u>. Very striking. They went down a
(22)	two faces. One was a <u>beautiful</u> girl with <u>wonderful</u>	**red hair**	, the Princess Flavia. The other was the face of a
(23)	I know my son will be <u>enchanted</u>. He dotes on	**red hair**	, you know.' 'Indeed?' was all Theda
(24)	parents). She was a small, <u>attractive</u> woman with	**red hair**	. She had not had any idea of leaving her family in
(25)	now and apparently it's quite <u>fashionable</u> to have	**red hair**	. Some of the super models like Linda Whatsername have actually

Hence, *red hair* is a two-dimensional phrase, as is *black hair*. It can project negative discourse prosody when it has the semantic preference for *anger* and *fury* or is linked to the emotion of *anger*. However, it presents positive discourse prosody when collocating with lexical items related to beauty and attraction. This discovery corresponds with what Hunston (2007) proposes i.e. the prosody of a node word/phrase can shift if its immediate phraseology changes, which at the same time

endorses the argument of this research in that the pragmatic meaning is influenced by the occurrences of a linguistic item with other lexical items.

4.3.2.2.1.2 Other phrases

As mentioned earlier, the rest of *red* phrases in this noun group have limited occurrences in the BNC, with the frequency ratio of less than 1.0 instance per million words. This indicates that they are not frequent in real uses. These phrases are red *face(s), red eyes, red hand*, and *red lips*. Each one will be discussed in turn.

4.3.2.2.1.2.1 *Red* face(s) has various patterns of use and meanings. There are at least three obvious kinds of use i.e. (1) generic description of a face; (2) specific description pertaining to emotions; and (3) specific description relating to health and illness. In category 1, the phrase is used descriptively to narrate the physical look of a person with a *red face* as shown in concordances (1-3) below:

(1)	But, he's got [pause] he's got a a big round	**red face**	[pause] and little eyes and a moustache, and the most peculiar little
(2)	Mrs Medlock was a large woman, with a very	**red face**	and bright black eyes. Mary did not like her, but
(3)	the crowd. He was short and broad with a veined	**red face**	and reddish corkscrew curls sprouting from under a woollen cap.

In category 2, *red face* is used in relation to emotions. At one end of the emotional spectrum, *red face* shows that a person is angry, and at the other end, *red face* manifests the joy and cheerfulness of a person. In regards to anger, the phrase keeps company with negative words like *angry* (lines 4 and 10), *aggressive* (line 5), *dangerous* (line 6), *rage* (line 7), *glower* (line 8), *furious* (line 9), in order to show that a face in *red* is a face of an angry person. This is shown through concordances (4-10) below. Obviously, *red face* in this category contains unfavourable prosody concerning anger. It should be noted that this semantic preference for anger, rage, and fury of *red face* is similar to what is found in *red hair*. Thus, to a certain extent *red* can signify rage when it collocates with *hair* or *face*.

(4)	the market, and a few minutes later we saw his <u>angry</u>	**red face**	above the wall on the far side of the field. Will
(5)	to the likes of you.' The man had a	**red face**	and an <u>aggressive</u> manner. A second, of the same sort
(6)	He was standing, his head sunk between his shoulders, his	**red face**	beaded with sweat. He looked <u>dangerous</u>, like a bull.
(7)	this attack?' Sir John pushed back his chair, his	**red face**	<u>bristling with rage</u>. 'Are you accusing me, Sir Edmund
(8)	in her throat and choked up too; Rosa twisted, her	**red face**	<u>glowered up</u> at Cati. She hissed, 'Go away,
(9)	all the way through. I can see your poor little <u>furious</u>	**red face**	now, glaring at me and the tears kept running down your

(10) off the machine. Up went the visor. His <u>angry,</u> **red face** said, 'Have you gone deaf, boy? Here,

In regards to cheerfulness, the phrase is modified by the adjectives *cheerful* or *cheery* in order to show that *red face* is a happy face, as seen in concordances (11-13).

(11) man pushing through the crowds. He had a <u>cheerful</u> **red face** which he hadn't succeeded in making entirely solemn and gloomy,

(12) answered Jan Coggan, a big, <u>cheerful</u> man with a **red face** . 'She only arrived here a few days ago, when

(13) a short, squat man with very little hair and a <u>cheery</u> **red face** . He was always <u>smiling</u> and greeted us most amicably as we

In category 3, *red face* signifies conditions of health, as it can refer to a healthy person (line 14), or an elderly person (lines 15-16), or a sick person (line 17). These are described through the words with which *red face* collocates e.g. *healthy* (line 14)*, elderly* (line 15)*, old* (line 16), or *in the fever* (line 17), as shown below:

(14) a wooden pipe. He was about twelve, with a <u>healthy</u> **red face** **and** bright blue eyes. There was a squirrel and a crow

(15) lost and tired, until a short, <u>elderly</u> man with a **red face** and gold-rimmed spectacles took pity on her. 'Who are you

(16) south of the Hall. He was an <u>old man</u> with a **red face** and white hair. He had two hobbies. The first was

(17) hot sweat worse (<) in the morning. A very **red face** <u>in the fever</u>. Neuralgic headaches; stick and tear, burn

In summary, *red face* has several dimensions in terms of what it describes and signifies. It can be used descriptively to give details of the image of a face or tell whether it is a face of an elderly, a healthy or a sick person. This description can be quite generic and neutral. Still, *red face* can project negative discourse prosody when it has a semantic preference for anger and signifies rage. *Red face* can also be recognized with its positive discourse prosody when it has a semantic preference for cheerfulness. Again, what Hunston (2007) has claimed about the shift of discourse prosody upon the change of semantic preference of a node/phrase can be applied with the case of *red face*.

4.3.2.2.1.2.2 *Red* eyes is found frequently in Imaginative Prose (55%). Its top three collocates are *its, with, and*. Altogether, they produce 43 concordance lines. The majority of this figure i.e. 26 lines, or 60.465 %, describe the *red eyes* of various animals e.g. rat, bear, lizard, bat, dog. Another 17 lines or 39.55% depicts features concerning humans' eyes. This depiction, as shown in concordances (1-7) tends to be associated with negative lexical items mostly negative feelings e.g. *agony* (line 1), *grief* (line 2), *mad* (line 3), *deeply sorry* (line 4). Other negative items include *blotched* (line 5), *bleary, suspiciously, dangerously* (line 7). Hence, when concerning

humans description, *red eyes* is associates with negative feelings and leads to a negative discourse prosody of the phrase.

(1)	away and shrivelled while <u>tears</u> of <u>agony</u> rolled from their little	**red eyes**	. Grom, having overcome his initial surprise, howled with
(2)	a fight. <u>Grief</u> had swung at him and given him two	**red eyes**	. He sagged inside his best grey suit, and his black
(3)	grey speeding across the meadows. He remembered those <u>mad,</u>	**red eyes**	which had glared at him earlier that day through the grille,
(4)	She pecked our hands for food and glared at us with her	**red eyes**	. I never liked her much. The room began to smell
(5)	lie, <u>deeply sorry</u> for the girl with the <u>blotched</u> face and	**red eyes**	. "Mr Amsterdam has never said anything to me which was
(6)	but Dr Frome's smooth good looks <u>were marred</u> by <u>stubble</u> and	**red eyes**	. His wife's hair was straggling over her eyes, and
(7)	<u>suspiciously</u> at the white, haggard face of Cranston, the <u>bleary</u>	**red eyes**	, and the way he was swaying rather <u>dangerously</u> on the top

4.3.2.2.1.2.3 *Red* lips only occurs in Written texts (100% with 35 occurrences in total). No instance is found in Spoken texts. In the Written texts, 82.86% or 29 occurrences of *red lips* are found in Fiction. Accordingly, the phrase is used frequently in fiction to describe the image of lips. It is quite noticeable from concordances (1-5) that when *red* is used with lips, it leads to sensuality. This is clearly shown by its relevant collocates e.g. *sex appeal* (line 1), *pouting* (to push both lips forward in a sexually attractive way, line 2), *sensual* (line 3), *sexy* (line 5). *Red lips* is also rich with adjective modifiers e.g. *bright* (line 1), *lush* (line 2), *succulent* (line 4), *plump* (line), which help intensify the sensual meaning of *red lips*. It should be noted that the finding above is consistent with what Allan (2009: 631) has claimed i.e. "*red lips* are favoured by women of many races and cultures presumably because they are found sensual."

(1)	brassy, audacious exterior. Her white blonde hair and <u>bright</u>	**red lips**	, the blatant hard-bitten <u>sex appeal</u> and the coiled danger camouflage
(2)	reached the grim forties,' said Masha, <u>pouting</u> her <u>lush</u>	**red lips**	. 'I can't believe it, Masha! You never
(3)	lips and shining cheeks would be pressed to Bert's <u>sensual</u>	**red lips**	, and then doubtless all those white teeth would clash and nip
(4)	lovely face, and large globules hung from her <u>succulent</u>	**red lips**	. He reached forward, and gently spread the sticky mess over
(5)	young and she's <u>sexy</u> and she's mine. Her <u>plump</u>	**red lips**	said: he's rich as hell and he's crazy about

In brief, "*red* in collocation with body-part noun phrases" contains several dimensions of discourse prosodies and tends to be associated with emotions. For example, *red hair* and *red face* connect to rage and express negative discourse prosody when collocating with lexical items relating to *anger* and *fury*. Their discourse prosodies change to positive when collocating with items concerning beauty and attraction in the case of *red hair* and cheerfulness in the case of *red face*. These findings not only champion what Hunston (2007) proposes about the shift of the

prosody upon the immediate phraseology, but also shows that the pragmatic meaning or discourse prosody is the property of the phrase, not the word or the colour term itself.

4.3.2.2.2 *"Red* in collocation with clothing noun phrases"

Table 4.3.6 below displays eight collocates of *red* in the noun group related to clothing. In comparison to *black* and *white* in the same noun group, *red*'s collocates are far less than those of *black* (22 collocates) and *white* (25 collocates). Moreover, all eight collocates has very low frequency i.e. less than 1.0 instance per million words across the BNC, which indicates that the uses of these phrases are fairly limited. The low frequency has also made it quite difficult to capture salient linguistic elements which can lead to the unit of meanings of each phrase. Hence, the discussion will be brief and only include a few phrases in this noun group.

Table 4.3.6 Collocates of *red* in collocation with clothing noun phrases

Collocates	Total Occurrences	Frequency (instances per million words)
red velvet	56	0.57
red dress	48	0.49
red silk	34	0.35
red shoes	32	0.33
red coat	27	0.27
red jacket	23	0.23
red leather	22	0.22
red hat	21	0.21

4.3.2.2.2.1 *Red* dress

Similar to what has been found from *black dress* and *white dress*, *red dress* is noticeably associated with special occasion i.e. dance or dancing. *Red dress* keeps company with positive lexical items which show that *red dress* is also a special dress. Such collocates displayed in concordance (1-6) include *the one I wanted* (line 1), *striking* (line 2), *sheer* (line 3), *gorgeous* (line 4), *bright* (line 5), *slender*, and *graceful* (line 6). In a way, these items can be considered synonyms of those of *white dress* e.g. *beautiful* and *gorgeous, striking* and *stunning*, which also relate to those of *black dress*. This finding corresponds with what Partington (1991) proposed about "group

preference". That is, some lexical items display distinct collocational pattern by sharing similar collocates in the same set of semantic preference. Accordingly, *red dress* is another phrase with a positive discourse prosody describing elegance and beauty.

(1)	went out to look for something else. When I saw the	**red dress**	, I knew that was the one I wanted. It's
(2)	's solo harmonica, watched by daughter Rachel, striking in a	**red dress**	. The climax was a clip from last week's Sheffield speech
(3)	other woman — dancing at a social event, in a sheer	**red dress**	showing a black bra beneath. Since that caravan site encounter,
(4)	and went to a dance. A girl walked in with a	**red dress**	on. She was gorgeous, I can even remember her name
(5)	for McAllister at the rectory. She was wearing a bright	**red dress**	, shiny black boots, and despite the heat of the day
(6)	banner behind her as she moved, slender and graceful in a	**red dress**	. She loved dancing. It was one of the joys of

4.3.2.2.2.2 *Red* velvet

The phrase only occurs in Written texts (100% in total of 56 occurrences). Most frequently, it appears in Fiction (60.71% with 34 occurrences). However, concordances of *red velvet* do not say much about the pattern of use of the phrase. One obvious point which is seen through the concordance lines is that *red velvet* tends to be used in relation to gold, as shown in the concordances (1-5) below. Apart from that, *red velvet* is used purely descriptive. In any case, if there were more concordances of *red velvet* to be investigated, it might be possible that more unique patterns of use of the phrase can be seen.

(1)	repainted on the funeral banners and his shield. His best	**red velvet**	saddlecloth was re-embroidered with gold thread. 'Aye, it'll
(2)	12 state coaches, each drawn by eight horses caparisoned in	**red velvet**	, heavily embroidered in gold with the imperial bees. The carriage
(3)	their splendid uniforms; the tall windows were hung with	**red velvet**	draperies with golden fringes and they seemed but tiny openings in
(4)	him. Michael stared at the tie pin glinting up from the	**red velvet**	lining. It was gold, in the shape of a large
(5)	our Viennese style.' 'Oh, Willi! All those	**red velvet**	curtains and golden tassels, and settees with little golden legs.

4.3.2.2.2.3 Other phrases

There are another five *red* phrases in this noun group which are in the same position as *red velvet* i.e. no distinct patterns of use of the phrases can be found due to the fact that they are used purely descriptive. It is possible that these phrases are not frequent and occur too minimally across the BNC. This is why it is difficult to grasp the core linguistic elements leading to their units of meaning. Obviously, more data are needed in order to make an analysis on these phrases, which are *red silk* (34 instances), *red coat* (27 instances), *red jacket* (23 instances), *red leather* (22

instances), and *red hat* (21 instances). Nonetheless, one clear issue which can be mentioned about these phrases is that they are used most frequently in Fiction e.g. *red silk* (76.47%), *red coat* (25.92%), *red jacket* (73.91%), *red leather* (59.09%), and *red hat* (33.33%).

In short, "*red* in collocation with clothing noun phrases" display only eight collocates, most of which are used purely descriptive**.** *Red dress* is the only phrase in this collocation which can be discussed in details. Similar to what has been discovered in *black dress* and *white dress*, *red dress* also expresses positive discourse prosody describing elegance and beauty. It is also associated with the context of special occasion e.g. entertainment and show while *black dress* is associated with special evenings and *white dress* is with wedding.

4.3.2.2.3 "*Red* in collocation with human noun phrases"

Table 4.3.7 below displays *red* collocates in collocation with human nouns. Unlike what has been discovered in the investigations of *black* and *white* whose noun collocates related to humans constitutes a big group of nouns, the result of *red* examination only yields three *red* collocates. These are *red Indian*, *red Indians*, and *red queen*. Additionally, they all have very low frequency of occurrence, not even 0.50 instances per million words. That means they occur less than 50 times across the BNC containing 100 million words.

Table 4.3.7 Collocates of *red* in collocation with human noun phrases

Collocates	Total Occurrences	Frequency (instances per million words)
red indian	35	0.36
red indians	24	0.24
red queen	22	0.22

The figures in Table 4.3.7 indicate that the uses of these three phrases are very limited in British English. The results may become otherwise if an American corpus (e.g. COCA) is studied, particularly in the cases of *red Indian(s)* which refer to Native Americans. Out of these three phrases, *red queen* cannot be included in the discussion as all of its 22 instances display the use of it as a proper noun referring to the evil *Red*

Queen, a character in *Snow White* and *Alice in the Wonderland*. Hence, only *red Indian(s)* will be investigated.

4.3.2.2.3.1 *Red* Indian(s)

Both phrases are found written with capital letters (91.43% for *Red Indian* and 91.66% for *Red Indians*). The top collocate for *Red Indian* is the word *like*, which shows the typical pattern of use of the phrase. That is, *Red Indian* is used for a comparative purpose in texts. To illustrate, the phrase *Red Indian* is used to compare with something or some actions e.g. *whooping like a Red Indian* (concordance line 1) or *his skin was like a Red Indian* (line 2), *a war dance like a Red Indian* (line 3). This comparison is accompanied with a number of negative lexical items e.g. *weathered, cruel* (line 2), *quickly intervened* (line 3), *bloody, mischief* (line 4). In a way, all of these collocates show that being like a *Red Indian* is a not positive thing to be and this relates to the issue of racial discrimination.

(1)	with delight as I ran up and down, whooping like a	**Red Indian**	. This became tiring, so I called a halt and suggested
(2)	at her, and she saw that his skin was like a	**Red Indian**	's, incredibly weathered, his eyes red-raw, his mouth cruel
(3)	and howling. One of them broke into a wardance like a	**Red Indian**	and the others followed suit, but their captain quickly intervened.
(4)	You're whippin' it round between melegs like a bloody	**Red Indian**	. You'll do me a mischief afore you've finished!

The sense of racial prejudice is presented clearer in concordances (5-8) of *Red Indians*. The phrase keeps company with a number of negative lexical items e.g. *frightening, beating* (line 5), *appalling* (line 6), *ridiculous* (line 7), *offended, offensive* (line 8). Consequently, *Red Indians* projects an unfavourable tone of use which leads to discourse prosody concerning negative attitudes towards *Red Indians*.

(5)	frightening the local inhabitants of Brixton by whooping like	**red indians**	, and beating on their shields like Zulu warriors. Why do
(6)	when the future they face is too appalling. Look at the	**Red Indians**	. If you have a child, OK, you know it
(7)	types, doing ridiculous things together like dressing up as	**red Indians**	when they took a canoeing holiday. Ken enjoyed the show
(8)	that is right. They're often-- they're offended when they	**Red Indians**	isn't, aren't they? That's offensive. That

In sum, "*red* in collocation with human noun phrases" discusses only two phrases i.e. *Red Indian* and *Red Indians*. Both phrases are used as a comparison of something to Native Americans which in a way present a sense of racial prejudice against these people. This leads to an unfavourable tone of use of the phrase.

4.3.3 Concluding notes

Red in collocation with four different noun groups displays different discourse prosodies. This is clearly seen in the finding of "*red* in collocation with body-part nouns." The pragmatic meanings in this collocation, which are prominently associated with emotions, tend to be shifted between positive and negative depending on each collocate co-occurring with the colour term *red*. Other collocations of *red* i.e. figurative, clothing (except *red dress*), and human noun phrases present more unfavourable than favourable tone of use. This clearly shows that the connotative property of *red* is inherent in its collocates, not in itself.

The next chapter synthesizes the findings from *black*, *white* and *red*. It discusses similarities and differences of the findings found in this study in comparison to those of previous studies.

Chapter V

Discussion and conclusion

5.0 Introduction

This final chapter discusses (1) Summary and discussion of findings which synthesize the results and analyse them in relation to those of previous studies; and (2) Limitations and further studies which explain the obstacles in doing this research and other study areas where the colour terms can be examined.

5.1 Summary and discussion of findings

5.1.1. As a corpus-based study

The three English colour terms – *black, white*, and *red* are selected for this study because they are found to occur in the list of the 100 most frequently used adjectives in BNC. The corpus findings have shown that they are frequent because they are used figuratively and non-figuratively. Both types of use, demonstrated through the corpus data, express discourse prosodies of each colour term phrase.

The corpus data play an essential role in filling out the obvious gaps from previous studies by Wyler (1992) and Allan (2009). Those studies are introspection-based and rely upon intuition, not empirical evidence. This means that the data presented in their studies are unobservable as they are not shown to occur in authentic contexts. Also, their intuitions about the features of the English colour terms can be wrong, as there are no supports by evidence from authentic uses. In contrast, this study uses corpus findings to complement and refute previous studies. Being corpus-based, this research is empirical in nature i.e. it examines the meanings and functions of the colour terms from authentic data. This means that the intuitive observations about the colur terms are checked against the corpus data. Moreover, the claims made in this research are based on the way the colour terms are actually used, and thus make them verifiable since the data from natural texts are observable.

5.1.2 Similarities and differences of findings in relation to previous studies

The use of corpus data enables this research to make two significant constributions in contrast to those of previous studies i.e. (1) the contribution on connotative properties of the colour terms and (2) the contribution on the non-figurative use of the colour terms.

5.1.2.1 Connotative properties of the colour terms

Both Wyler (1992) and Allan (2009) suggested that connotations of the color terms such as *black*, *white* and *red* are the properties of the terms themselves, i.e. they have a tendency to be either positive or negative in their figurative use. This study argues with the support from corpus findings that their connotative properties in fact tie strongly to their collocational patterns with other lexical items. In other words, the connotative properties materialize in phrases not in individual colour terms. This is shown in the four most evident groups of collocations of the three colour terms in question i.e. (1) colour terms in collocation with figurative noun phrases; (2) colour terms in collocation with humans noun phrases; (3) colour terms in collocation with clothing noun phrases; and (4) colour terms in collocation with body-part noun phrases. These four groups are summarized into two categories i.e. figurative use, containing group (1) only; and the non-figurative use, encompassing groups (2-4).

5.1.2.1.1 Colour terms in collocation with figurative noun phrases

Both Wyler (1992) and Allan (2009) pay particular attention to figurative use of colour terms. They suggest that each colour term is attached with connotative properties e.g. *black* is marked with negative connotation, *white* and *red* can both be positive or negative. However, based on corpus findings, this study found that colour terms in figurative use cannot be assigned a fixed property of conveying either positive or negative meanings. Its figurative meaning is in fact realized through its co-occurrence with other lexical items. This claim is supported by the findings of the three colour terms in figurative use as follows:

Black phrases in figurative use tend to contain negative discourse prosodies describing various things. *Black hole(s),* for example, denotes the sense of difficulty, problems, hardship, or despair. *Black box* concerns mystery or the unknown, *black sheep* describes someone who is misfit to their group. *Black magic*, *black arts* are used unfavourably to refer to the dark arts which can do harmful things. *Black humour* and *black comedy* in the BNC are used to show adversities which make the phrases are also negative. As a result, *black* in these phrases signifies darkness or evil deeds (cf. Allan 2009).

White phrases in figurative use are the opposite to those of *black*. That is they tend to have positive discourse prosodies describing various things. *White paper* concerns official and important paper. *White collar* describes workers with better skills and work conditions. *White heat* and *white hot* represents something new and special. *White knight* is a hero, especially in a business crisis. Still, this positive discourse prosody is not hegemonic as a number of phrases portray negative discourse prosodies and are used in unfavourable situations. *White flag*, for example, refers to an acknowledgement of defeat, particularly in political context. *White elephant* describes costly but useless items, while *white noise* concerns disturbances of a sound.

Red phrases in figurative use tend to have more phrases with negative discourse prosodies than the ones with positive discourse prosodies. *Red light* refers to workplace for prostitutes when collocating with *district/area*. *Red tape* associates with bureaucracy and denotes inefficiency. *Red card* is a signal of punishment or exclusion. *Red herring(s)* concerns distracting or misleading information. *Red flag* symbolizes revolution or a sign of danger. *Red* phrases which are used in pleasant situations are *red hot* referring to someone or something very popular or exciting, *red carpet* describes special treatment for special guests, and *red alert* concerns the state of being ready for unpleasant situations. These three *red* phrases are used in positive linguistic environments and contain positive discourse prosodies.

The findings about the pragmatic meanings of each colour terms in figurative use correspond to those observed in the previous studies e.g. Wyler (1992), or Allan (2009). But, as mentioned earlier, the difference lies in the corpus findings which

show that the colour terms themselves are not connotative and do not retain discourse prosodies without their co-occurrences. As a matter of fact, these prosodies are not the property of the colour term itself, but of the lexical items co-occurring with it.

5.1.2.2. The non-figurative use of the colour terms

Another major contribution this study makes to previous studies lies in its findings in the non-figurative category. Previous studies tend to focus on figurative use of English colour terms and their pragmatic implications. They hardly discuss the non-figurative use of the colour terms. This research argues that pragmatic meanings or discourse prosodies of English colour terms can also extend to non-figurative use. In fact, the non-figurative category makes a substantial part of findings in this study as it covers three out of four noun groups of collocations of the colour term in questions i.e. human nouns, clothing nouns, and body part nouns. Each one is discussed in turn.

5.1.2.2.1 Colour terms in collocation with human noun phrases

While Wyler (1992) does not mention the aspect of colour terms in relation to races, Allan (2009: 626, 628) mentions briefly that colour terms can be applied to races. According to Allan, *black* has often been used dysphemistically or offensively as racial term. Also, as part of racism, to be a *white man* was to be honourable and square dealing, particularly in the US. Moreover, with negative attitudes towards Native Americans, the term *Red Indians* is used dysphymistically.

The corpus findings of colour terms in human noun phrases in this study go in the same direction as those of Allan in a way that similar senses of use are found. However, this present study show more details of use particularly more phrases in this noun group are found and discussed. The corpus findings are summarized below.

The colour terms and their human noun collocates share one thing in common i.e. they are associated with races, more specifically with racial discrimination. *Black* has the biggest group of human noun collocates and presents very strong sense of racial discrimination. The very top collocates of *black* in this group are *black people,*

black women, black man, black community, black children, and *black kids*. All of these phrases, except *black kids* are used in unpleaseant linguistic environments and express evident discourse prosodies concerning racial prejudice against black people. This issue of discrimination, as shown in concordances of each phrases is displayed through violence, aggression, unemployment, and impoverishment. *Black kids* is the only phrase in this group which has a different tone of use. That is, it contains a positive discourse prosody describing the endeavor of *black kids* who seek to make free from discrimination.

White in human noun phrases presents a different feature to that of *black*. That is, it is used as a description of aspects of relations between white people and other races e.g. black and ethnic minorities. This is seen in the findings of the most frequent phrases e.g. *white man*, *white people* as well as in the less frequent phrases e.g. *white women*, *white workers*, and *white areas*. All these phrases share one common collocate i.e. *black* which is used as a key marker of relation description, particularly between white and black people. *White population* is found to be used to describe white people in relation to ethnic minorities e.g. Asians. Within the context of such description, the issue of racial discrimination is touched upon.

Red in human noun phrases has the least number of collocates, compared to those of *black* and *white*. This is because the two *red* phrases discussed in this group i.e. *Red Indian* and *Red Indians* refer to Native Americans. Hence, their uses in the BNC which represents British English are fairly limited. Both phrases are used to compare something or someone with Native Americans. In a way, this particular use presents a sense of racial discrimination against these people which leads to negative discourse prosodies of both phrases.

5.1.2.2.2 Colour terms in collocation with clothing noun phrases

The colour terms in clothing noun phrases are discussed minimally and sporadically by Allan (2009), while Wyler (1992) only mentions it in passing. According to Allan (ibid: 627), *black* is viewed positively in the phrases *black tie* event for formal social gathering, *little black dress* for a simple, elegant black dress,

black-coat for clergyman. For Wyler, he mentions that *black* can be viewed as the colour of elegance, of dressing or festive season, but, according to Wyler (ibid: 158) there is only a few collocations being used for this sense of meaning.

While previous studies pay only little attention to colour terms in clothing noun phrases, this study discovers from the corpus data that colour terms are used significantly with their clothing noun collocates and present evidently clear and distinctive pragmatic meanings or discourse prosodies. Most importantly, these discourse prosodies of the three colours are dominantly positive. That is, particular phrases in this group can relate to specific functions of different colours and types of clothes, and especially to the way they are used.

For example, *black* in this group has the word *dress* as its top collocate. In fact, *dress* also co-occurs significantly with *white* and *red*. Thus, it is discussed in relation to the three colour terms. *Black dress* occurs most frequently with *little* and becomes *little black dress*. Concordance analysis of the phrase shows that it refers to a simple and elegant dress for special occasions e.g. evenings. It is clearly used in positive environment and has a discourse prosody concerning elegance. Similarly to *black dress*, *white dress* expresses a positive discourse prosody describing elegance and beauty. This is also the case for *red dress* which presents a positive prosodic profile describing elegance.

These three colour dresses describes the same qualities i.e. elegance and beauty because they share what Partington (1991) terms "group preference" referring to the same group of semantic preference. For example, group of beauty and attraction e.g. *neat, perfect, beautiful, attractive, gorgeous, stunning*, and *striking*. The three colour dresses are also associated with different special occasions i.e. *black dress* for evenings, *white dress* for wedding, and *red dress* for entertainment and show e.g. dancing.

Other phrases of *black* in this noun group contain prominent and positive pragmatic meanings. For example, *black silk* concerns beautiful dressing, *black shoes, black suit, black coat, black hat*, and *black tie* describe formality or being part of a

uniform. All of these show positive discourse prosodies of all *black* phrases in this noun group.

White in clothing noun phrases form the biggest group of all *white* collocates. This shows that *white* is used frequently and commonly being the colour of different kinds of clothes. In terms of the pragmatic meanings, concordance analysis demonstrates that a number of *white* phrases in this group signifies formality as part of a uniform e.g. *white shirt, white coat, white blouse*, and *white gloves*. *White shirt* and *white blouse* particularly concern neatness and tidiness, while *white silk* and *white dress* describe elegance and fineness. As mentioned earlier, *white dress* is also associated with the context of wedding. *White cloth* seems to be associated with a pleasant atmosphere/environment as it co-occurs with food and dining. Again, these *white* phrases contain positive discourse prosodies and favourable sense of uses.

Red has the least collocates, compared to *black* and *white* in this group of collocation. The only strong collocate which shows evident pragmatic meaning is *red dress*. As discussed above, the phrase expresses positive discourse prosody describing elegance and beauty. Other phrases of *red* in this noun group are used purely descriptive e.g. *red silk, red shoes, red coat, red jacket* etc. Also, these phrases have low occurrences in the BNC. Hence, they do not present enough evidence to generalise their specific characteristics.

5.1.2.2.3 Colour terms in collocation with body-part noun phrases

Again, colour terms and their collocates in this noun group are given little attention by Wyler (1992) and Allan (2009). This is because they tend to look at the phrases from figurative perspective. For example, Wyler (ibid: 159) mentions that *white* gives clearly negative value with expressions e.g. *white-lipped, white-lips* for being filled with anger, *white-livered* for cowardice. Allan (ibid: 631) states that people are described as *red-faced* with embarrassment or anger, while *red-neck* is an ill-educated bigot.

This study argues for the non-figurative use of colour terms in body part noun phrases in that as they are used literally, they also present strong pragmatic meanings

or discourse prosodies. Most importantly, these discourse prosodies are not all negative, as suggested above by Wyler and Allan. Instead, the colour terms and their body-part nouns share a common feature i.e. they present apparent mix of pragmatic meanings i.e. both positive and negative discourse prosodies depending on their collocations. This feature corresponds with what Hunston (2007) proposes i.e. the prosody of a node word/phrase can shift if its immediate phraseology changes, which at the same time endorses the argument of this research in that the pragmatic meaning is influenced by the occurrences of a linguistic item with other lexical items.

Black's top collocates in this noun group are *black hair* and *black eye(s)*. *Black hair* has a discourse prosody concerning beauty of *black hair*, as seen through its typical collocates e.g. *beautiful, good-looking, enchanting, fine* etc. However, it projects negative discourse prosody when collocating with *dyed* and *greasy* and presents unfavourable tone of use. *Black eye(s)* in literal use associate with negative feelings e.g. fury, hatred, and frustration. When they are used figuratively, they connote the meaning of eye's injury.

White's top collocates in this noun group are *white face, white hair*, and *white teeth*. *White face* relates strongly to the negative feelings of fear and terror and does indicate unfavourable tone of use. *White hair* is used rather descriptively, but partially it expresses a positive discourse prosody concerning good old age. *White teeth* is used positively to refer to a good and strong set of teeth. Other phrases of *white* in this noun group e.g. *white beard* and *white skin* are not so prominent. *White beard* is used descriptively and tend to go together with *white hair*. *White skin* is used in a favourable environment to describe a preferable skin.

Red in body part phrases show explicit association with emotions. Its most frequent phrases are *red hair* and *red face(s)*. They both connect to rage and express negative discourse prosodies when collocating with lexical items relating to anger and fury. However, their discourse prosodies become positive when collocating with items concerning beauty and attraction in the case of *red hair* and cheerfulness in the case of *red face(s)*. Other phrases of *red* in this noun group also relates to emotions. For

example, *red eyes* to grief and madness when it is used in association with human nouns, and *red lips* to sensuality.

The discussion above has shown that the corpus findings from this present study, to a large extent, refute those of previous studies particularly on the connotative properties of the colour terms and the pragmatic meanings of the colour terms in non-figurative use. Nevertheless, some of the findings support those of previous studies especially on the sense of meanings of the colour term phrases used in figurative category.

5.2 Limitations of the study

There are a number of limitations in doing this study. Firstly, the work of concordance reading and analysis is rather tedious. As a matter of fact, the acquisition of practical skills of reading and interpreting concordances is needed along with the exposition of theory. It is a sort of recurrent task that requires the researcher to keep looking for salient features, some of which are easily recognized, but some can be rather subtle.

Secondly, the notion of discourse prosody is not straightforward. This is because a lexical item can display different behaviours when collocating with other items or occurring in different text domain. Moreover, discourse prosody is a pragmatic and/or functional aspect of language rather than a formal one. Hence, its identification can vary according to analysts' interpretation. Again, such subtlety of discourse prosody requires some training skills before it can be comprehensive.

Finally, another corpus may be required. As mentioned in some of the findings, especially in the part of *red*, the amount of data for some colour term phrases are not sufficient which make it difficult to capture specific features or characteristics of the phrases in question. Hence, if there were a supplemental data from other corpora, the process of analysis could be more complete. Moreover, the data for analysis taken from the BNC can be checked against other corpora. This is because, as suggested by Hunston (2002: 23), conclusions or statements about language drawn from a corpus should be treated as deductions, not as facts. In other

words, what is claimed about evidence in a corpus is considered a statement about that corpus, not about the language or register of which the corpus is a sample. In actual fact, this can be a limitation of any corpus-based study which needs to check its data against another source in order to verify and validate the claims made in the study.

5.3 Further studies

As the most frequently used colour term adjectives in the BNC, *black*, *white*, and *red* can be taken to study in many areas. For example, they can be the subjects of study using a corpus (or corpora) of literary texts. That is, particular novels or short stories may be selected for an analysis of the use of the colour terms to see whether they portray any typical features if they are only used in the text domain of Imaginative prose. Their uses can also be examined in other specific text domains e.g. Science or Commerce. The findings can be taken to compare to those from Imaginative prose.

The colour terms can also be investigated in an American corpus e.g. COCA, representing American English and in a British corpus e.g. the BNC or the Bank of English, representing British English. This is in order that the uses of colour terms in these two varieties of English can be compared. The colour terms can also be the subject of translation studies e.g. the use of these three colour terms under the notion of discourse prosody in Thai-English translation, or vice versa.

As discussed in the limitations of this study, colour terms can be looked at in other corpora e.g. the Bank of English by applying a similar framework to this study. The findings may be different to those drawn from the BNC and other possible claims or statements about the use of colour terms may be made.

5.4 Concluding remarks

The authentic corpus data of the three English colour terms *black, white* and *red* has revealed that these terms are used frequently as adjectives particularly in British English because they are found to contain pragmatic meanings in their both

figurative and non-figurative uses. The corpus data has also enabled this study to make two major contributions in terms of those uses. First, the pragmatic meaning or discourse prosody of English colour terms is realized through the repeated co-occurrence patterns between each colour term itself and a lexical item. Together as a phrase, they express a specific evaluative meaning. This pragmatic meaning can change if its collocation changes. This applies well with the discovery of this study in that the connotative properties of the colour terms are inherent in themselves when occurring alone. Second, the pragmatic meaning of English colour terms is not restricted only to their figurative use, but also extends to the non-figurative use which has not been addressed adequately by previous studies.

References

Allan, K. (2009). "The connotations of English colour terms: Colour-based X-phemisms" *Journal of Pragmatics* 41(3): 626-637.

Ariel, M. (2002). "The demise of a unique concept of literal meaning." *Journal of Pragmatics* 34: 361-402.

Baker, P. (2006). *Using Corpora in Discourse Analysis*. London: Continuum.

Berlin, B and Kay, P. (1969). *Basic Color Terms: Their Universality and Evolution*. Berkeley: University of California Press.

Biber, D. Johansson, S., Leech, G., Conrad, S. and Finegan, E. (1999). *Longman Grammar of Spoken and Written English*. Harlow: Pearson Education.

Biber, D. Conrad, S. and Reppen, R. (1998). *Corpus Linguistics: Investigating Language Structure and Use*. Cambridge: Cambridge University Press.

Bloomfield, L. (1933). *Language*. New York: Holt, Rinehart and Winston.

Cambridge Advanced Learner's Dictionary-online. Cambridge University Press.

URL: http://dictionary.cambridge.org

Collins Cobuild Advanced Learner's English Dictionary (2006) Glasgow: HarperCollins.

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

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

Hunston, S. (2002). *Corpora in Applied Linguistics*. Cambridge: Cambridge UP.

Hunston, S. (2007). "Semantic prosody revisited", *International Journal of Corpus Linguistics* 12(2): 249-268.

Israel, M. (2002). "*Literally* speaking." *Journal of Pragmatics* 34: 423-432.

Leech, G. (1981). *Semantics: The Study of Meaning*. Middlesex: Penguin Books.

Leech, G. (1991). "The State of the art in corpus linguistics." In Aijmer and Altenberg (eds.), 8-29.

Leech, G., Rayson, P. and Wilson, A. (2001). *Word Frequencies in Written and Spoken English.* London: Pearson Education Limited.

Louw, B. (1993). "Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies." In Baker, M., Francis, G. and Tognini-Bonelli, E. (eds), *Text and Technology: In Honour of John Sinclair*. Amsterdam: John Benjamins, pp. 157-175.

Lucy, J. (1996). "The linguistics of color." In Hardin, C. and Maffi, L. (eds), *Color Categories in Thought and Language*, Cambridge: Cambridge University Press.

Mahlberg, M. (2007). "Lexical items in discourse: identifying local textual functions of sustainable development." In Mahlberg, M. and Teubert, W.(eds), *Text, Discourse and Corpora: Theory and Analysis*, London: Continuum.

Murphy, M.L. (2010). *Lexical Meaning*. Cambridge: Cambridge University Press.

McEnery, T. and Wilson, A. (2001). *Corpus Linguistics*. Edinburgh: Edinburgh University Press

Partington, A. (1998). *Patterns and Meanings*. Amsterdam: John Benjamins.

Partington, A. (2004). "Utterly content in each other's company: semantic prosody and semantic preference." *International Journal of Corpus Linguistics* 9(1): 131-156.

Phrases in English (PIE). URL: http://phrasesinenglish.org/.

Quirk, R.S., Greenbaum, S., Leech, G. and Svartvik, J. (1985). *A Comprehensive Grammar of the English Language*. Harlow: Longman.

Ruhlemann, C. (2010). "What can a corpus tell us about pragmatics?" In O'Keeffe, A. and McCarthy, M. (eds) *The Routledge Handbook of Corpus Linguistics*, Abingdon: Routledge.

Sahlins, M. 1976. "Colors and Cultures": *Semiotica* 16(1): 1-22.

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

Sinclair, J. (2003). *Reading Concordances*. London: Pearson Education

Sinclair, J. (2004) "The search for units of meaning" in J. Sinclair. *Trust the Text*. London: Routledge, pp. 24-48.

Steinvall, A. (2002). *English Colour Terms in Context*. Omslag: Magnus Olofsson.

Stewart, D. (2010). *Semantic Prosody: A Critical Evaluation*. London: Routledge.

Stubbs, M. (1996). *Text and Corpus Analysis*. Oxford: Blackwell.

Stubbs, M. (2001). "Texts, corpora and problems of interpretation." *Applied Linguistcs* 22(2): 149-72.

Stubbs, M. (2002). *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

Susan-Philip, G. "Collocation and Connotation: A Corpus-Based Investigation of Colour Words In English and Italian," PhD's Dissertation, School of English, The University of Birmingham, 2003.

The British National Corpus (BNCweb CQP Edition). Distributed by Oxford University Computing Services on behalf of the BNC Consortium. URL: http://bncweb.lancs.ac.uk/

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

Wierzbicka, A. (1990). "The Meaning of Colour Terms: Semantics, Culture, and Cognition." *Cognitive Linguistics* 10(2): 353-389.

Wyler, S. (1992). *Colour and Language: Colour Terms in English*. Tubingen: Gunter Narr, Germany.

Appendix A: The 100 most frequently-used adjectives in the BNC

Sequence	Adjective	Frequency (per million words)	Sequence	Adjective	Frequency (per millon words)
1	other	1336	51	easy	198
2	good	1276	52	strong	197
3	new	1154	53	european	195
4	old	648	54	central	193
5	great	635	55	similar	184
6	high	574	56	human	183
7	small	518	57	true	183
8	different	484	58	common	182
9	large	471	59	necessary	181
10	local	445	60	single	177
11	social	422	61	personal	176
12	important	392	62	hard	176
13	long	392	63	private	173
14	young	379	64	poor	166
15	national	376	65	financial	165
16	british	357	66	wide	165
17	right	354	67	foreign	161
18	early	353	68	simple	159
19	possible	342	69	recent	158
20	big	338	70	concerned	158
21	little	306	71	american	157
22	political	306	72	various	155
23	able	304	73	close	154
24	late	302	74	fine	150
25	general	301	75	english	150
26	full	289	76	wrong	149
27	far	288	77	present	148
28	low	286	78	royal	147
29	public	285	79	natural	142
30	available	272	80	individual	136
31	bad	264	81	nice	134
32	main	245	82	french	134
33	sure	241	83	following	134
34	clear	239	84	current	133
35	major	238	85	modern	131
36	economic	236	86	labour	131
37	only	231	87	legal	131
38	likely	228	88	happy	129
39	real	227	89	final	129
40	**black**	226	90	**red**	126
41	particular	223	91	normal	124
42	international	221	92	serious	124
43	special	220	93	previous	123
44	difficult	220	94	total	122
45	certain	220	95	prime	121
46	open	219	96	significant	121
47	whole	216	97	industrial	116
48	**white**	207	98	sorry	115
49	free	200	99	dead	114
50	short	198	100	specific	113

(cf. Leech *et al*, 2001: pp. 286-287)

APPENDIX B: THE MOST FREQUENT COLLOCATES OF *BLACK* IN PIE

Displaying 2-grams

Minimum frequency 20
First item   1
Chunk size   1,000
Order   descending frequency
Word 1   black
POS 1   AJ?

Showing 139 items, 1-139 of 139 matching this query
- Click on any item to display a random set of up to 50 concordances from the corpus.
- Put cursor over PoS-gram for explanation.

☐   Interactive concordance *(Internet Explorer only)*

☐   Match PoS in concordances

black and	1806	AJ0 CJC
black hole	537	AJ0 NN1
black people	482	AJ0 NN0
black hair	466	AJ0 NN1
black holes	258	AJ0 NN2
black eyes	204	AJ0 NN2
black or	193	AJ0 CJC
black women	191	AJ0 NN2
black pepper	168	AJ0 NN1
black man	166	AJ0 NN1
black market	158	AJ0 NN1
black leather	151	AJ0 NN1
black with	137	AJ0 PRP
black community	129	AJ0 NN1
black children	116	AJ0 NN2
black kids	115	AJ0 NN2
black dress	113	AJ0 NN1
black box	108	AJ0 NN1
black sheep	103	AJ0 NN0

black prince	97	AJ0 NN1
black coffee	96	AJ0 NN1
black as	93	AJ0 CJS
black one	84	AJ0 PNI
black velvet	81	AJ0 NN1
black dog	77	AJ0 NN1
black youth	76	AJ0 NN1
black eye	75	AJ0 NN1
black death	74	AJ0 NN1
black men	72	AJ0 NN2
black forest	71	AJ0 NN1
black cat	68	AJ0 NN1
black silk	67	AJ0 NN1
black workers	67	AJ0 NN2
black woman	65	AJ0 NN1
black sportsmen	64	AJ0 NN2
black country	63	AJ0 NN1
black population	61	AJ0 NN1
black &	60	AJ0 CJC
black wednesday	60	AJ0 NP0
black in	59	AJ0 PRP
black shoes	59	AJ0 NN2
black communities	57	AJ0 NN2
black plastic	57	AJ0 NN1
black hat	53	AJ0 NN1
black smoke	52	AJ0 NN1
black child	48	AJ0 NN1
black comedy	48	AJ0 NN1
black car	46	AJ0 NN1
black coat	46	AJ0 NN1
black horse	46	AJ0 NN1
black music	46	AJ0 NN1
black pupils	45	AJ0 NN2
black tie	45	AJ0 NN1
black lace	44	AJ0 NN1

black line	44	AJ0 NN1		black jeans	32	AJ0 NN2
black magic	44	AJ0 NN1		black leaders	32	AJ0 NN2
black mark	44	AJ0 NN1		black youths	32	AJ0 NN2
black book	43	AJ0 NN1		black cloak	31	AJ0 NN1
black economy	43	AJ0 NN1		black african	30	AJ0 AJ0
black report	43	AJ0 NN1		black power	30	AJ0 NN1
black skirt	43	AJ0 NN1		black orcs	29	AJ0 NP0
black spot	43	AJ0 NN1		black pudding	29	AJ0 NN1
black ink	42	AJ0 NN1		black guy	28	AJ0 NN1
black beard	41	AJ0 NN1		black family	27	AJ0 NN1
black cloud	41	AJ0 NN1		black ones	27	AJ0 NN2
black south	41	AJ0 NP0		black panthers	27	AJ0 NN2
black families	40	AJ0 NN2		black skin	27	AJ0 NN1
black american	39	AJ0 AJ0		black bread	26	AJ0 NN1
black for	39	AJ0 PRP		black cloth	26	AJ0 NN1
black face	38	AJ0 NN1		black dwarf	26	AJ0 NN1
black girl	38	AJ0 NN1		black paint	26	AJ0 NN1
black label	38	AJ0 NN1		black parents	26	AJ0 NN2
black students	38	AJ0 NN2		black water	26	AJ0 NN1
black watch	37	AJ0 NN1		black widow	26	AJ0 NN1
black bag	36	AJ0 NN1		black boxes	25	AJ0 NN2
black olives	35	AJ0 NN2		black brows	25	AJ0 NN2
black person	35	AJ0 NN1		black head	25	AJ0 NN1
black spots	35	AJ0 NN2		black to	25	AJ0 TO0
black suit	35	AJ0 NN1		black but	24	AJ0 CJC
black americans	34	AJ0 NN2		black cotton	24	AJ0 NN1
black boots	34	AJ0 NN2		black lashes	24	AJ0 NN2
black jacket	34	AJ0 NN1		black majority	24	AJ0 NN1
black trousers	34	AJ0 NN2		black moustache	24	AJ0 NN1
black boy	33	AJ0 NN1		black humour	23	AJ0 NN1
black british	33	AJ0 AJ0		black night	23	AJ0 NN1
black on	33	AJ0 PRP		black players	23	AJ0 NN2
black shirt	33	AJ0 NN1		black arts	22	AJ0 NN2
black stockings	33	AJ0 NN2		black flag	22	AJ0 NN1
black against	32	AJ0 PRP		black lines	22	AJ0 NN2
black belt	32	AJ0 NN1		black magic	22	AJ0 AJ0
black clouds	32	AJ0 NN2		black speakers	22	AJ0 NN2

black swan	22	AJ0 NN1
black body	21	AJ0 NN1
black cap	21	AJ0 NN1
black patch	21	AJ0 NN1
black shadow	21	AJ0 NN1
black townships	21	AJ0 NN2

black cab	20	AJ0 NN1
black cattle	20	AJ0 NN2
black clothes	20	AJ0 NN2
black fire	20	AJ0 NN1
black tights	20	AJ0 NN2

APPENDIX C: THE MOST FREQUENT COLLOCATES OF *WHITE* IN PIE

Displaying 2-grams

Minimum frequency 20
First item   1
Chunk size   1,000
Order   descending frequency
Word 1   white
POS 1   AJ?

Showing 144 items, 1-144 of 144
matching this query
- Click on any item to display a random set of up to 50 concordances from the corpus.
- Put cursor over PoS-gram for explanation.

☐   Interactive concordance *(Internet Explorer only)*
☐   Match PoS in concordances

white paper	1106	AJ0 NN1
white and	719	AJ0 CJC
white wine	271	AJ0 NN1
white man	200	AJ0 NN1
white shirt	192	AJ0 NN1
white with	175	AJ0 PRP
white people	148	AJ0 NN0
white or	144	AJ0 CJC
white face	143	AJ0 NN1
white coat	128	AJ0 NN1
white collar	127	AJ0 NN1
white hair	126	AJ0 NN1
white horse	121	AJ0 NN1
white men	118	AJ0 NN2
white water	118	AJ0 NN1
white as	115	AJ0 CJS
white teeth	114	AJ0 NN2
white one	109	AJ0 PNI
white in	88	AJ0 PRP

white flowers	87	AJ0 NN2
white marble	84	AJ0 NN1
white cotton	80	AJ0 NN1
white silk	77	AJ0 NN1
white light	73	AJ0 NN1
white bread	71	AJ0 NN1
white papers	69	AJ0 NN2
white walls	69	AJ0 NN2
white dress	68	AJ0 NN1
white women	67	AJ0 NN2
white blood	66	AJ0 NN1
white line	64	AJ0 NN1
white cloth	58	AJ0 NN1
white linen	58	AJ0 NN1
white sand	58	AJ0 NN1
white ones	57	AJ0 NN2
white population	55	AJ0 NN1
white blouse	53	AJ0 NN1
white on	53	AJ0 PRP
white woman	52	AJ0 NN1
white flag	49	AJ0 NN1
white house	48	AJ0 NN1
white paint	47	AJ0 NN1
white plastic	47	AJ0 NN1
white lines	46	AJ0 NN2
white rose	46	AJ0 NN1
white coats	45	AJ0 NN2
white spirit	41	AJ0 NN1
white satin	40	AJ0 NN1
white gloves	39	AJ0 NN2
white trousers	39	AJ0 NN2
white chocolate	38	AJ0 NN1
white clouds	38	AJ0 NN2
white lace	38	AJ0 NN1
white socks	38	AJ0 NN2
white tower	38	AJ0 NN1

white cliffs	37	AJ0 NN2	white holes	27	AJ0 NN2
white spot	37	AJ0 NN1	white minority	27	AJ0 NN1
white t-shirt	37	AJ0 NN1	white sheet	27	AJ0 NN1
white cells	36	AJ0 NN2	white to	27	AJ0 TO0
white elephant	36	AJ0 NN1	white as	26	AJ0 PRP
white heat	36	AJ0 NN1	white car	26	AJ0 NN1
white powder	36	AJ0 NN1	white card	26	AJ0 NN1
white striped	36	AJ0 AJ0	white fur	26	AJ0 NN1
white clover	35	AJ0 NN1	white hand	26	AJ0 NN1
white beard	34	AJ0 NN1	white horses	26	AJ0 NN2
white city	34	AJ0 NN1	white shirts	26	AJ0 NN2
white cross	34	AJ0 NN1	white tie	26	AJ0 NN1
white girl	34	AJ0 NN1	white workers	26	AJ0 NN2
white hot	34	AJ0 AJ0	white areas	25	AJ0 NN2
white park	34	AJ0 NN1	white boy	25	AJ0 NN1
white patch	34	AJ0 NN1	white person	25	AJ0 NN1
white spots	34	AJ0 NN2	white settlers	25	AJ0 NN2
white stone	34	AJ0 NN1	white van	25	AJ0 NN1
white apron	33	AJ0 NN1	white christmas	24	AJ0 NN1
white fish	33	AJ0 NN0	white handkerchief	24	AJ0 NN1
white skin	33	AJ0 NN1	white rump	24	AJ0 NN1
white flour	32	AJ0 NN1	white south	24	AJ0 NP0
white hole	32	AJ0 NN1	white star	24	AJ0 NN1
white stripes	31	AJ0 NN2	white china	23	AJ0 NN1
white background	30	AJ0 NN1	white head	23	AJ0 NN1
white for	30	AJ0 PRP	white icing	23	AJ0 NN1
white wines	30	AJ0 NN2	white knight	23	AJ0 NN1
white worm	30	AJ0 NN1	white patches	23	AJ0 NN2
white metal	29	AJ0 NN1	white room	23	AJ0 NN1
white cloud	28	AJ0 NN1	white white	23	AJ0 AJ0
white dwarf	28	AJ0 NN1	white wing-bar	23	AJ0 NN1
white fondant	28	AJ0 NN1	white but	22	AJ0 CJC
white noise	28	AJ0 NN1	white cat	22	AJ0 NN1
white photographs	28	AJ0 NN2	white chalk	22	AJ0 NN1
white rabbit	28	AJ0 NN1	white faces	22	AJ0 NN2
white society	28	AJ0 NN1	white jacket	22	AJ0 NN1
white cell	27	AJ0 NN1	white label	22	AJ0 NN1

white of	22	AJ0 PRF
white roses	22	AJ0 NN2
white sheets	22	AJ0 NN2
white wall	22	AJ0 NN1
white community	21	AJ0 NN1
white sauce	21	AJ0 NN1
white shorts	21	AJ0 NN2
white stones	21	AJ0 NN2

white working-class	21	AJ0 AJ0
white foam	20	AJ0 NN1
white plumage	20	AJ0 NN1
white racism	20	AJ0 NN1
white sands	20	AJ0 NN2
white space	20	AJ0 NN1
white suit	20	AJ0 NN1

APPENDIX D: THE MOST FREQUENT COLLOCATES OF *RED* IN PIE

Minimum frequency 20
First item   1
Chunk size   1,000
Order   descending frequency
Word 1   red
POS 1   AJ?

Showing 90 items, 1-90 of 90 matching this query
- *Click on any item to display a random set of up to 50 concordances from the corpus.*
- *Put cursor over PoS-gram for explanation.*

☐   Interactive concordance *(Internet Explorer only)*
☐   Match PoS in concordances

red and	587	AJ0 CJC
red cross	453	AJ0 NN1
red wine	223	AJ0 NN1
red hair	221	AJ0 NN1
red light	196	AJ0 NN1
red army	194	AJ0 NN1
red tape	161	AJ0 NN1
red hot	132	AJ0 AJ0
red brick	131	AJ0 NN1
red deer	110	AJ0 NN0
red blood	100	AJ0 NN1
red or	99	AJ0 CJC
red one	95	AJ0 PNI
red star	86	AJ0 NN1
red rose	83	AJ0 NN1
red in	77	AJ0 PRP
red lion	77	AJ0 NN1
red roses	76	AJ0 NN2
red with	72	AJ0 PRP

red face	71	AJ0 NN1
red house	69	AJ0 NN1
red meat	67	AJ0 NN1
red card	65	AJ0 NN1
red eyes	62	AJ0 NN2
red pepper	62	AJ0 NN1
red lights	61	AJ0 NN2
red flag	56	AJ0 NN1
red herring	56	AJ0 NN0
red velvet	56	AJ0 NN1
red sandstone	53	AJ0 NN1
red cell	52	AJ0 NN1
red line	52	AJ0 NN1
red book	49	AJ0 NN1
red cells	47	AJ0 NN2
red dress	45	AJ0 NN1
red glow	45	AJ0 NN1
red as	44	AJ0 CJS
red carpet	43	AJ0 NN1
red nose	43	AJ0 NN1
red alert	42	AJ0 NN1
red hand	42	AJ0 NN1
red ink	42	AJ0 NN1
red light	42	AJ0 AJ0
red rum	40	AJ0 NN1
red colour	39	AJ0 NN1
red lips	35	AJ0 NN2
red spots	35	AJ0 NN2
red ones	34	AJ0 NN2
red silk	34	AJ0 NN1
red arrows	33	AJ0 NN2
red car	33	AJ0 NN1
red for	33	AJ0 PRP
red rhino	33	AJ0 NN0
red shift	33	AJ0 NN1
red shoes	33	AJ0 NN2

red fort	32	AJ0 NN1
red peppers	32	AJ0 NN2
red bitch	31	AJ0 NN1
red dwarf	31	AJ0 NN1
red kite	31	AJ0 NN1
red paint	31	AJ0 NN1
red stripe	30	AJ0 NN1
red riding	28	AJ0 NP0
red squirrel	28	AJ0 NN1
red ball	27	AJ0 NN1
red coat	27	AJ0 NN1
red plastic	27	AJ0 NN1
red flowers	26	AJ0 NN2
red herrings	26	AJ0 NN2
red cabbage	25	AJ0 NN1
red indians	25	AJ0 NN2
red rag	25	AJ0 NN1
red rock	25	AJ0 NN1

red button	24	AJ0 NN1
red indian	24	AJ0 AJ0
red jacket	23	AJ0 NN1
red lipstick	23	AJ0 NN1
red kidney	22	AJ0 NN1
red kites	22	AJ0 NN2
red leather	22	AJ0 NN1
red poll	22	AJ0 NN1
red queen	22	AJ0 NN1
red berries	21	AJ0 NN2
red from	21	AJ0 PRP
red hat	21	AJ0 NN1
red faces	20	AJ0 NN2
red flags	20	AJ0 NN2
red label	20	AJ0 NN1
red to	20	AJ0 PRP
red wines	20	AJ0 NN2

Vitae

Sirintorn Duangkhot was born in Phattalung. She completed her high school from Worranareechalerm School, Songkhla. She graduated with Bachelor of Social Work from Thammasat University. She also gained a Graduate Diploma in English as an International Language from International Pacific College, New Zealand.

She is now a self-employed at her own business dealing with New Zealand education. She is married and is a mother of a ten years old girl.