



INGE SWINKELS

UNUSUAL FEATURES
IN THE COLOUR CLASSIFICATION
OF MODERN IRISH



Universiteit
Leiden

ABSTRACT

In this thesis I investigate the unusual features found in the Modern Irish colour classification system, relative to features of colour naming found in other languages. Within the Indo-European language family, the Celtic languages are the only ones that have a grue category, which means there is one colour term denoting both green and blue, rather than distinct terms that express both these categories. In Irish, however, there is a term for grue, plus two additional terms for green and blue. This is not just a feature unattested in IE languages, it is an anomaly worldwide as well. Other dissimilarities with IE languages include the basic referents of colour terms when describing humans: in many languages, colour terms refer to complexion, but in Irish this is haircolour. Lastly, the total number of basic colour terms of Irish is unusual as well: despite the colour lexicon being very extensive, the colour terms denoting orange, pink, purple, and brown, are considered non-basic or secondary terms.

[MASTER THESIS OF INGE SWINKELS] [THEORETICAL LINGUISTICS
AND COGNITION] [LEIDEN UNIVERSITY CENTRE FOR LINGUISTICS]

JUNE 2015

ACKNOWLEDGEMENTS

I would like to thank the following people for their contribution to this thesis:

My thesis supervisor Dr Eithne Carlin for her great feedback and support.

AND

My 26 informants for very patiently filling in my survey and providing me with great research material.

TABLE OF CONTENTS

| | |
|------------|---|
| i | Abstract |
| iii | Acknowledgements |
| v | Table of contents |
| vii | List of figures |
| ix | List of abbreviations |
| 1 | Introduction |
| 3 | Methodology |
| 5 | Chapter 1: Semantics of Colour: contemporary perspectives |
| 5 | 1.1 Basic colour terms |
| 6 | 1.2 Universality of basic colour terms |
| 8 | 1.3 The relativist's view |
| 9 | 1.4 Terminology and other important notions on the semantics of colour |
| 10 | 1.4.1 Dimensions of colour |
| 11 | 1.4.2 Colour categories vs colour terms |
| 12 | 1.5 Summary |
| 13 | Chapter 2: Development of the Irish language |
| 13 | 2.1 Evolution of the Irish language |
| 14 | 2.2 Borrowing and language contact |
| 14 | 2.2.1 Influence of Latin |
| 15 | 2.2.2 Influence of Old Norse |
| 17 | 2.2.3 Influence of English |
| 19 | 2.3 Current status of the Irish language |
| 22 | 2.4 Sentence structure and constituent order |
| 24 | 2.5 Summary |
| 25 | Chapter 3: Classification of the colour spectrum of Modern Irish |
| 25 | 3.1 Concise version of the dataset |
| 27 | 3.2 Etymology |
| 29 | 3.3 Analysis and notes on the classification system of Modern Irish |
| 30 | 3.3.1 Dathogham |
| 30 | 3.3.2 The status of <i>liath</i> |
| 32 | 3.3.3 The status of <i>donn</i> |
| 33 | 3.3.4 The status of <i>corcra</i> |
| 34 | 3.3.5 The GRUE category |
| 37 | 3.3.6 The DARK category |
| 38 | 3.3.7 The RED category |
| 39 | 3.3.8 Brightness vs hue and the status of <i>geal</i> |

| | |
|----|--|
| 42 | 3.3.9 Variegation |
| 43 | 3.4 Morphology: compounds and verbs |
| 47 | 3.5 Conclusion |
| 49 | Chapter 4: Unusual features in Irish colour classification |
| 50 | 4.1 Basic colour categories: universal, relative, or invented? |
| 51 | 4.1.1 Universality of senses |
| 51 | 4.1.2 Dividing the spectrum |
| 52 | 4.2 Colour linked with perceptual qualities other than hue, saturation, and brightness |
| 54 | 4.3 The GRUE category |
| 57 | 4.4 Complexion |
| 58 | 4.5 Haircolour |
| 60 | 4.6 The world's languages conforming to the English standard |
| 61 | 4.7 Conclusion |
| 65 | Chapter 5: Conclusions |
| 68 | References |
| 73 | Appendix I: Complete dataset |
| 88 | Appendix II: Corpus extractions |
| 97 | Appendix III: Informants |

LIST OF FIGURES

| | |
|----|---|
| 1 | Criteria for BCT status |
| 2 | The Berlin and Kay evolutionary sequence |
| 3 | Distributional restrictions in the Berlin and Kay sequence |
| 4 | Stages of the Irish language |
| 5 | Irish words describing different types of Vikings |
| 6 | Construction of an Irish NP |
| 7 | Word order in adjectival clusters |
| 8 | Nominal and adjectival declension paradigm |
| 9 | Basic Colour Terms of Irish |
| 10 | Secondary Colour Terms of Irish |
| 11 | Colour terms that are no longer used |
| 12 | Etymology of the Irish colour terminology |
| 13 | Usage frequency of <i>liath</i> and <i>donn</i> |
| 14 | Usage frequency of <i>corcra</i> |
| 15 | Usage frequency of <i>glas</i> , <i>gorm</i> , and <i>uaine</i> |
| 16 | Usage frequency of <i>breac</i> |
| 17 | Overview of compound meanings of colour adjectives |
| 18 | Verbal forms derived from colour adjectives |
| 19 | The micro categories of GRUE in Irish |
| 20 | List of languages with a GRUE category |
| 21 | Polysemy relations of the GRUE terms in Irish |

LIST OF ABBREVIATIONS

| | |
|-------------|--|
| PIE | Proto-Indo-European |
| IE | Indo-European |
| PC | Proto-Celtic |
| PI | Primitive Irish |
| EI | Early Irish |
| OI | Old Irish |
| MI | Middle Irish |
| MO | Modern Irish |
| OE | Old English |
| ME | Middle English |
| BCT | Basic Colour Term |
| BCC | Basic Colour Category |
| NCE | Nua Chorpas na hÉireann [The New Corpus for Ireland] |
| DB | English-Irish Dictionary (De Bhaldraithe, 1959) |
| FGB | Fócloir Gaeilge-Béarla (Ó Dónaill, 1977) |
| DIL | Dictionary of the Irish Language (2013) |
| EPC | Etymology of Proto-Celtic (Matasovic, 2009) |
| SG | Singular |
| PL | Plural |
| GEN | Genitive |
| PREP | Prepositional |
| NOM | Nominative |
| N | Noun |
| i/t | Intransitive/transitive |

INTRODUCTION

Before Berlin and Kay published their very influential work on the universality of colour naming in 1969, the linguistic relativity principle was held as an axiom. Linguistic relativity is based upon the idea that people name objects and group them into categories based on the structure underlying their native language, in other words: language influences thought. It was generally believed that colour terms are encoded in different ways cross-linguistically, until the universalist theory by Berlin and Kay proposed a set of universal constraints on colour naming.

Since the emergence of the theory, many problems have been pointed out. For example, it imposes an anglocentric viewpoint upon non-Indo-European languages to make them fit the system of Western European colour classification. However, the Irish language is not compatible with this Western European system either, even though it is an Indo-European language. For example, the Celtic languages are the only ones within the Indo-European family that still have a GRUE category. In Modern Irish, there is a term denoting GRUE, but additionally, there are also terms denoting BLUE and GREEN – which overlap with the GRUE category. It seems odd that this trichotomy still exists today. According to the Berlin and Kay paradigm the GRUE category should have disappeared from the language with the lexicalization of a term denoting BLUE. Another example of an anomaly is that the terms denoting BROWN, ORANGE, PINK, and PURPLE are considered non-basic. In this thesis I will investigate these unusual features of Irish colour naming which make it an anomaly within the Berlin and Kay framework: which features can be distinguished and why are they still present today, after extensive language contact with Germanic languages and after the necessity to revitalize the language during the 20th century – a process that is still ongoing.

In short, I will investigate the unusual features of the Irish language in the context of the current trends in the colour naming debate and propose hypotheses for their existence. In order to

be able to index these features, I will start out by providing an overview of the universalist-relativist views on colour naming in Chapter 1, followed by the historical development of the Irish language in Chapter 2, in which I shall also briefly discuss relevant morpho-syntactic aspects of the language. Chapters 3 and 4 will deal exclusively with my analysis of the Irish colour classification system. In Chapter 3 I present my dataset and will discuss anomalies within the system. The dataset I use in this thesis has been compiled of information obtained from dictionaries, Nua-Chorpas na hÉireann [The New Corpus for Ireland], and informants. Even though the Irish language differentiates three distinct dialects (Munster, Connacht, and Ulster (Nolan 2012: 1)), I do not take into account dialectal variation, nor will I be concerned with the neurophysiology of colour. An analysis and discussion of the unusual features of Irish will be presented in Chapter 4, together with hypotheses of their existence. To conclude, in the final chapter, Chapter 5, I will relay my findings and briefly look back upon the research I have conducted.

METHODOLOGY

The information that the classification in Chapter 3 and 4 is based upon, is obtained during multiple stages of my research:

- I Dataset
- II NCE
- III Informants

Stage I) First, I obtained information from dictionaries of which I compiled a dataset. The dictionaries I have used for this are English-Irish Dictionary by De Bhaldraite (DB; 1959) and Foclóir Gaeilge-Béarla by Ó Dónaill (FGB; 1977) for Modern Irish; the Dictionary of the Irish language (eDIL; 2013) for Old and Middle Irish; and Etymology of Proto-Celtic by Matasovic (EPC; 2009) for etymological information on Proto-Celtic. The full dataset can be found in Appendix I. In this dataset, the Irish colour term is given with the following information per entry: spelling in different stages of the language, a suggestion of the English equivalent, absolute token frequency in the NCE in numbers and percentages, information obtained from the FGB, DIL, and EPC, which includes translations, collocations, compounds and verbalisations. Sometimes additional sources are indicated when I thought this was necessary.

Stage II) Subsequently, I used this dataset as input for the Nua Chorpas na hÉireann [The New Corpus for Ireland] to obtain usage frequencies. These were added as both numbers and percentages to the existing dataset in Appendix I to keep all information together. At this point, I also compiled an additional dataset of possible compounds, which I used at stage III to present to my informants. This dataset of compound adjectives plus token frequencies can be found in Appen-

dix II. The total amount of tokens in the NCE is 30 million. In addition, I have used the British National Corpus (BNC) for frequency comparison with English colour terms.

Stage III) Based on Appendices I and II, I compiled a survey which I distributed to informants through online channels. The channels I used were: the Facebook pages of Gaeilge Amháin, Bord na Gaeilge, Conradh na Gaeilge; Coláiste loch gíle, and Gaelschurtúr; and requests through email to the Limerick Institute of Technology, Radio na Gaeltachta, An Siopa Gaeilge, Conradh na Gaeilge, Trinity College Dublin, University College Dublin, and the National College of Art and Design Dublin. Informants were asked to describe colour terms, give collocations of colour terms, indicate how often they use certain colour terms, which terms they thought were a subset of another term, indicate any semantic restrictions of colour terms and lastly, indicate which colour compounds they thought are existing words. For this last question, I used the dataset I compiled in Appendix II, including both existing and non-existing colour compounds. The complete set of answers I have obtained from the survey can be found in Appendix III. I have not done any adjustments in spelling and a dash (-) indicates no answer was given.

Furthermore, throughout this paper I will use *italics* to denote colour terms and SMALL CAPS to denote colour categories.

THE SEMANTICS OF COLOUR

1.1 BASIC COLOUR TERMS

A landmark work in the semantics of colour is *Basic colour terms: their universality and Evolution* by Brent Berlin and Paul Kay (1969). The authors tried to find evidence of the universality of basic colour terms. They broke down the spectrum into eleven categories which express the basic colour terms of each language. These eleven basic colour categories are WHITE, BLACK, RED, GREEN, YELLOW, BLUE, PURPLE, PINK, ORANGE and GREY (Berlin & Kay 1969: 2). Berlin and Kay postulated a set of criteria to establish whether or not any given colour word constitutes a Basic Colour Term or not (Berlin & Kay 1969: 6), namely;

1. it must be monolexemic (its meaning is not predictable from the meaning of its parts);
2. its signification is not included in that of any other colour term;
3. its application must not be restricted to a narrow class of objects;
4. it must be psychologically salient (i.e. stability of reference across informants and across occasions of use, the occurrence in the ideolects of all informants);

In case of uncertainty, some subsidiary criteria apply:

5. should have the same distributional potential as previously established basic colour terms;
6. colour terms that are also the name of an object characteristically having that colour are suspect (gold, silver, ash);

7. Recent foreign loanwords may be suspect;
8. In cases where lexemic status is difficult to assess, morphological complexity is given some weight;

Figure 1: Criteria for BCT status (Berlin and Kay 1969: 6)

1.2 UNIVERSALITY OF BASIC COLOUR TERMS

Berlin and Kay concluded that their encoding sequence suggests that there is a temporal ordering in the encoding of the basic colour terms of each language (Berlin & Kay 1969: 4). In other words, there are fixed evolutionary stages that each language goes through in acquiring its colour lexicon. This them to deduce the following encoding sequence (see figure 2).

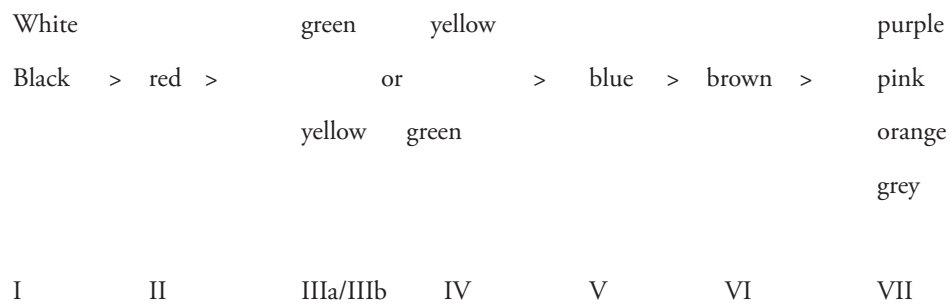


Figure 2: The Berlin and Kay evolutionary sequence (1969: 4)

The first stage contains terms for both BLACK and WHITE. Berlin and Kay found no language that had a colour term for either BLACK or WHITE, but not for the other. If a language has three terms, the third term is necessarily RED (Berlin & Kay 1969: 15). Figure 3 shows the distributional restrictions of colour terms, as postulated by Berlin and Kay.

Distributional restrictions of colour terms:

1. all languages contain terms for white and black
2. if a language contains 3 terms, then it contains a term for red
3. if a language contains 4 terms, then it contains a term for either green or yellow (but not both)
4. if a language contains 5 terms, then it contains a term for both green and yellow
5. if a language contains 6 terms, then it contains a term for blue
6. if a language contains 7 terms, then it contains a term for brown
7. if a language contains 8 or more terms, then it contains a term for purple, pink, orange, grey, or some combination of these.

Figure 3: distributional restrictions in the Berlin and Kay sequence (1969: 2-3)

These restrictions show that not all eleven basic colour terms are necessarily expressed in every language, but there is a pattern in the exclusion of colours in systems with fewer than eleven basic colour terms. A language with only five colour terms will not distinguish BLUE from GREEN or BLACK, and would either have BLUE encoded in GREEN, which is transliterated in English as 'GRUE', or have BLUE encoded in BLACK, as an extended meaning of the term (see section 1.4.2 for a more detailed description of extended categories). Universalists see this temporal pattern as one of the signs that colour categories are universal in language (Berlin and Kay 1969: 10).

The question of universality plays a significant part in the debate of colour classification. Berlin and Kay were the first to put conclusive evidence on the table of the existence of universal categories that divide the spectrum. Before they postulated their theory, the linguistic relativity principle was held as an axiom: *'Each language is semantically arbitrary relative to every other language.'* (Berlin & Kay 1969: 1-2). Berlin and Kay claim that their findings support their hypothesis: colour categorization is not random and the foci of basic colour terms are similar in all languages (Berlin & Kay 1969: 10).

The colour terms surrounding the 'centre' of their category are labelled focal colours. They are 'the best example' of their category: the 'greenest' version of GREEN or the 'bluest' version of BLUE. All basic colour terms are necessarily focal colours. According to Berlin and Kay, these focal colours are encoded in every language and vary no more between speakers of different languages than between speakers of the same language (Berlin & Kay 1969: 10). It should, however, be noted that the difference between Basic Colour Terms (henceforth called BCTs) and basic colour categories is quite a crucial one. Categories are cognitive concepts in the mind, whereas terms are linguistic expressions that in some way or another refer to those categories (Biggam 2012: 20). Section 1.4.2

deals with the distinction between colour terms and colour categories. But first, section 1.3 will deal with the relativist view that opposes the universalist approach of Berlin and Kay.

1.3 THE RELATIVIST VIEW

Before the ground breaking Berlin and Kay study, linguistic relativity was held as an axiom. The ideas of the relativists are based upon the Whorfian tradition, which claims that speakers of different languages perceive and evaluate the external world differently depending on the language that they speak (Foley 1997: 192). In other words: language influences thought. This principle is expressed, for example, through elements that are obligatory in a language, and those that are not. Obligatory categories force speakers to pay attention to different things, even though the reality in which they exist is the same. Every language has different obligatory categories: in English one cannot omit subject pronouns, Japanese needs classifiers, in German the definite article has gender agreement with the noun and in Dutch you have to specify information about the position of an object relative to another (something *staat/ligt/zit/hangt* rather than *is (on)* in English). Consequently, following the linguistic relativity tradition, language also influences the (arbitrary) way in which the colour spectrum is divided and the individual colours are assigned a name.

One of the strongest cases against universalism in colour naming is made by Wierzbicka, a prominent scientist within the field of cross-cultural linguistics, who brought up evidence that refutes the Berlin and Kay theory. According to her, the idea of colour universals is an anglocentric perspective. English speaking researchers impose a conceptual grid onto the informant's thinking that is alien to him (Wierzbicka 2008: 408). Wierzbicka pointed out that not every language has lexicalized colour categories. There are multiple languages that do not have words for 'colour' nor distinct colour terms. According to her, as a consequence, speakers of languages that do not have words for colour, also do not have a concept of colour. This does not, however, lead to the conclusion that speakers of 'colourless' languages cannot perceive colour (Foley 1997: 151).

Part of Wierzbicka's evidence against colour universals, is inherently intertwined with the fact that Berlin and Kay used the Munsell colour chips during their research. It has been pointed out more than once by people opposing their theory, including Wierzbicka, that these colour chips are an abstraction of colour that is not made in every language. It is a set of 320 chips of 40 hues in eight degrees of brightness at maximum saturation and nine chips of neutral hue (that is to say, whites, blacks and greys). The Munsell chips have culturally specific concepts of colour embedded in them, which makes them a useful tool in western languages, but not in languages that have mark-

edly different ways of classifying the world (Wierzbicka 2008: 421). In many (Indo-) European languages colour is conceptualized as an abstract concept. It is not included in or interconnected with a certain material, size or shape, but it denotes an idea. In many languages colour cannot be separated from its carrier, albeit an object, texture or pattern. A concept such as RED FLOWER may make perfect sense, but the concept of REDNESS does not (Biggam 2012: 91). To illustrate this, the colours of the Navaho equal earth substances; this means that the difference between the colours YELLOW and RED is exactly the same difference as the difference between YELLOW clay and RED clay (Turton 1980: 324). Their colleague Lucy added that the Berlin and Kay methodology is 'hopelessly subjective' (Kay & Regier 2002: 2).

In her plea against universal colour categories, Wierzbicka presented a case study of Warlpiri (an Australian language) as evidence. In English, as well as many other languages, colour is a permanent descriptor: a green object against a black wall is just as green as when the same object is placed against a blue wall. In Warlpiri this is not the case, as the language makes use of relative descriptors. The contrast between object and background is more important than the status of the colour of the object itself. This implies that perception and conceptualizations derived from those perceptions are indeed very different across languages.

Warlpiri does not have a word for colour, nor distinct colour terms, but there is a cultural significance for other aspects that are often intertwined with colour, such as brightness, shine, and contrast. In this language, 'colour', or the lack of colour terms, has to do with functional importance. When something shines in the distance, it could indicate a possible source of water (Wierzbicka 2008: 413). It is a possibility that their way of classifying brightness, shine, and contrast is very similar to the way we classify colour. To speakers of European languages, an expansive colour lexicon is functionally important to differentiate between all the differently coloured stimuli we are exposed to in an age of technology, advertisement, and consumerism. Even though the status of colour is not relative in Modern Irish, there are distinct indications that other aspects play a large part in the perception of colour as well, such as brightness, saturation, and darkness, of hues, which is similar to non-Indo-European languages. This shall be discussed in detail in Chapter 3.

1.4 TERMINOLOGY AND OTHER IMPORTANT NOTIONS ON THE SEMANTICS OF COLOUR

In this section I will clarify some of the terminology, to avoid confusion in later chapters on the concepts that will be encountered.

1.4.1 DIMENSIONS OF COLOUR

Carey (2009: 221) makes the seemingly trivial remark that BLACK and WHITE are opposites and thus form a polarity, but that this is not the case with (primary) colours. This observation is very important, and not trivial at all. The range of colours in the spectrum is complementary; no one colour is the 'opposite' of another. This puts BLACK and WHITE in a special position, as their contrast is based upon brightness rather than hue. In more explicit terms, it means that the BLACK-WHITE polarity is interchangeable with the brightness-polarity, and this is the very reason that Berlin and Kay always found BLACK and WHITE to be the first colour terms that are encoded in a language, while furthermore one never occurs without the other. The brightness-polarity explains why many people do not regard black and white as colours. More specifically, the contrast between BLACK and WHITE is achromatic (these colours do not have a hue) and the contrast between the range of colours in the spectrum is chromatic (these colours have a hue) (Foley 1997: 151).

Other dimensions of colour are hue, saturation, brightness and tone. Of these four concepts, hue is the most difficult one to explain. Foley (1997: 151) defines it as the 'colouredness' of a colour – the yellowness of YELLOW or the redness of RED. But in my opinion this does not completely tell it apart from saturation, which is the 'purity' of the hue, or more specifically, the amount of GREY it contains (Biggam 2012: 3). Tone is similar to saturation and means the amount of BLACK or WHITE a hue contains (Biggam 2012: 4); in the remainder of the text I will use tone and tint synonymously. Lastly, there is the concept of brightness, which is the amount of light that is reflected by a colour. Thus the denotation of brightness is inextricably linked with external factors, namely the source of light, whereas hue and saturation do not depend on external factors, but instead on their own 'internal' makeup. Furthermore, Biggam (2012: 3-4) makes an important observation on the types of words that people use to describe colour. She regards terms such as 'vivid' and 'dull' as saturation terms and 'pale' and 'dark' as tonal terms.

This results in the following contrasts in the dimension of colour: the first distinction is that in chroma (chromatic/achromatic colour), which basically indicates whether a colour is part of the gradient between BLACK and WHITE or part of the spectrum; the second is the hue, the colouredness of a colour; the third is saturation, the vividness of the hue; then there is tone which is the admixture of BLACK or WHITE in a hue; and the last is brightness, which indicates how much light is reflected.

Even though the distinction between these dimensions is not altogether easy to tell apart, they are very straightforward. One of the major problems with these dimensions is that they cannot

be considered exhaustive. In the previous section 1.3, we saw that Wierzbicka objected to the use of the Munsell colour chips as they can only indicate hue, saturation and brightness. They cannot include other features that may be fundamental in ascribing colour terms to referents, such as softness, size, shininess, glossiness, fluctuation, variegation, etc. (Biggam 2012: 87).

1.4.2 COLOUR CATEGORIES VS. COLOUR TERMS

In section 1.2 I already briefly mentioned colour categories as being distinct from colour terms. Here, I would like to elaborate on that a little bit more. A colour category is the concept underlying a colour term. The initial Berlin and Kay encoding sequence accounts exclusively for the linguistic classification of the hues of these categories and thus include only those terms that express hue. In 1975, the sequence was changed to include the GRUE category – replacing GREEN as a basic category in the evolutionary sequence. Hence at stage III, a term for either GRUE or YELLOW would enter the language. Subsequently, after the inclusion of a term for BLUE at stage IV, the GRUE category is split up in the single hue categories BLUE and GREEN at stage V (Biggam 2012: 75).

The GRUE category is an example of a macro category, or extended category, as it covers both GREEN and BLUE, and sometimes GREY. Macro categories have their foci based in more than one hue. The structure of these categories is exactly the same as single hue categories, with the added characteristic of the possibility of more than one focal area, as is the case with GRUE. In general terms, extended categories cover a larger part of the spectrum than single hue categories, so that the term for BLACK could be used to denote (dark) BLUE or (dark) GREEN. However, it is also possible that certain categories cover only a limited part of the typical colour categories, those are called micro-categories, sometimes leading to two BCTs within the same category, as is the case in Russian. Russian has two BCTs for BLUE *sinji* ‘light blue’ and *goluboj* ‘dark blue’ (Biggam 2012: 61-62). Therefore Russian has two micro-categories that could be regarded as BLUE₁ and BLUE₂ for clarity. In Chapter 3, possible micro- and macro-categories will be discussed in the case of Irish.

Extended categories are not necessarily distinctly based upon hue, but can instead be based upon, for example, brightness. An example of a language with extended categories based in brightness is Dani (a language spoken in Indonesia, which is part of the Trans-New Guinea language family), which technically has a stage I system, containing a LIGHT and a DARK category. This distinction is based upon brightness, although this DARK category also includes cool hues as well as the typical ‘dark’ colour terms, and the LIGHT category includes warm hues (Biggam 2012: 74).

Not every linguist is satisfied with the explanation of colour semantics involving colour

categories. Saunders presents her idea of the fabrication of basic categories in her doctoral thesis *The Invention of Basic Colour terms*. She is not satisfied by researchers' disregard for the cultural context in which colour terms are used. Saunders investigated colour terms in Kwak'wala (a language spoken in Canada, which is part of the Wakashan language family), using colour naming tests that involved real objects such as fruit, vegetables, beads, animals and pictures. At the end of the test she would introduce the Munsell colour chart, upon which informants would become very discomforted, anxious and agitated (Biggam 2012: 88). Her case study of Kwak'wala can be seen as evidence that there is indeed a problem with the way colour research (using the Munsell chart) has been conducted thus far, and her arguments subsequently aid Wierzbicka's claim that the Munsell chart imposes anglocentric perspectives upon informants (Wierzbicka 2008: 408) and excludes certain dimensions of colour such as shininess or variegation, that might be vital in the distinction between colour terms and the choices made in colour naming.

1.5 SUMMARY

In this first chapter, I have discussed the influential work by Berlin and Kay, who propose an universal evolutionary sequence for the development of Basic Colour Terms. Opponents of this view argue that the Berlin and Kay theorem is anglocentric and does not hold for non-Western languages. For instance, Wierzbicka shows that the Warlpiri language does not concur with this perspective and Saunders reports the same on Kwak'wala. Saunders furthermore objects to the 'invention' of colour categories in general. In the last two sections of this chapter, important concepts in colour semantics were mapped: the dimensions of colour (brightness, hue, saturation and tone), the distinction between colour categories and colour terms – and in extension the concept of micro- and macro-categories. With this in mind, the discussion in Chapter 3 on the colour terms of Irish will be much more transparent. First, Chapter 2 will give an overview of the evolution of the Irish language.

EVOLUTION OF THE IRISH LANGUAGE 2

2.1 EVOLUTION OF THE IRISH LANGUAGE

The Celtic languages occupy one of the oldest branches of the Indo-European family tree (Eska 2010: 22). During the 3th and 4th centuries BC, the Celts inhabited areas stretching from the British Isles to Asia Minor (Fife 2010: 3), having spread from the Central European Alps where the Proto-Celtic language originated approximately 4000 BC (Eska 2010: 22).

| | |
|--------------------|-----------------------------|
| Early Goidelic | pre-4 th century |
| Primitive Irish | 300-600 |
| Archaic Irish | 600-700 |
| Old Irish | 700-900 |
| Middle Irish | 900-1200 |
| Early Modern Irish | 1200-1700 |
| Modern Irish | 1700-present |

Figure 4: Stages of the Irish language (Ball 2010: 55)

Although little is known about the early inhabitants of Ireland, they are believed to have arrived on the island from Central Europe during the Iron Age (Thomson 1984: 241). The earliest attested form of Irish is Primitive Irish using the Ogham alphabet. Figure 4 gives an overview of the developmental time frame of the Irish language. It includes transitional periods of the language, such

as Archaic Irish, which was an early variant of Old Irish; and Middle Irish, which was the transitional period between Old Irish and Modern Irish (Stifter 2010: 55). All stages of the Irish language preceding Middle Irish come under the label Early Irish. This includes Early Goidelic, Primitive Irish, Archaic Irish and Old Irish (Stifter 2010: 55).

Old Irish was spoken in Ireland, the northern and western Islands of Great Britain, and the island of Man (Stifter 2010: 56). There is evidence that it is very likely that the Old Irish colour terms were still current for speakers of Middle Irish. Heidi Ann Lazar-Meyn investigated the colour terms used in the Irish legend *Táin bó Cúailnge* (The Cattle-Raid of Cooley). This tale was recorded during the transition from Old to Middle Irish, providing an opportunity to investigate whether and how colour terms and their usage had changed from one phase of the language to another (Biggam 2012: 196-7). With the transition from Middle Irish into Early Modern Irish, the language developed into Irish Gaelic (Gaeilge) or Modern Irish, Scottish Gaelic (Gàidhlig) and Manx Gaelic (Gaelg).

2.2 BORROWING AND LANGUAGE CONTACT

One of the peculiarities of the Celtic languages is that despite extensive language contact, certain characteristic features of Indo-European languages have never entered the Irish language, such as an infinitive category, or a single verb expressing *to have* (Schmidt 1986: 200). In the following sections I will discuss what the language contact between Irish and Latin, Old Norse, and English entails. To start, there are two points of great cultural significance in the history of the Irish language: the advent of Christianity around 3-4th centuries AD and the extensive contact with the Scandinavians from the 9th century onwards to the Anglo-Norman invasions in the 12th century (Stifter 2010: 55). Both events turned out to be precursors of linguistic change.

2.2.1 INFLUENCE OF LATIN

The arrival of the Latin language in Ireland in the 5th century is tied to the advent of Christianity (Mac Giolla Chríst 2004: 63). The Roman influence on Ireland was extensive, the Latin alphabet soon replaced Ogham, and Old Irish developed into a written language. The Ogham alphabet was a set of 25 signs that represented different types of trees and was used by the early inhabitants of Ireland. It was around the time of the arrival of Christianity that the Old Irish language was carried to Scotland and the island of Man (Mac Giolla Chríst 2004: 65-66), but it was not until the early modern period (around 1200) that Middle Irish would evolve into Scottish Gaelic (Gàidhlig) and

Manx Gaelic (Gaelg) respectively.

During the Roman occupation, a large number of Latin words was borrowed into the languages of Britain and many of them found their way into the Irish language (Lewis and Pederson 1937: 56). However, initially all the Latin loanwords that entered the Irish language, were appropriated through Welsh. One example of this is the Irish colour term for PURPLE *corcra*, which was *purpura* in Latin, turned into *porffor* in Welsh and entered Old Irish as *corcur*. After the establishment of Christianity, the direction of exchange reversed and Latin words were adopted from Irish into Welsh (Mac Giolla Chr  st 2004: 69). Amongst the very earliest words that were borrowed into Primitive and Archaic Irish are *cuithe* ‘pit, well’ < *puteus*; *caille* ‘wood, forest’ < *pallium*; *c  ise* ‘cheese’ < *c  seus*; *eclais* ‘the Christian Church’ < *ecl  sia*; *notlaic* ‘Christmas’ < *nodolig* (McManus 1983: 28, 30). Among the later borrowings (into Old Irish) are *stoir* ‘history’ < *(hi)storia*; *proind* ‘meal’ < *prandium*; *notire* (later *notaire*) ‘a professional scribe’ < *not  rius* (McManus 1983: 27, 34).

Ireland was never part of the Roman Empire and Latin was never adopted as the vernacular, but exercised in some of the high social status domains, while in others, Irish remained the preferred choice – for example poetry and law. At this point in time, both Latin and Irish were considered languages of high status (Mac Giolla Chr  st 2004: 69-70). Some learned words that were borrowed into Irish include: *gr  d* ‘degree’ < *gradus*; *t  ball* ‘(writing) tablet’ < *tabula*; *t  m* ‘thyme’ < *thymum*; *m  inia* ‘mania’ < *mania*; *r  s* ‘rose’ < *rosa*; *t  is* ‘thesis’ < *thesis* (McManus 1983: 68). At this point it is important to note that loanwords are by no means an exhaustive way to index the effects of language contact, but it does give some insight in which domains of the language are influenced by the contact.

2.2.2. INFLUENCE OF OLD NORSE

The first encounter between the Vikings and the Irish is recorded in 795 (Mac Giolla Chr  st 2004: 71). After initial raids, the Norsemen set up their settlements along the coast. They referred to these or settlements as kingdoms, which included Dublin in the mid-9th century, and Waterford, Limerick and Wexford in the early 10th century (Jackson 1975: 4).

These plundering ‘barbarians’ brought a product of great cultural significance with them: their language. The Norsemen referred to their language, Old Norse, as D  nsk Tunga, which despite the early contact, did not impact the Irish language until the mid 9th century (Mac Giolla Chr  st 2004: 71). The vast majority of Viking settlers were Norwegian, the remainder of Vikings were Danish. The Danish and Norse languages were so similar that the difference between them can be

regarded as dialectal (Sommerfelt 1975: 74). Despite this, the Norwegians and the Danish were not the same people in the eyes of the Irish (as indeed they were not), which resulted in a distinction in terminology between the two types of Vikings, as well as a distinction between ‘proper foreigners’ and those that had settled and more or less fully integrated in the Irish society (see figure 5).

The settlers in Irish terminology

| | |
|--------------|--------------------------|
| Lochlannaigh | Norseman (foreigner) |
| Finn-gaill | Gaelicised Norse Viking |
| Dubh-gaill | Gaelicised Danish Viking |

Figure 5: Irish words describing different types of Vikings (Curtis 1988: 86)

The word *finn* is the genitive sg of *find*, the Old Irish form of *fionn*, meaning ‘fair of hair - light, white’. The word *dubh* means ‘dark’ or ‘black’. This distinction marks the difference between Norse and Danish Vikings. These colour terms do not readily agree with the actual (skin) colours of these races, but point out a symbolic distinction that is made between the two, between the very fair Norsemen and the slightly ‘darker’ Danish (Curtis 1988: 86). In other words, in this context these colour terms refer (exclusively) to hair colour. In Chapter 4, this will be discussed in more detail and it will become apparent that hair colour holds an important place in the colour classification of Irish.

When the Middle Irish and Old Norse languages met, they were at more or less equivalent stages of their evolution (Jackson 1975: 6). However, the relative mutual understanding between Old Norse and Anglo-Saxon did not at all extend to Irish. Norse and Irish must have been incomprehensible to one another. Thus, some scholars think there must have been some kind of pidgin between the Norsemen and the Celts during the time of the first wave of settlers (cf Sommerfelt 1975; Chadwick 1975; Mac Giolla Chríst 2004). A 10th century Irish text speaks of their language as *gic-goc*, a Gaelic pidgin (Chadwick 1975: 26). The people who spoke this pidgin were a hybrid population known as the Gall-Gáidill (Norse-Irish), they were distinct from both the Irish and the Scandinavians (Jackson 1975: 4). According to Mac Giolla Chríst (2004: 73-4), this pidgin must have disappeared subsequent to the arrival of the Normans in Britain (1066) and Ireland (1167).

After generations of bilingual speakers, fluent in both Irish and Norse, many of the early Norse settlers gaelicised and fully integrated in the Gaelic society. In the period leading up to the

Norman invasion of 1169, the Norse language was waning fast and by the time of the invasion, previous settlers and their descendants all spoke Irish and seemed Irish (Curtis 1988: 94-5). This gaelicising is often described with the Latin phrase *Hibernis ipsis Hiberniores* ‘more Irish than the Irish themselves’ (Edwards 1984: 480).

The linguistic influence of the language contact between Old Norse and Middle Irish comprised mostly proper names, place names such as *Wicklow* (from *Vikingaló*) and *Howth* (from *Hofud*) and specialized terms, such as *eralliarla* (from *jarl*) (Mac Giolla Chríst 2004: 71-72). Words were mainly borrowed into restricted domains, which has to do with the fact that the vast majority of Norsemen were absorbed into the Irish population (or emigrated after the Norman Conquest) (Sommerfelt 1975: 76). Still, borrowings from Viking Norse in Irish are much more common than borrowings from Anglo-Saxon (Thomson 1984: 256). In Ó Cuív (1975), Jackson ascribes this to the Irish orthography, which differed from Old Norse to such an extent, that if the vocabulary had been more recognisable, there would perhaps have been fewer loanwords (Jackson 1975: 6). There are also words that first entered the Irish language from Old Norse and were subsequently borrowed by English, for example: boat < *bád* < *bátr*; beer < *beoir* < *bjórr*; market < *margadh* < *markadr*; shilling < *scilling* < *skillingr*; penny < *pinginn* < *penningr* (Mac Giolla Chríst 2004: 72)

After the Norman invasion of England in 1066, Old Norse words – especially place names – were borrowed directly into English (Mac Giolla Chríst 2004: 73). The Norman army consisted of Norse, Breton, and French soldiers and their settlements extended from Scandinavia to the British Isles to Mediterranean Europe. One century after the invasion of England, in 1169, Ireland was invaded and years of Anglo-Norman oppression followed (Hegarty & Keane 2011).

2.2.3 INFLUENCE OF ENGLISH

It has been argued that the linguistic influences of English on the Celtic languages was a one way exchange (Filppula et al 2008: 25). There is however evidence that this is an unjust conclusion, which I would like to get into first, before continuing with the influence of English on Irish.

Other than Celtic loanwords in English, such as *bard*, *crag*, *glen* and *whiskey*, and place names, such as *York*, *Avon*, and *Thames*, also syntactic and phonological influences of Celtic influences on English can be found. Examples include the Old English distinction between **es-* and **bheu-*, two forms of the verb ‘be’; the OE verbal noun construction which led to the progressive as we know it today; and favouring internal possessor constructions (his head) instead of external ones (the head) (Filppula et al 2008: 27 and 34). Especially the latter feature distinguishes English from

the rest of the Germanic languages. König and Haspelmath (1998) established that the external possessor construction constitutes a characteristic of most (Indo-) European languages. This construction is only lacking in Welsh, Breton, English, Dutch, Hungarian and Turkish. (Filppula et al 2008: 35). Irish does make use of the external possessor, which can be explained by Scandinavian influence during the Viking period. (Filppula et al 2008: 38).

In contrast, the influence of the English language on Irish is evident and is regarded as the most dominant and substantial influence on the linguistic climate in Ireland. For quite some time, Early Modern Irish coexisted with English, but both languages occupied different social domains. English was the language of law at this time, whereas Irish was the preferred vernacular (Mac Giolla Chríst 2004: 63). Halfway through the 15th century, English took over from Latin in many high status domains (mainly government and administration), while Irish still remained the main language in the domain of history, grammar, medicine, music and poetry (Mac Giolla Chríst 2004: 76).

In *English and Celtic in Contact* (2008), Filppula et al outline the language contact between English and the Celtic languages. They argue that through interlingual identifications, *'speakers acquiring a new language seek both categorial and structural equivalence relations, or as the case may be, dissimilarities, between their native language and the new 'target language'* (Filppula et al 2008: 24). In other words, by a relatively rapid shift of one language to another, phonological and syntactic features of the native language were implemented in the English of the Irish, as well as additions that were made to the lexicon (Filppula et al 2008: 24).

There are many historical events that have all contributed to the decline of Irish in favour of English. I will list some of the most defining ones below to sketch a picture of the situation, but it has to be understood that this outline is merely a brief one. A gradual shift had already set in, which was accelerated by the inflow of the many English and Scottish immigrants to Ireland to the plantations that were set up by Tudor and Stuart monarchs (1534-1610) (cf Mac Giolla Chríst 2004: 85; Edwards 1984: 481). This, paired with the abandonment of Ireland by its aristocracy, commonly referred to as 'The Flight of the Earls' (1607), left its mark on the Irish language (Filppula et al 2008: 126). The final blow to the language and society was administered by the establishment of Cromwellian settlements in the mid-17th century and by the turn of this century, the Irish language had become detached from all its significant social domains (Mac Giolla Chríst 2004: 86). It was around this time, that the Irish word for the English language, *Béarla* 'technical language', was coined (Jackson 1975: 10). Therefore it is no surprise that in the 17th century, legal documents

began to appear only in English (Mac Giolla Chr  st 2004: 88). The only social domain that was left for Irish, was as the popular vernacular, all formal domains were taken over by English.

By the end of the 17th century, it was English and not Irish, that was the popular language for literacy and status, as it was associated with modernity (Mac Giolla Chr  st 2004: 90-1). The Irish language would continue to be spoken as the preferred vernacular throughout the 18th century, but it had lost its status and became more and more associated with poverty (Edwards 1984: 481). English was quickly gaining ground and many Irish parents would send their children to school specifically to learn English. Attitudes towards the English language amongst the Gaelic Irish indicate that it was held in considerable regard. The acquisition of the language was seen by some of the Gaelic Irish elite as a mark of distinction (Mac Giolla Chr  st 2004: 88-9). During this time, place names were anglicised, which detached the Irish language from the landscape (Mac Giolla Chr  st 2004: 96).

The last meaningful domain of the Irish language, that of the vernacular, was eventually eroded by the Great Famine (1845-1849), which also confirmed a relationship between the Irish language and poverty in the eyes of many (cf Mac Giolla Chr  st 2004: 100-1; Edwards 1984: 481). The reasons for the decline of the Irish language are consequently manifold. Among the most catastrophic ones are the plantations under reign of the English crown, the ‘flight of the earls’, which marked the abandonment of Irish aristocracy, the Cromwellian settlements, and the Great Famine, which together constituted an environment in which English could steadily take over from Irish. Indeed, already since the 17th century English started to become a language of high status in Ireland – in favour of Irish, which is beautifully put by Mac Giolla Chr  st: *‘the abandonment of Irish was a gradual affair, a matter of evolution rather than revolution’* (2004: 98).

2.3 CURRENT STATUS OF THE IRISH LANGUAGE

The famine in the 19th century and subsequent emigration proved to be devastating for the contingency of the Irish language. Afterwards, attempts were made to revitalize the language and multiple organizations were founded to this end, of which the Conradh na Gaeilge [Gaelic League] was the most successful one. Their aim was to invoke interest and popularity for the Irish language, by campaigning towards the inclusion of Irish as a compulsory subject in schools and universities (Mac Giolla Chr  st 2004: 103). Unfortunately, it was very difficult to find suitable teachers, resulting in poor teaching quality and consequently poor student competence (Edwards 1984: 485).    Laoire observes that the Irish government delegated language planning to the educational system, in the

hopes that Irish would become the vernacular in schools, but at the same time, the schools expected that the use of the Irish language would extend to the home (2012: 18).

The revival attempts made at the beginning of the 20th century focussed on the maintenance of Irish as the popular vernacular in the Gaeltacht and aimed to restore the language in the rest of the country (Mac Giolla Chríst 2004: 111). The paradox in this is that revivals are by default an attempt to restore an old world, a desire to renegotiate the present by means of a radical synthesis with the past (De Brún 2013: 17-18). In 1995 the Bord na Gaeilge reviewed the use of the Irish language in public services and found that limited progress was being made (Mac Giolla Chríst 2004: 190), even though the number of Gaelscoileanna (all Irish-medium schools) has continued to increase since the 1970's and the implementation of Irish as a compulsory subject in all schools has resulted in at least some level of competence in 25% of the population (Ó Laoire 2012: 18-9).

In a national survey (2004), 39% of inhabitants of Ireland attribute importance to speaking Irish as an expression of Irish ethnicity; by far the majority (89%) considers the maintenance and revival of Irish important for national identity – yet over half of this group feels it is up to those who live in the Gaeltacht to take action (McCubbin 2010: 461). The distinction between symbolic and functional importance appointed to the Irish language is parallel to the gap between the sense of cultural identity and Irish ethnicity. Irish speakers do not recognize themselves as a distinct ethnic group, but instead rather an *ethnoculture* (McCubbin 2010: 461). On one hand, ethnic identification is only weakly connected to language behaviour in Ireland, yet on the other hand, the dominant public discourse still evolves around an idea of isomorphism between nation, people, and language (McCubbin 2010: 461, 475). This could have something to do with the fact that much of the early revitalization was largely initiated by people who were second language speakers themselves, rather than fluent mother tongue speakers (Edwards 1984: 482). Thus, the resulting policies perhaps reflect more of the ideologies of the dominant non-Irish-speaking population than the beliefs of the Irish-speaking community about ethnocultural membership and language ownership (McCubbin 2010: 460).

In Northern Ireland, the process of language revitalization is slightly different. In 1989 the Ultaich Trust was founded with the aim to widen the appreciation of the Irish language, which involved incorporation of Irish in the school system as well (Mac Giolla Chríst 2004: 136). In 1991 the most comprehensive survey of the language up to date was conducted, with various outcomes: there were 131.974 speakers of Irish in Northern Ireland; education is more important in the acquisition of the language than intergenerational transmission (Mac Giolla Chríst 2004: 152);

and there are considerable positive effects of Irish-medium schools to be found in Northern Ireland: within the age group of 12-24 there is a steady increase in Irish speakers (MacKinnon 2004: 109, 113-4).

Mac Giolla Chr  st points out a crucial distinction between the expression of language revival and policy in the Republic of Ireland and Northern Ireland: in the Republic, revival is expressed through the principle of territoriality¹, with its main focus on the Gaeltacht and its inhabitants, whereas in Northern Ireland the revival is expressed through the principle of personality (2004: 197-8). This suggests that in the Republic of Ireland, the language policies are based upon a presupposition that ethnicity is inextricably linked with cultural identity, thus excluding or discouraging for example immigrants to learn the language, whereas in Northern Ireland, the policies are based upon everyday interaction, regardless of ethnicity. This is also stated by McCubbin, albeit under different terms:

‘The fact that people have multiple and changeable identities and that linguistic and ethnic boundaries are neither isomorphic nor impermeable is rarely articulated in public discourse. In Ireland, the dominant ideology that informs Irish-language policy at numerous levels is still largely ethnically essentialist. Despite the weakening relationship between language use and ethnic identification. In this case, notions of ownership are determined less by the question of who is expected to speak Irish and more by the question of who is expected not to: immigrants.’

(McCubbin 2010: 462)

Recent data (November 2013) from UNESCO suggests that there are 44.000 speakers of Irish left, but there is no indication what the extent of their use is, nor whether it includes Northern Ireland. The official status of the language is ‘definitely endangered’, meaning that children no longer learn the language at home. UNESCO discerns six stages of language endangerment, ranging from ‘safe’ to ‘extinct’.

UNESCO’s total number of speakers is remarkably lower than the number of speakers that

1: ‘The principle of territoriality means that the rules of language to be applied in a given situation will depend solely on the territory in question. The principle of personality means that the rules will depend on the linguistic status of the person or persons concerned.’ (McRae 2009: 33)

was accounted for in the national census of Northern Ireland in 1991. The reason for this is that in this census all speakers were included, also L2 speakers and people who did not use it in daily life, whereas UNESCO only takes into account native speakers in the narrow sense. Both in the Republic of Ireland and Northern Ireland, people learn Irish in schools rather than at home. These speakers are thus excluded from the count.

The national census of 2006 showed that only 3% of the population of Ireland uses Irish as their first language (Ó Laoire 2012: 18). A couple of years earlier, in 2003, the Official Languages Act was invoked, which pressed for language equality, rather than reinforce ‘national’ or ‘official’ status upon one language while classifying all the others as secondary (Crowley 2005: 204). Additionally, Irish was made an official working language of the EU in 2007 (McCubbin 2010: 458). In order to keep battling the language shift of Irish to English, the Irish government has made a 20-year plan of language revitalisation at the start of the 21st century (McCubbin 2010: 458)

2.4 SENTENCE STRUCTURE AND CONSTITUENT ORDER

This section deals with Irish sentence structure, in order to be able to view the colour terms in the right context. It is not only useful to look into the distribution and properties of adjectives in Irish, as all Irish colour terms are adjectives, but also into the manner in which they operate within a clause. As a general rule, the Irish adjective is placed behind the noun or other adjective it modifies (Ó Dochartaigh 1984: 293), for example: *don chapell dhubh* ‘to the black horse’ (Ó Siadhail 1989: 116). There are however more restrictions that apply, such as adjectival and noun declension, agreement, and word order in adjective clusters.

First, we will look at the basic constituent order. All Celtic languages have basic VSO order (Ó Dochartaigh 1984: 293). This is an anomaly within the Indo-European language family, as no other IE language has this basic word order, and even worldwide it is a minority word order (Fife 2010: 19).

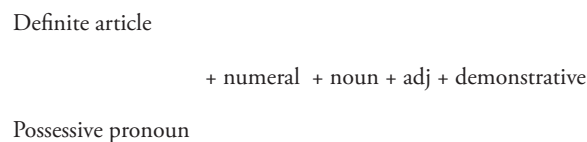


Figure 6: Construction of an Irish NP (Trudgill 1984: 293)

Figure 6 shows the pattern of a NP in Irish. Either a definite article² or a possessive pronoun is selected, followed by a numeral, followed by the head noun, followed by the adjective, which is in turn followed by a demonstrative. An example can be seen in figure 7 below:

Leis na trí coin móra gránna fíor-dhubha sin.
 With the.PL three dogs big ugly very-black those
 ‘with those three big ugly very black dogs’

Figure 7: word order in adjectival clusters (Ó Dochartaigh 1984: 292)

Figure 7 also shows that when multiple adjectives occur in a cluster, there is a fixed order: an adjective of size comes first, followed by one designating quality, followed by adjectives of colour. The noun is the only obligatory element in the nominal phrase. There are some exceptions to this basic order. In some cases, adjectival modifiers can precede the noun, for example, and adverbial modifiers can sometimes precede any of the adjectives (Ó Dochartaigh 1984: 293), but this is not relevant for this classification.

Both attributive and predicative adjectives agree in gender, number, and case with their head noun (Ó Baoill: 178). In Modern Irish, the predicative adjective sometimes remains uninflected, leading to the following structure: *go rabhadar na súile dall aige* ‘so that his eyes were blind’ (Lewis and Pederson 1937: 180-181). Figure 9 shows the declension paradigm of two attributive adjectives modifying a masculine noun and a feminine noun.

| | <u>The black flag (M)</u> | | <u>The white shirt (F)</u> | |
|------|---------------------------|-------------------|----------------------------|-----------------|
| | SG | PL | SG | PL |
| NOM | an bratach dubh | na bratacha dubha | an léine gheal | na léinte geala |
| GEN | an bhrataigh dhuibh | na mbratach dubh | na léine gile | na léinte geala |
| PREP | an bhratach dhubh | na bratacha dubha | an léine ghil | na léinte geala |

Figure 8: Nominal and adjectival declension paradigm (Ó Dochartaigh 1984: 295)

²: Irish does not have indefinite articles.

Something to be aware of is lenition of the adjective, which is the phonological mutation of initial consonants, that can take place under certain conditions, for example in compounding, which will be discussed in section 3.4, or in the AP or NP: *na fóid dhubha* ‘the black sods’ and *beithígh bhána* ‘white cattle’ (Ó Siadhail 1989: 119-20). In these sentences, the adjectives *dubh* ‘black’ and *bán* ‘white’ are subjected to consonant mutation, indicated by the h following the initial consonant (the –a suffix is an indicator of agreement). This mutation is purely functional and does not semantically affect the interpretation of lexical items.

2.5 SUMMARY

In summary, Chapter 2 provides an overview of the evolution of the Irish language, by outlining the different stages the language has gone through, evaluating the language contact situation, and concluding with the current sociolinguistics and grammatical structure of Irish. In terms of language contact, Latin turned out to have contributed to the Irish colour vocabulary by donating *purpura* to the Welsh language, which was subsequently donated to Irish. It developed into OI *corcur* > MI *corcair* > MO *corcra*. The influence of Old Norse is quite difficult to get grip on: the language contact seems to have been extensive, yet all early Viking settlers fully gaelicised (this must have left a mark on the language, but this is beyond the scope of this thesis to reconstruct). This suggests that contact influence would have been bidirectional, some authors propose a Hiberno-Norse pidgin to this extent. In terms of lexical influence, borrowings from Old Norse are mainly nautical in nature. I will explore a possible Norse borrowing of a construction involving colour in Chapter 4 (see section 4.4.1). The steady decline of the Irish language as the popular vernacular can be ascribed to a constant flux of events which changed the socio-economic circumstances of the country which facilitated the gradual adoption of the English language in favour of Irish. Attempts to revive the language during the 20th century were not unsuccessful, national censuses have shown that there is an increase in Irish speakers due to the Irish-medium Gaelscoileanna. The last section of this chapter gave some insight into the grammatical structure of Irish: its VSO status, NP structure, ordering of adjectival clusters and nominal and adjectival declensions. In the following chapter I will present my classification of the Irish colour spectrum, with comprehensive descriptions of the features that mark this system.

CLASSIFICATION OF THE COLOUR SPECTRUM OF MODERN IRISH 3

In this chapter, I will relay my findings on the specificities of the Irish colour classification. I will discuss the BCTs and their etymologies; which colour term should in my opinion be included or excluded as BCTs; the role that brightness, hue, saturation and tone plays; the GRUE category; variegation; and I will conclude with the morphology of colour terms, including compounding and verbal derivatives of colour adjectives.

3.1 CONCISE VERSION OF THE DATASET

In this first section of Chapter 3, I will present my dataset. I have obtained my initial translations from De Bhaldraithe's English-Irish Dictionary (DB; 1959) and definitions from Fóclóir Gaeilge-Béarla (FGB; 1977). For Old and Middle Irish, I consulted the Dictionary of the Irish Language (DIL; 2013). I used this information as input for the NCE [Nua Chorpas na hÉireann], and based a digital survey upon it, which was filled in by 26 informants. I have taken all information into consideration (dictionaries, corpus, and informants), resulting in figure 9 and 10 below. The full classification of colour terms with detailed descriptions of the terms and specific references to sources can be found in Appendix I.

| <u>Basic colour term</u> | <u>English equivalent</u> | <u>NCE</u> |
|--------------------------|---|------------|
| Bán | White, light | 5018 |
| Dubh | Black, dark | 7205 |
| Dearg | Red (includes orange and tawny) | 4045 |
| Buí | Yellow (includes orange, light brown and tan) | 1918 |
| Glas | Light grue, green, grey | 2245 |
| Gorm | Dark grue, blue, black | 2352 |
| Liath | Grey | 1475 |

Figure 9: Basic Colour Terms of Irish

The leftmost column in figure 9 lists the seven BCTs of Irish according to the Berlin and Kay criteria, the middle column lists the equivalents in English and in the rightmost column the absolute token frequency of these terms in the NCE are listed. Conform the Berlin and Kay evolutionary sequence, these seven BCTs make Irish a stage VI language. Instead of the usual inclusion of a lexical item denoting BROWN as the seventh BCT, in Irish this place is filled by GREY. In the remainder of this chapter, I will argue for and against the inclusion of some of these terms, therefore figure 9 can be considered a preliminary classification.

This means that all remaining colour terms are secondary colour terms. The secondary colour terms of Irish can be divided into three groups: non-derived terms (monolexemic), derived terms (compounds) and recent loanwords from English. Figure 10 lists the most salient terms - please note that this list is by no means exhaustive. Some of the less salient terms not included here will also be discussed in this chapter.

| <u>Non-derived terms</u> | <u>English equivalent</u> | <u>NCE</u> |
|--------------------------|-----------------------------|------------|
| Geal | Bright, light, white | 4031 |
| Rua | Brownish red | 1208 |
| Donn | Dun, light brown, chestnut | 1015 |
| Breac | Variegated, speckled | 1054 |
| Fionn | Blonde, fair | 657 |
| Corcra | Purple | 300 |
| Uaine | (artificial) green, verdure | 236 |
| Crón | Tan, dark yellow, tawny | 150 |

| <u>Derived terms</u> | <u>English equivalent</u> | <u>NCE</u> |
|-------------------------|---------------------------|------------|
| Bándearg | Pink | 303 |
| Flannbhuí | Orange | 127 |
| <u>Recent loanwords</u> | <u>English equivalent</u> | <u>NCE</u> |
| Oráiste | Orange | 473 |
| Pinc | Pink | 118 |

Figure 10: Secondary colour terms of Irish

Why are these secondary terms not BCTs? *Rua*, *fionn*, and *crón* are excluded because they are semantically restricted (see point 3 in the Berlin and Kay criteria in Chapter 1); *geal* and *breac* refer to features other than hue, which is in my opinion where the Berlin and Kay analysis falls short, this, together with the ‘colour term status’ of these terms, will be discussed in sections 3.3.7 and 3.3.8 respectively. The case of *uaine* is more complex, and will be discussed along with the GRUE category of which is part in section 3.3.4. *Donn* and *corcra* could be on their way of becoming BCTs, *donn* will be discussed in section 3.3.3 and *corcra* in section 3.3.9. For completeness sake, I have included secondary colour terms that I initially took into consideration, but which turned out to be no longer current in Modern Irish (see figure 11).

| <u>Colour term</u> | <u>equivalent in English</u> | <u>NCE</u> |
|--------------------|-------------------------------|------------|
| Odhar | Dun, greyish brown | 60 |
| Lachna | Grey (dull) | 32 |
| Ciar | Pitch black, dark | 24 |
| Teimhleach | Dark | 4 |
| Riabhach | Variegated, speckled, striped | 0 |
| Flann | Blood red | 0 |

Figure 11: colour terms that are no longer used

3.2 ETYMOLOGY: PREVIOUS AND CURRENT DEVELOPMENT OF THE IRISH COLOUR TERMS

Figure 12 shows the etymology of the Irish colour terms and the stages they have gone through since they emerged in the language, this information is obtained from Matasovic’s *Etymology of Proto-Celtic* (2009).

| PIE | | PC | | EI | OI | MI | MO |
|--|-----------------|----------|------------------|-------|--------|---------|--------|
| *b ^h eh ₂ - | ‘shine’ | *bāno- | ‘white, shining’ | Bán | Bán | Bán | Bán |
| *d ^h ub ^h - | ‘black’ | *dubu- | ‘black’ | Dub | Dub | Dub(h) | Dubh |
| *d ^h erg- | ‘dark’ | *dergo- | ‘red, blood-red’ | Derg | Derg | Derg | Dearg |
| *bodyo- | ‘yellow’ | *bodyo | ‘yellow’ | Buide | Buide | Buíde | Buí |
| *g ^h lh ₃ -(stó) | ‘yellow, green’ | *glasto- | ‘green, blue’ | Glass | Glas | Glas | Glas |
| | | *gurmo- | ‘dun, dark’ | - | Gorm | Gorm | Gorm |
| *pelHi- | ‘gray’ | *flēto- | ‘gray’ | Líath | Líath | Líath | Liath |
| | | | | - | Úanne | Úaine | Uaine |
| *h ₁ rewd ^h - | ‘red’ | *rowdo- | ‘red’ | Rúad | Rúad | Rúad | Rua |
| *d ^h ews- | ‘dark’ | *dusno- | ‘dark, brown’ | donn | donn | Donn | Donn |
| | | | | | Corcur | Corcair | Corcra |
| | | *windo- | ‘white’ | Find | Find | Finn | Fionn |
| *g ^h elh ₃ - | ‘yellow, green’ | *gelo- | ‘yellow, green’ | Gel | Gel | Gel | Geal |
| *prk- | ‘speckled’ | *brikko- | ‘speckled’ | | brecc | Brecc | Breac |

Figure 12: Etymology of the Irish colour terminology (Matasovic 2009)

During the Proto-Celtic stage of the language, the colour system of Irish was at stage III of the Berlin and Kay sequence, the BCTs being *dub* ‘black’, *find* ‘white’, *ruad* ‘red’ and *glas* ‘grue’ (Lazar-Meyn 1988: 228). *Find* originated in Proto-Celtic, meaning ‘white’, and does not have a PIE root form that it was derived from. The Proto-Celtic form *riúad* ‘red’ was derived from a PIE root form meaning ‘red’, which developed into *read* ‘red’ in Old English. These two colour terms, *find* and *riúad*, were replaced by *bán* and *derg* respectively when the language transitioned into Old Irish, and a fifth BCT appeared: *buide* ‘yellow’, making it a stage IV system (Lazar-Meyn 1988: 229). *Buide* is likely a loanword from a non-IE source and its PIE root form developed in Latin into *badius* ‘bay, chestnut brown’ (Matasovic 2009).

As table 12 shows, *derg* was a term denoting ‘blood red’ before it became a BCT. It is derived from a PIE root meaning ‘dark’, this same root developed into *deorc* ‘dark’ in Old English (staying closer to its original meaning). *Bán* developed as a term meaning ‘white, shining’, before it became a BCT, being derived from a PIE root meaning ‘shine’.

Both *glas* and *geal* were derived from the same PIE root form, meaning ‘yellow, green’. When this term developed into the Proto-Celtic forms, a semantic shift occurred. The original meaning ‘yellow, green’ remained current for *geal*, but changed into ‘green, blue’ for *glas*. When Proto-Celtic transitioned into Early Irish, the meaning of *geal* developed into much what it means

today 'bright'. The PIE root form of *donn* 'dark' developed into *dox* in Old English meaning 'dark coloured, dusky'; in Proto-Celtic it was supplemented with an additional hue sense namely 'brown'.

Other secondary colour terms were not to enter the language until much later. For example the term *oráiste*, which is still up to this day a noun denoting the citrus fruit, additionally denoting the colour ORANGE, which can therefore not fully be accounted for as a basic colour term. However, as it is likely a loanword from English, the term is used as such – often in favour of the original Gaelic compound *flannbhúí*. The reasons that this term is not a BCT are clear: it is a compound word (non-monolexic), plus ORANGE is included in both *dearg* and *búí*. Something similar seems to be the case for *bándearg*, which in Lazar-Meyn's study into the colour terms of Irish, was not suggested to denote 'pink' by any of her informants, instead the loanword *pinc* (from English) was suggested (Biggam 2012: 57). The colour term for PURPLE (*corcra*) is an early loanword appropriated from Latin through Welsh (Mac Giolla Chríst 2004: 69). As it appeared in the language during Old Irish period, it is not included in the 'recent loanword' section, but instead given the status of an underived colour term.

Other terms that used to be frequent in (Early Modern) Irish, are not used by speakers anymore today. These terms are *flann* 'blood red', *lachna* 'dull grey', *ciar* 'pitch black, dark', *odhar* 'dun, greyish brown', *teimbleach* 'dark' and *riabhach* 'variegated, speckled, striped'. This conclusion is based upon the amount of entries in the Nua Chorpas na hÉireann and information obtained from my informants (see appendices 2 and 3 for usage frequency). In the case of *ciar*, it was not even recognised as a colour term by six of the informants (informants 6, 12, 13, 15, 19, 20) and others only recognised it as a colour word when it is compounded with *dubb* > *ciardubb* 'pitch black'. Something similar happened in the case of *odhar*; there was a lot of variation and uncertainty in the answers. These secondary terms are very likely blocked by the existence of a better, more specific term for the concepts they denote (Plag 2003: 64). Thus the use of *búí* is blocked in reference to 'yellow hair', as there is already a more specific term that covers it: *fionn* 'blonde'.

Already in 1988, Lazar-Meyn has pointed out that language contact with English has had substantial effects on the colour system of Modern Irish, colour terms that were previously secondary and restricted terms, have been adapted to serve a role in a 'proper' stage VII system (Lazar Meyn 1988: 239). In the remainder of this chapter I will look into the development that has occurred since then.

3.3 ANALYSIS AND NOTES ON THE CLASSIFICATION SYSTEM OF MODERN IRISH

In this section the grounds upon which this classification is build will be explored. First, I will elaborate upon the status of the terms *liath* and *donn*; next, I will look into the GRUE, DARK and RED categories; after which I will discuss the importance and salience of brightness. Before I start, I would like to bring the dathogham to the attention as a short interlude.

3.3.1 DATHOGHAM

Before the incorporation of the Latin alphabet in the Irish society, the Ogham alphabet had a subset comprising of colour terms, called the dathogham. In the dathogham a series of colours is matched to the ogham characters in alphabetical ordering. Non-colour words were included as entries to ‘fill up’ all the characters, and thus words were included such as *sodath* ‘having a good colour’, *necht* ‘clean’, *uath* ‘terrible’, *sorcha* ‘bright’ and *úscda* ‘greasy’ (Carey 2009: 228).

The inclusion of these words could purely have been for technical reasons, meaning to fill up otherwise empty ‘spots’ in the system, but simultaneously it could also express an idiosyncrasy of the colour sense of the Irish: their colour vocabulary is not one that denotes colour terms in the proper or traditional sense, but rather denotes ideas about colour. Even though my native language [Dutch] is one of many distinctions between tones of colour, with a full array of terms to choose from, my background in fine arts leads me to thinking it is not far fetched to include a term such as ‘greasy’ to denote a colour – it could have a similar relationship to colour interpretations in Irish, as ‘shine’ and ‘contrast’ have to the interpretations in Warlpiri, which is arguably a very limited and loose association (and according to Wierzbicka an association only made by people who have an anglocentric perspective of the world), but an association nonetheless. In other words, we should not rule out something, because it does not seem to comply with our version of the world.

Additionally I must note that when something does not denote a ‘colour proper’ from a Western perspective, this does not lead to it not *being* a colour term. The ‘empty spots’ in the structure could just as well have been filled by compound colour terms, but they were not. Lastly, what I want to point out by bringing the dathogham to the attention in this brief interlude is that its very existence emphasises the importance of colour in the eyes of the speakers of Irish.

3.3.2 THE STATUS OF *liath*

In this section, the BCT status of *liath* will be discussed. In my opinion, this is not a completely straightforward matter. In the 1975 revision of the Berlin and Kay sequence, GREY has been given

the status of wildcard. It can appear in a language between stages III and VII (Biggam 2012: 76). This makes it the only BCT that is not confined to a strict linear progression. I am not entirely certain if we are to deduce from this that the term itself holds a special place among the BCTs, but this does seem to be the case for Irish.

My initial inclusion of *liath* among the BCTs is based upon an unpublished paper by Ó Sé on the colour classification of Modern Irish, in which he includes it as a BCT. He does however transliterate *liath* with 'light grey' and points out that grey hair on a person is called *liath* but (exactly the same hue and brightness) on a horse is called *glas*. This specification on the tone of grey (namely: light) together with the 'discrepancy' in terminology for human and animal (grey) hair, hints to me that *liath* should perhaps not be considered a BCT, and is in need of closer inspection.

Other sources that I have consulted on earlier stages of the language also do not consider *liath* a BCT. Carey (2009) does not specify the basicness of colour terms in his classification of Early Irish at all; and Lazar-Meyn (1988: 229) classified *liath* in Old Irish as a semantically restricted term, referring primarily to hair - therefore it is implausible that it was a BCT in Early Irish. In a study of Modern Irish she carried out among three Irish informants, only one of them suggested *liath* as a basic term for GREY, the other two informants could not come up with any term (Lazar-Meyn 1988: 231). The information I have obtained from my informants concurs with this analysis up to a point. Even though the majority (75%) of the informants classified *liath* solely as 'grey', some informants imposed semantic restrictions upon the term, namely: one out of 24 (equalling 4.2%) used 'blue' and another informant used 'green' in their descriptions, additionally to the "textbook" meaning 'grey'; another informant (informant 1) gave further specification: 'dark grey'; another (informant 4) specified it as a colour term restricted to grey hair; one informant (informant 9) specified it as 'cream'; another one specified it as 'grey and greyish blue' (informant 11); another one excluded the description of animals (informant 17); and lastly, one informant classified it as 'grey or certain shades of green' (informant 18). This diversity in definitions was not present in their answers about BLACK, WHITE OR RED.

A possible explanation of the doubtful status of *liath* in Irish is that the GRUE category (specifically *glas*) includes certain tones of GREY, making the boundaries of the category less distinct than is the case with the category for RED. However, this could also be disputed because in the upcoming section on the RED category, it will become apparent that this category is not exactly clear-cut either. The important difference is that there is no other category that includes RED in it, therefore the category RED is in itself not divided between different terms, even though it may

include other hues itself. For now, it suffices to say that *liath* is perhaps more restricted than the terms for RED or YELLOW, as it does not cover the whole range of GREY.

As for the *glas/liath* terminology for animal fur and human hair colour respectively, a possible explanation could be that grey haired animals have naturally grey hair, whereas in humans it turns grey with age. As an adjective, *liath* can also refer to old people, regardless of hair colour. I hypothesise that the term *liath* in reference of hair could have something to do with the verbal derivative of the adjectival form: *liath(adh)* ‘to become grey’. This verb can both be instantiated transitively or intransitively. It can also occur as a verbal noun, which is halfway between a verb and a noun: *gruaig ag liathadh* ‘hair turning grey’; *is mór atá sé ag liathadh* ‘he is greying fast’; *duine a liathadh* ‘to gives someone grey hair’ (FGB 1977). This is however purely speculative, but interesting nonetheless.

Neither this distinction nor the variation in the definitions of informants is sufficient grounds to exclude *liath* as a BCT in Irish. The usage frequency of informants and the token frequency in the NCE may rule – albeit hesitantly - in favour of its inclusion. It is a relatively frequent term, although it is not as frequent as the majority of BCTs and not as infrequent as the majority of secondary colour terms. As a final criterion, there is no reason to exclude *liath* as a BCT according to the Berlin and Kay principles. Previous studies show more restriction than my study has pointed out regarding *liath*, it therefore seems that *liath* is undergoing a change from restricted term to basic term. Thus, for the time being, *liath* will be regarded as a wild card BCT with certain restrictions that are not sufficient grounds to rule in favour of its exclusion as a BCT.

3.3.3 THE STATUS OF *donn*

Similar to *liath*, the status of *donn* is not evident either. In none of the sources I have consulted it was included as a BCT. In earlier stages of the language *donn* signified tone rather than hue. If we quickly return to the etymology discussed in section 3.2, we notice that *donn* was derived from a PIE-root meaning solely ‘dark’ and developing a hue sense afterwards in Proto-Celtic: ‘brown’. This accounts for the fact that it was not included before, but the tables have turned in Modern Irish.

The classification of *donn* by informants was by far more uniform than was the case for *liath*. All informants (23/23) classified *donn* as ‘brown’, with only two informants (equaling 8.7%) giving further specification, namely ‘dark brown’ (informant 1) and ‘brown, dull, grey-brown, muddy’ (informant 11). There is no longer a strong tonal sense next to the BROWN hue sense, nor do there seem to be any other restrictions. Additionally, the usage frequency lines up with this information.

| | <u>Liath</u> | | <u>Donn</u> | |
|-------------|--------------|-------|-------------|-------|
| | Total: 24 | | Total: 23 | |
| Very often | 15 | 62.5% | 13 | 56.5% |
| Often | 1 | 4.2% | 5 | 21.7% |
| Neutral | 7 | 29.2% | 4 | 17.4% |
| Hardly ever | - | - | - | - |
| Never | 1 | 4.2% | 1 | 4.3% |
| NCE | 1475 | | NCE | 1015 |

Figure 13: usage frequency of *liath* and *donn*

Figure 13 shows how often informants use these terms in numbers and percentages - the bottom row shows the absolute token frequency in the NCE. These data suggest very similar usage patterns of the terms *liath* and *donn*. Next, if we turn to the Berlin and Kay principles for establishing BCT status, there are no grounds to exclude *donn* as a BCT, for all the criteria are met. An earlier study demonstrated that *donn* is indeed the basic terms for BROWN, additionally, in this same study one informant (out of 3) included subsets of PURPLE and the complete category ORANGE in *donn* (Lazar-Meyn 1988: 231-2).

Thus to conclude, *donn* is uniformly identified as BROWN by informants without any semantic restrictions; the usage and token frequencies are similar to those of *liath*; and there are no grounds to rule out *donn* as a BCT according to the Berlin and Kay principles. This seems enough basis to regard *donn* as a non-restricted colour term (or in any case, no more restricted than the established BCTs of Irish), which licenses its inclusion as a BCT.

3.3.4 THE STATUS OF *corcra*

Corcra developed out of a subset of RED. When it entered the language as a loanword from Latin (which was appropriated through Welsh), it was a term exclusively denoting dyed cloth and clothing worn by the nobility and it could indicate both 'purple' and 'crimson' (Stahl 2006: 14-15). This no longer seems to be the case in Modern Irish. My informants (24/24) unanimously suggested 'purple' for *corcra*, without any restrictions.

| <u>Corcra</u> | | |
|---------------|-----|-------|
| Total: 24 | | |
| Very often | 8 | 33.3% |
| Often | 7 | 29.2% |
| Neutral | 6 | 25% |
| Hardly ever | 3 | 12.5% |
| Never | | |
| NCE | 300 | |

Figure 14: usage frequency of *corcra*

Figure 14 shows the frequency data for *corcra*, suggesting that even it is not as frequent as the majority of BCTs – nor indeed as frequent as *liath* and *donn* – it is a term that is firmly embedded in the perception of native speakers.

Corcra has experienced a transition from a saturation and tone sense to a hue sense and it has lost its semantic restrictions. The fact that is an early loanword does not exclude it as a BCT with respect to the Berlin and Kay principles, as their loanword criterion is limited to recent loanwords, which generally have other senses next to a colour sense. This is not the case for *corcra*, nor are there any other principles to rule this term out as a BCT, plus it is psychologically salient for all informants, which confirms that it should in fact be treated as a BCT.

3.3.5 THE GRUE CATEGORY

Another uncertainty I will address is whether *uaine* should be included as a BCT. This is part of a larger discussion, namely that of the GRUE category in Irish. The Celtic languages hold the unique position within the Indo-European language family of having a GRUE term (source: Typology Database System). The GRUE category is typically described as ‘a macro-category consisting of GREEN+BLUE and, sometimes, including GREY’ (Biggam 2012: 206). The distinctions that are made between the three ‘grue’ terms in Irish, *glas*, *gorm*, and *uaine*, are again not clear-cut.

For my analysis I shall follow the chronological development of the language, starting with some remarks of Lazar-Meyn (1988: 228-32) about Proto-Celtic. She notes that at this point, the language had a stage III colour system and that it included the term *glas*, but not *gorm*. In Carey’s account of Early Irish he points out that *glas* is used as the equivalent of the Latin adjectives for BLUE *caeruleus* and *hyacinth(in)us* and the things denoted by *glas* include bright skies and

sapphires, but that it could also mean GREEN or GREY. Similarly, *gorm* could be used to denote BLUE and GREEN, but excluding GREY and extending towards BLACK. Both *glas* and *gorm* were at this time descriptive of water, the sky, vegetation and metal objects (Carey 2009: 226). Evidently, there was an overlap between the things denoted by these terms, and this is the case even in Modern Irish. Carey (2009: 226) also points out that *gorm* does not appear to be used to translate Latin terms for BLUE as much as *glas* was. In Old Irish as described by Lazar-Meyn, all three GRUE terms *glas*, *gorm*, and *uaine*, were included in the system (Lazar-Meyn 1988: 229). In a later report, she states that in Old Irish both *gorm* and *uaine* were secondary terms that referred primarily to brightness, while *glas* was a BCT (Lazar-Meyn 2004: 288). Concluding with Modern Irish, in which *gorm* denotes focal BLUE, *uaine* denotes GREEN, but *glas* is still the more usual term for GREEN while retaining the semantic range of GRUE (Lazar-Meyn 2004: 288). Ó Sé gives a more nuanced account, stating that *gorm* denotes bluish greens and dark greens (of grasses, moss, leaves and various plants), while *glas* covers more generic/general foliage, whereas *uaine* is used to describe artificial green.

According to the information obtained from my informants, the distinction between *glas*, *gorm* and *uaine* is not as straightforward as the previous references suggest: 52.2% of informants (12 out of 23) described *glas* solely as ‘green’; 87.5% of informants (21 out of 24) described *gorm* solely as ‘blue’; and 56.5% of informants (13 out of 23) described *uaine* solely as ‘green’. Further specifications that were made for each term will be discussed now. **Glas:** All of the informants (23 out of 23) described *glas* as ‘green’, about half of all informants described *glas* solely as ‘green’, as stated above, the other half had further specifications, namely: no informants used terms such as ‘light’ or ‘bright’ in their definition; eight (equalling 34.8%) additionally described *glas* as ‘grey’; three (equalling 13%) also described it as ‘blue’; four informants (equalling 17.4%) further specified the term as applicable to nature and plants. This makes the interpretation and possible denotations of *glas* very varied. **Gorm:** All of the informants (24/24) described *gorm* as ‘blue’; only one (equalling 4.2%) used the description of ‘dark’ in his definition of *gorm*; another one used ‘green’, and another one used ‘grey’. These results show that *gorm* is the least “problematic” colour term to define within the GRUE category. **Uaine:** The opposite can be said of *uaine*: in describing *uaine*, my informants were not at all on one line, even though 91.3% (21/23) agreed upon the meaning ‘green’, the two informants who did not classify *uaine* as ‘green’ both described it as ‘cream’ (8.7%). Additional specifications were as follows: three informants (equalling 13%) restricted *uaine* to describe inanimate things or artificial objects; one (4.2%) said the opposite, namely a restriction applying to nature and plants; three informants (not the same three as before), used ‘dark’ in their definition of *uaine*,

whereas only one (4.2%) used 'light' to describe this colour term.

It seems there is no uniform definition to distinguish these three terms. This is not at all unusual, as we are dealing with natural language, after all. For me, the real puzzle is the status and place of *uaine* in this equation. According to Matasovic's etymology (2009), *gorm* originated somewhere in the Proto-Celtic stage of the language, meaning 'dun, dark'; *uaine* originated in Early Irish, and neither *gorm* nor *uaine* (OI *úanne*) were derived from PIE root forms. Also Lazar-Meyn (1988: 229) points out that *gorm* did not appear until the transition into Old Irish. From the Berlin and Kay (1969) point of view, it makes sense that *glas* became the basic term for GREEN. In the early stages of the language, *glas* covered BLUE, GREEN and GREY. With the appearance of *gorm* (and *liath*), there was a shift in the semantic range of the term and part of what *glas* previously denoted was taken over by *gorm* (and *liath*). This explains why Carey's account seems to imply a tendency towards BLUE, whereas present day *glas* may have a tendency towards GREEN. So why was the appearance of a third term necessary and how was it facilitated?

Stahl (2006: 18) points out that *uaine* is the 'greenest of all grue terms'. But it can also describe BLUE. Perhaps the appearance of this word in the language was facilitated by technological advancement, but at the same time the prototypical description of the range of colours *uaine* denotes, refers back to nature. The distinction between *uaine* and *glas* therefore is mainly a distinction in brightness, saturation and tone – while hue is left out of the equation.

Now with regards to the BCT status of *uaine*, in most other languages that have a GRUE term, this term shifts in meaning to denote GREEN as soon as BLUE becomes lexicalized (see section 4.3 for specificities). This did not happen in Irish, and the reason is clear: there is not a GRUE term, plus terms for BLUE and GREEN: there are three distinct GRUE terms, although there is overlap in the semantic ranges these terms cover. This is not only an anomaly within colour classification, it also goes against the second Berlin and Kay criterion for BCT status: '*its signification is not included in that of any other colour term*' (Berlin and Kay 1969: 6). Of course, the nuances of these terms are not included in the range of another term, but they refer to different sections of the same category. Regardless, *glas* and *gorm* are still BCTs, so this point cannot be regarded as decisive in the matter. *Uaine* can only be ruled out as a BCT because psychological salience in native speakers can be largely disputed.

| | Glas | | Gorm | | Uaine | |
|-------------|-----------|-------|-----------|-------|-----------|-------|
| | Total: 23 | | Total: 24 | | Total: 23 | |
| Very often | 16 | 69.6% | 16 | 66.7% | 2 | 8.7% |
| Often | 4 | 17.4% | 4 | 16.7% | 5 | 21.7% |
| Neutral | 4 | 17.4% | 3 | 12.5% | 6 | 26.1% |
| Hardly ever | - | - | - | - | 8 | 34.8% |
| Never | - | - | - | - | 2 | 8.7% |

Figure 15: usage frequency of *glas*, *gorm*, and *uaine*

Figure 15 shows the usage frequencies all three GRUE terms (obtained from informants) and *uaine* is used remarkably less frequent than *glas* and *gorm* in daily speech. This information concurs with the data from NCE: *glas* (2245); *gorm* (2352); and *uaine* (236). There is no doubt that *uaine* is a secondary term, while *glas* and *gorm* are BCTs.

The distinctions in the semantic range the three GRUE colours denote are indeed fascinating. There is fluctuation in the salience of these terms between informants as well as researchers. But the semantic dimensions are hopefully clearer now: *glas* denotes the desaturated range between GREEN, BLUE and GREY; *gorm* denotes the saturated range between GREEN and BLUE; and *uaine* denotes brightness in the range of GREEN and BLUE. Still, the boundaries are not black and white, as the fluctuation between speakers shows.

3.3.6 THE DARK CATEGORY

Like GRUE, the DARK category is a macro-category. This means that a DARK category consists of more than one hue (Biggam 2012: 207). A DARK category often incorporates BLACK and dark tones of hues, such as dark GREY, dark BLUE, or dark GREEN, and often centres around one of the denoting terms. In this section I want to explore the question of the existence of a DARK category in Irish. The fact that Irish makes a distinction between *dubh*, *gorm*, and *glas* initially favours against a hypothesis of a DARK category. However, I do not want to exclude a possibility because of its unlikeliness.

In this classification, *gorm* is part of the GRUE macro-category, as it includes tones of GREEN. An overlap on the level of colour categories sounds very unusual - if not straight impossible. Additionally, my informants only saw one 'extension' of *gorm*, namely in the description of the complexion of black people: *feor gorm* 'black man' (suggested by four informants out of 24; equaling 16.7%). But as this is only one instance, it is unlikely to base the existence of a DARK category upon it.

Turning to *dubh*, there is indeed some extension in the use of this term, but this has more to do with polysemy than with including other hues. For example, out of 24 informants, three (12.5%) used ‘dark’ in their description of *dubh*; one (4.2%) used ‘swarthy’; three (12.5%) pointed out the use of *dubh* to describe crowdedness; and another three (12.5%) associated it with gloom and/or depression. In total 37.5% of informants (9 out of 24) indicated *dubh* has additional meaning other than purely BLACK, either ‘swarthy’, ‘dark’, ‘crowded’ or ‘gloom/depression’. With regard to crowdedness, this is not an intrinsic word sense of *dubh*, but instead an idiomatic meaning: *bhí an áit dubh le daoine* ‘the place was crowded’ (lit. ‘black with people’), which has little to nothing to do with the actual colour (compare: *green with envy* in English and *het ziet zwart van de mensen* in Dutch).

Based on this information, it is unwarranted to argue in favour of a DARK category in Modern Irish. It is however not entirely implausible that such a category used to exist in the past – or at the very least a micro-category involving *dubh* or subsets of *dubh*. In regard to this micro-category, Stahl (2006: 6) classifies the BLACK colour family in Early Irish as containing the following terms: *dub*, *ciar*, and *teimen* (MO *teimbleach*). I have excluded *teimbleach* from my survey, as both the FGB and NCE did not return any results. As for *ciar*, it was barely recognised as a colour term by my informants: 10 informants did not answer this question, indicating they did not know the meaning of the word and out of remainder (of 16 informants): 25% (4 informants) described it as ‘black; 18.8% (3 informants) described it as ‘swarthy’ or ‘dark’; 18.8% (3 informants) only knew it as compound with *dubh* > *ciardhubh* ‘pitch black’; and the last six (37.5%) thought it was not a colour term at all and that it meant either ‘comb’ or ‘wax’. Three informants additionally classified *ciar* as a subset of *dubh* (informants 16, 17 and 22). The usage frequency aligns with these results: 56.5% of informants says they never use the term; 39.1% says they hardly ever use it and 4.3% answered ‘neutral’. The token frequency in the NCE is 24 (1:1.250.000). In conclusion, the BLACK category is not ‘black and white’ in Irish and I have ruled out the possibility of the existence of a DARK category.

3.3.7 THE RED CATEGORY

With the transition of Proto-Celtic into Old Irish, the BCT for red *ruad* was replaced by *dearg* (Lazar-Meyn 1988: 229). In these early stages of the language, *ruad* was the darker variant of red, *dearg* was more salient (Stahl 2006: 13) – despite *dearg* originating from a root meaning ‘dark’. In Modern Irish, the tables seem slightly turned again: only one informant (informant 14 – out of 24

responses) described *dearg* as ‘bright red’, none of the others mentioned brightness. 20.8% of informants (5 out of 24) associated *dearg* with emotions and 12.5% (3 out of 24) specifically mentioned the intensifier function of *dearg*. One informant (informant 1) described *dearg* as a modifying term for artificial, inanimate things – which could lead to a preliminary hypothesis that there is an animate/inanimate distinction between *dearg* and *rua*.

For *rua*, the balance is clear: the large majority (15 informants out of 22, equalling 68.2%) restricted its use to describe hair colour or fur on animals. Three informants used ‘orange’ in their definition, equalling 13.6% of the total. One informant classified both *dearg* and *rua* as subsets of *donn* (informant 3), four informants (informants 16, 17, 20, 22) classified *rua* as a subset of *dearg*.

Another RED term I initially took into consideration, *flann*, turned out to be obsolete in modern speech. The original sense of *flann* ‘blood red’ is not really recognised anymore by speakers of Modern Irish. Only eight informants out of 27 gave a definition of the term, indicating that the majority does not recognise it as a colour term at all. Out of these eight, two (equalling 25%) described it as ‘bright or vibrant red’, three (equalling 37.5%) described it as ‘orange and/or yellow’, one informant only recognised it as the compound with *buí* ‘flannbhúí’, another one specifically stated not to recognise it as a colour term, and only two indicated the textbook meaning ‘colour of blood’. The usage frequency concurs with the relatively small number of informants giving a definition of this term: 23 informants indicated they never use this term, an additional two informants said they hardly ever used it.

3.3.8 BRIGHTNESS VS. HUE AND THE STATUS OF *geal*

In this section I will discuss the Irish colour terms that have a strong association with brightness and their progression in terms of brightness/hue shift. In the semantics of colour, ‘brightness’ denotes the amount of light that is reflected by an object (Biggam 2012: 4).

For comparison and reference, I will dedicate the first few paragraphs to the semantic shift from brightness to hue that occurred in English, before discussing this process in Irish. Old English (OE: 600-1150 AD) had seven BCTs: *white*, *black*, *red*, *yellow*, *green*, *blue*, and *grey*, of which only *red* had a predominant hue sense (Casson 1997: 227). The other terms referred primarily to brightness until their focus shifted to hue during Middle English (ME: 1150-1500 AD) (Casson 1997: 224). This makes OE a stage VI system according to the Berlin and Kay evolutionary sequence, except, instead of having a term for BROWN, English had a term for GREY, like Irish. Gradually, the ME basic colour lexicon grew to become a stage VII system.

Blue appeared in the English language relatively late (during the ME stage), as a loanword from French, and did not have a hue sense. It likely replaced OE *haewen* as a colour term denoting BLUE (Casson 1997: 230). *Brown* did not appear as a BCT until the end of the ME period. Before, it was still a semantically restricted term (Casson 1997: 230-1). *Purple*, *pink*, and *orange* have always strictly been hue terms, with no brightness sense whatsoever (Casson 1997: 231). *Purple* was, like Irish, a loanword from Latin and was heavily restricted up to 1398, when it became a BCT. *Pink* is regarded to be obscure in origin, and appeared in the language in 1573 as the name of a species of flowers. *Orange* is a loanword from French that entered the English language in the 14th century and became a colour term around 1600 (Casson 1997: 231-2).

To conclude this interlude of English colour classification, the shift of OE into ME coincided with shift of brightness to hue in colour term denotation. *Red* is the only colour term that has always been focussed in hue rather than brightness, and more recent additions to the colour lexicon, namely *blue*, *purple*, *orange*, and *pink*, never had a brightness sense either.

Returning to Irish, which was a stage III system during Proto-Celtic, as discussed in section 3.2.1 on the etymology of colour terms. One of the four BCTs at this time was *find*, the Early Irish variant of *fionn*, which at this point in time meant ‘white’. *Find* was replaced by *bán* as the BCT for WHITE with the transition from Proto-Celtic into Old Irish (Lazar-Meyn 1988: 229). Originally, *bán* meant ‘white, shining’ in Proto-Celtic and the PIE root it was derived from meant solely ‘shine’ (Matasovic 2009). Thus *bán* seems to have made an extensive progression, shifting from a brightness to a hue. Whereas the opposite holds true for *fionn*, once being a hue based BCT, but currently a severely semantically restricted secondary colour term.

According to Stahl (2006: 8, 18), Early Irish colour terms with a strong basis in brightness are *find* (MI *fionn*) ‘white, bright’, *gel* (MI *geal*) ‘white, fair’, *bán* ‘white, bright, fair’, and *gorm* ‘either darker or brighter than *glas*’. Additionally, she considers *lachtna* (MI *lachna*) and *glas* as referring to the dullness of a colour, rather than to brightness (Stahl 2006: 56). As we have previously seen in section 1.4, Biggam considers dullness a characteristic of saturation, which makes *lachna* and *glas* terms that deal with saturation, rather than brightness – in any way, they are to a lesser extent concerned with hue. Lazar-Meyn (1988: 229) points out the following terms for the period of Old Irish, *find* meant ‘bright, fair’, *gel* meant ‘dazzlingly white’, *gorm* meant ‘bright blue through black’, *úaine* (MI *uaine*) meant ‘bright green’, *odor* (MI *odbar*) meant ‘bright brown’. It seems evident that at some point in time, brightness played a larger part in colour naming than hue.

I will now inspect the importance of brightness in the colour terms of Modern Irish, based

on information I have obtained from my informants. *Bán* used to be a brightness term, it made a shift to include hue (WHITE) in its word sense, and now it seems to be exclusively hue-based. 44% of a total of 25 responses contained exclusively 'white' in the definition, out of these 25, only one informant (equalling 4%) described *bán* as 'white, bright'. This indicates that not only 'bright' is not (strongly) associated with *bán*, a lot of other things are, as the majority of informants gave additional information, ranging from agricultural use (32%), to including 'blank' in the definition (16%), to hair colour (12%), to including 'empty' (8%), 'light' (4%), 'plain' (4%), or 'pure' (4%). Brightness does no longer seem to be encoded in *bán*.

Fionn originally had a sense of brightness in Early/Old Irish, which does not seem to be the case anymore in Modern Irish today. All of the informants (23) agreed that *fionn* is a semantically restricted colour term, denoting only the colour of hair 'blonde'. Additionally, only one of them (equalling 4.3%) used the term brightness in their description of *fionn* (informant 11), and two informants (informant 11 and 17) mentioned it could also be used to denote 'white'. Despite the small number of informants who included 'white' in the definition of *fionn*, a total of six informants (equalling 26.1%) classified *fionn* as a subset of *bán*. There is no indication to regard *fionn* as a brightness term at this stage of the language.

The prototypical brightness colour term in Modern Irish is *geal*. In the case of *geal*, 79.2% of informants (19 out of 24) described the term as referring primarily to brightness, or more specifically, having the meaning 'bright'. This seems to imply that *geal* is not strictly limited to any specific hue, making it a brightness term. At the same time, 25% of all informants did link *geal* to 'white' and one person also specified it as 'light yellow'. From a historical point of view, *geal* used to have a (strong) association with hue, originating with the word sense 'yellow, green' (Matasovic 2009). This sense slowly shifted towards 'bright white/yellow' over time, and it seems that now the term is nearly exclusively denoting 'bright'. Still, five informants (20.8%) classified *geal* as a subset of *bán*. Additionally, one informant classified *geal* as a subset of *buí*, which is an anomaly within the responses, as none of the informants used a concept of brightness in their definition of *buí*.

As for *gorm* and *uaine*, none of the informants used 'bright' to describe these colours, some of them did however mention tonal values. *Uaine* was described as 'dark' by three informants (equalling 13%), one informant used 'dark' for *gorm* (equalling 4.2%), and one informant additionally mentioned 'light' for *uaine* (equalling 4.3%). None of the informants mentioned brightness as a descriptor of *glas*.

The remaining term suggested by Lazar-Meyn denoting brightness, *odor*, can be regarded

as obsolete in Modern Irish, as the usage frequency of informants and token frequency in the NCE point out it is not in use anymore (as discussed in section 3.1). Furthermore, terms that were not included by Stahl or Lazar-Meyn, were occasionally described in terms of brightness by my informants. For *dearg*, one informant (informant 14; out of 24 responses; 4.2%) described *dearg* as ‘bright red’, none of the others mentioned brightness.

As discussed in section 1.3 on the relativist view on colour theory, certain non-Indo-European languages make use of relative rather than absolute descriptors. In other words, more emphasis is placed upon colour-independent features, including brightness, texture, and pattern (the latter two shall be discussed in the following section 3.3.8) – which are considered in relative relation to an object. In certain lighting circumstances an object could be described as GRUE, and in others as GREEN. In Irish, this is not the case, but there is a distinct importance of brightness. Focus on brightness rather than hue is similarly found in other Celtic languages, but also in languages such as Navaho and Turkish (Van Brakel 1994: 772).

In conclusion, this means that, *bán*, *gorm*, and *uaine*, are all three affected by a semantic shift from brightness to hue, which has also happened to many of the English colour terms. Additionally, whenever modifiers are used to specify these hues, a tonal term is used rather than a brightness term. Contrasting, *geal* went through the reverse process, shifting from hue to brightness. *Fionn* went through a similar process as *geal*, yet the difference lies in the fact that it went from being a hue-based BCT (WHITE) to a semantically restricted term for the hair colour ‘blonde’, with no grounds in brightness anymore. Both *geal* and *fionn* are regarded as a subset of *bán* by my informants. The last term that used to have some ground in brightness, *odhar*, is obsolete in Modern Irish and will thus not be taken into account. In the Irish language, both processes of brightness to hue and hue to brightness/tone are identified, which distinguishes it from languages such as English that have gone through an extensive brightness to hue shift.

3.3.9 VARIEGATION

According to Van Brakel’s typology of colour, Welsh has a colour term denoting variegation which seems to fit all criteria of a BCT (Van Brakel 1994: 772). In Irish, variegation terms are not BCTs, they are semantically restricted with a high degree of fluctuation in salience among speakers. The most common variegation term is *breac* ‘variegated, speckled’, which is also the noun for ‘trout’ in Modern Irish. Another term that I initially took into consideration was no longer recognised by informants, this term is *riabhach* ‘variegated, specked, striped, brindled’. The latter is restricted to

cattle and *breac* is restricted to nature. In Early Irish there was a third term, *alad*, which meant ‘pie-bald’ and was also restricted to describe cattle colours, it was also a compound with *breac* (OI *brecc*) (Stahl 2006: 23).

Usage frequency data obtained from my informants shows that salience among speakers is very divided. 33.3% of informants uses this term often, the others are equally divided between ‘very often’, ‘neutral’, ‘hardly ever’ and ‘never’, as can be seen in figure 16 below. Additionally, one informant (informant 8) describes *breac* as ‘multicoloured’, one (informant 1) describes it as referring to sparkling colours and one (informant 23) describes it as referring to the contrast between black and white.

| <u>Breac</u> | | |
|--------------|------|-------|
| Total: 24 | | |
| Very often | 4 | 16.7% |
| Often | 8 | 33.3% |
| Neutral | 4 | 16.7% |
| Hardly ever | 4 | 16.7% |
| Never | 4 | 16.7% |
| NCE | 1054 | |

Figure 16: usage frequency of *breac*

Since *alad* and *riabhach* became obsolete in the language, variegation is not strongly embedded in colour terms anymore in Irish. Even so, it is still unusual for an IE language to have a variegation sense encoded in a colour term at all.

3.4 MORPHOLOGY: COMPOUNDS AND VERBS

In chapter 2 I introduced some basics of the morphological processes of Irish. Colour adjectives follow the noun they modify. In compounds, on the other hand, colour adjectives often precede the term they modify. This is the same in English, compare: *liathghorm* and *light blue*. *Liath* often loses its hue sense in compounding and is consequently the equivalent of English ‘light’. Colour adjectives can also play a part as prefix in the word formation process of nouns, as can be seen in the nominal phrase *breac-Ghaeilge* ‘broken Irish’, as opposed to the derived colour adjective *breacghlas* ‘speckled green’. As prefixes to nominals, certain colour adjectives can have additional meaning next

to their hue senses: *dearg* is an intensifier *dearg-ghráin* ‘intense hatred’, *deargbhuile* ‘raging madness’; and *glas* denotes freshness of nature or immaturity in humans, such as in *glas-stócach* ‘half grown boy’. Apart from these modifier functions, compounding is used to denote an intersection between two colour terms, as is the case in *bándearg* ‘pink’ (lit. white-red) and *flannbhúí* ‘orange’ (lit. red-yellow), or they can modify a colour term as is the case in *liathghlas* ‘light green’ (lit. grey-green). It is important to make a distinction between colour adjectives that serve as prefixes (intensifiers) to nominals, which do not create a new colour term, and compound colour terms that do.

Compound words are important to examine, because of what is called ‘colour term intersection’ by Heidi Ann Lazar-Meyn (Stahl 2006: 58). These intersections give insight in the distinct colour categories and their referents in a certain language; where they border on each other and perhaps more importantly, which colour borders on which in the conception of native speakers. The fact that compounds *liathchorcra* ‘lilac’ and *bánchorcra* ‘mauve’ express two different tints of PURPLE, even though PURPLE is only weakly encoded in Irish, shows again the precision of the Irish language in expressing and describing colour. In fact, it is an interesting hypothesis that these two terms distinguish between saturation and tone. *Liathchorcra* mixes the purple hue term *corcra* with *liath* ‘grey’, leading to a term that expresses a certain level of saturation. *Bánchorcra* on the other hand mixes *bán* ‘white’ with the purple hue term, leading to the interpretation of either a tonal variety or a brightness variety of the PURPLE hue.

There is a tendency in Irish to intensify a colour by modifying it with a different term within the same colour category, this is called concatenative compounding and can be characterised as follows: red+red=superred (as opposed to non-concatenative compounding which is red+white=pink). *Fionnbhán* literally means ‘white-white’ or ‘light-white’ and translates as ‘fair, light coloured’. Both *fionn* and *bán* carry this meaning already, so the compounded version stresses the lightness and fairness of the colour. The same is the case with *fionngheal*, which is used to stress the fair hair colour of a person. *Ciardhubh* is a term for black, stressing the darkness of the black, translating as ‘pitch black’ or ‘jet black’. The same can be done with reds, forming compounds such as *flanndearg* ‘vermillion’ and *flannrua* ‘bloodred’. The latter are specific tints of red and the same type of specification can be done with any other terms as well. Figure 17 shows a non-exhaustive overview of colour compounds of Irish.

| | | |
|--------|---|---|
| Bán | In compounds bán weakens meaning of word | <i>Bánach</i> (N) 'fair haired person'; <i>bánbhúí</i> 'offwhite, cream'; <i>bándearg</i> 'pink' |
| Dubh | prefix dubh- before vowels and fh and dú- before consonants means 'black, intense, evil, unknown' | <i>dubhuaine</i> 'dark green'; <i>dubhghorm</i> 'blue-black' |
| Dearg | as prefix dearg- means 'real, red, intense, utter'; as compound it is an intensifier, can also mean evil | <i>Cródbhearg</i> 'blood-red' |
| Buí | | <i>crónbhúí</i> 'dark yellow, coppery'; <i>gealbhúí</i> 'bright and pale yellow, tawny'; <i>flannbhúí</i> 'orange' |
| Glas | prefix: glas- 'green, greenish, grey, greyish, pale, pallid, immature, inexperienced' | <i>glasrua</i> 'reddish grey'; <i>glasbhán</i> 'pallid, pale green'; <i>fionnghlas</i> 'light green' |
| Gorm | when compounded it serves as an intensifier meaning 'very' or 'truly' | |
| Liath | as a prefix it is equivalent of English 'light' | <i>Liathghorm</i> 'light blue, pale blue'; <i>liathchorcra</i> 'lilac'; <i>geal-liath</i> 'white of hair' |
| Geal | | <i>gealbhreac</i> 'variegated with white'; <i>gealbhúí</i> 'pale yellow, tawny' |
| Rua | | <i>flannrua</i> 'bloodred'; <i>ruabhreac</i> 'char'; <i>fionnrua</i> 'light, sandy red'; <i>ruachorcra</i> 'pale pink'; <i>for-rua</i> 'deep red' |
| Breac | prefix breac- means 'middling, partly, odd'; compounds: gives modified N or A a subsequent meaning of variegation | <i>gealbhreac</i> 'variegated with white'; <i>breac-Ghaeilge</i> 'broken Irish'; <i>breacghlas</i> 'speckled green' |
| Donn | | <i>donnbhúí</i> 'biscuit coloured, yellowish brown'; <i>ciardhonn</i> 'dark brown'; <i>donndearg</i> 'reddish brown' |
| Fionn | | <i>finn-genti</i> 'norsemens' (lit white heathens); <i>fionnbhán</i> 'fair, light coloured'; <i>fionnbhúí</i> 'light yellow'; <i>fionnliath</i> 'grey-white'; <i>fionngheal</i> 'white, fair haired'; |
| Corcra | | <i>gealcorcra</i> 'rosy' |

Figure 17: overview of compound meanings of colour adjectives (information obtained from FGB: 1977)

Compounded colour terms are not BCTs for the simple reason that they are not monolexemic, and their meaning is deducible from the meaning of their parts. This fact might facilitate the implementation of English loanwords for PINK and ORANGE, as *bándearg* and *flannbhúí* could not be accepted as BCTs conform the Berlin and Kay criteria.

In the case of verbal derivatives, in Irish nearly all colour adjectives, both basic and secondary terms, can be instantiated as a verb. With the single exception of the verbal form of *corcra*, all verbs can be used in a transitive as well as an intransitive construction.

Irish verbs in general have root forms to which inflectional suffixes are added that are marked for person, number and tense. The verbs in table 18 are dictionary forms, in order to put

an Irish verb in the right tense, only the root of the dictionary forms is used, which is then suffixed with the correct tense. For example, to make the form for the first person singular present tense of *bánaigh*, the root *bán* is suffixed with *-áim*, which is marked for tense, person, and number, forming *bánaím* ‘I white (something)’. Irish is also widely studied for its verbal noun (VN) construction, comparable to the progressive in English, which are halfway between nominal and verbal forms. Most of the Irish colour adjectives have a verbal noun form, for example *bán* has the VN *banú* ‘whitening’: *banú an tae* means ‘whitening tea with milk’.

| Adjective | Derivative verb | Meaning | Verbal noun |
|-----------|--|--|-------------------------|
| Bán | bánaigh t+i | ‘to white, bleach, dawn (of day)’ | banú ‘whitening’ |
| Dubh | dubhaigh t+i | ‘to blacken, darken’ | Dúchan |
| Dearg | deargaigh t+i | ‘redden, makes red, lighting of a cigarette or pipe’ | deargadh ‘reddening’ |
| Buí | buígh t+i PRES buíonn | ‘turn yellow, ripening, tanning’ | Buíochan |
| Glas | glasaigh t+i | ‘to become green’ (of vegetation or skin turning a sickly shade) or ‘to become grey’ (of hair and weather) | glassú |
| Gorm | gormaigh t+i | ‘to colour blue, to become tinged with blue’ | Gormú |
| Liath | liath t+i | ‘to turn grey’ (of hair); ‘fading’ (of colour) | |
| Geal | geal t+i | ‘whiten, brighten’ | gealadh ‘dawning, dawn’ |
| Rua | ruaigh t+i PRES ruann FUT ruafaigh | ‘to make or become reddish brown’ | Ruachan |
| Breac | breac(aigh) t+i | ‘to speckle, dapple, variegate’ | |
| Donn | donnaigh t+i | ‘to brown, to rust, to tan’; | Donnú |
| Fionn | fionn t+i Fionn i | ‘to whiten, to clear, to brighten’ ‘to discover’ | |
| Corcra | corcraigh t | ‘to dye purple, to stain with blood’ | Corcrú |
| Crón | crónaigh t+i | ‘tan, darken, grow dark’ | |

Figure 18: Verbal forms derived from colour adjectives

In certain cases, colour terms get additional meaning when used as a verb. For instance, the verbal form of *bán* can mean ‘to dawn’ as in *bhánaigh an lá* ‘the day dawned’; *ná fionnadh d’athair ort é* ‘you had better not let your father find out about it’; especially in the case of *breac*: *urlár a bhreacadh* ‘to spatter a floor’; *páipéar a bhreacadh le scibhinn* ‘to cover a paper with writing’; *tá an lá ag breacadh* ‘the day is dawning’. In other cases, the colour term refers to a more symbolic denotation, for ex-

ample: *dhearg sé go bun na gcluas* ‘he blushed up to the ears’; *buífidh an ghrian do chraiceann* ‘the sun will tan your skin’; *donnú le grian* ‘to get sun-tanned’; *duine a liathadh* ‘to give someone grey hairs, to wear someone out’; *dhubhaigh is dearg aige* ‘he turned purple/he became all confused’; *dhubhaigh agus dhean aid* ‘he changed colour, became terrified’.

3.5 CONCLUSION

After considering all these features of Irish colour classification, we might have to revisit the ideas postulated by Berlin and Kay: these ideas do not seem to be fully compatible with the traditional Irish colour lexicon. Berlin and Kay imply that the number of BCTs is associated with the technological advancement of that society (Berlin and Kay 1969: 16), implying a sense of minority or inferiority of the language in question. Yet the number of BCTs in Irish is limited in comparison to its overall colour terminology, that is to say, the number of secondary monolexic terms, the terms that can be derived from compounding and the loanwords from English that seem to be favourable to original Irish compounds.

The language contact between English and Irish has left its mark on the Irish language. Colour terms such as *corcra* and *donn* have been adapted to fulfil the role of a ‘proper’ BCTs in order to compose a stage VII system. Derived terms such as *bándearg* and *flannbhuí* have been replaced by and large to accommodate *pinc* and *oráiste*, which can fill the empty BCT spots for PINK and ORANGE in a stage VII system. A similar process has assimilated *liath* in the past and there are still traces to be found of this process: *liath* is still relatively restricted, there is considerable diversity in the definition of this term, and it has not been a BCT for long. *Liath* shares some of these characteristics with *donn*, which was uniformly identified as BROWN without semantic restrictions by my informants and the usage frequencies of both *liath* and *donn* are very similar. I therefore propose to include *donn* as a BCT. I also think that *corcra* can be included as a BCT, the term has transitioned from a saturation/tone sense to a hue sense and it has lost its semantic restrictions.

In Irish the semantic shift from brightness to hue senses is not as extensive as it was in English during the transition of Old English into Middle English. This could indicate that a further shift might occur. So far, *bán*, *gorm*, and *uaine*, have all three shifted from brightness to hue, in contrast to *geal*, which went through the reverse process, shifting from hue to brightness; and *fionn*, which went from a hue based BCT to a semantically restricted term.

The Irish GRUE category is an anomaly within the Indo-European systems of colour classification. Not only is there one term denoting GRUE, there are three. The distinctions in the semantic

range of GRUE is not always evident, but I have found that the main distinction does not lie in hue, but can be found in saturation and tone, with *glas* referring to desaturated tints of GRUE, extending towards GREY, *gorm* to saturated tints of GRUE, extending towards black, and *uaine* to brightness in the range of GRUE. Another anomaly is the link between colour sense and variegation, in Irish variegation is only still marginally encoded and has lost two variegation terms during the Early Modern period.

UNUSUAL FEATURES IN THE IRISH COLOUR CLASSIFICATION 4

In this chapter I would like to revisit the colour naming debate and the Berlin and Kay paradigm. Critics have pointed out its incompatibility with non-IE languages due to the anglocentric viewpoint which dominates this theorem. However, critical voices can also be heard concerning IE languages: Russian has two BCTs denoting BLUE, Hungarian has two for RED, French has two for BROWN, and Irish can be included in this list with two BCTs denoting GRUE, one of which denotes GREEN, BLUE and GREY and another one that is closer to focal BLUE, but covers more saturated tones in the GRUE range and extending towards BLACK. Even if we consider *glas* to be the only term denoting GRUE, with *gorm* denoting focal BLUE, then this is still an anomaly within the Berlin and Kay sequence.

The following sections will thus outline some of the problems regarding the Berlin and Kay theory and its incompatibility with many of the world's languages, including Irish. I will illustrate this by analysing the examples I have gathered from the Irish language. The problems that will be dealt with include: 1) BCTs and Basic Colour Categories [BCCs]; 2) the exclusion of perceptual qualities other than hue and saturation; 3) linking the total number of BCTs with technological advancement; and 4) the constraints on the theory caused by colour systems around the world conforming to Western European standards due to globalisation. Furthermore, I will analyse the colour classification of Irish, formulate the unusual features in this classification and propose explanations and hypotheses.

4.1 BASIC COLOUR CATEGORIES: UNIVERSAL, RELATIVE, OR INVENTED?

In Chapter 1 I already briefly mentioned that not everyone acknowledges BCTs and BCCs. Saunders believes BCCs are invented by the anglocentric tradition in colour studies and Van Brakel concurs by pointing out the only ‘evidence’ for BCCs is empirical, and that empirical evidence is not sufficient grounds to base categories upon (1993: 111). Also McNeill (1972) is opposed to the idea of a natural division of the spectrum (1972: 21).

It is easy to assume that colour is not a universal concept when standardised tests such as colour naming tasks aided by the Munsell chips do not yield results in every language. We can not conclude from this that not every language has colour terms: the only conclusion we can draw from it is that *abstract* colour categories are not universal. This is exactly the problem of the Munsell colour chips, which embody abstract colour categories, devoid of any other perceptual qualities such as texture, surroundings, shape, size, glossiness, glitter, glow, etc. No comprehensive theory of colour appearance can be based only on the properties hue, saturation, and brightness (Saunders and Van Brakel 1997: 175). By extension, this methodology is also why the Berlin and Kay paradigm has been subject to much critique over the years.

Saunders reified this problem when her informants did not know how to respond to the Munsell chart, but could only answer questions about coloured beads and fruits (see section 1.4.2). This example points out that colour categorisation is relative from one language to another. Van Brakel also has problems with the use of the Munsell chips, saying that 95% of the world’s colour words are eliminated by its use (1993: 112). Hardin’s response to Saunders and Van Brakel’s resistance towards the decontextualising properties of this system was that it can also be seen as an advantage: replacing real systems with ideal ones has been a standard and effective technique of scientific inquiry, the fact that we now know which features are excluded by the Munsell chips (which should not be excluded) shows how much we have learned by using colour chips in controlled environments (Hardin 1997: 190).

In the case of Irish, the colour spectrum does not seem to be divided in the same way as in English – or many other West European (i.e. Germanic) languages for that matter. There are arguably two macro categories which cover different parts of the spectrum of what English speakers call GREEN and BLUE, this demarcation shall be discussed in section 4.3.1.

4.1.1 UNIVERSALITY OF SENSES

Wierzbicka claims that not the semantics of colour, but instead the semantics of vision are universal (2008: 410). Hardin points out that when we perceive an object, we do not perceive a physical object, but a perceptual object (Hardin 1992: 37). The same holds true for colour: it can be argued that when we perceive colour, it is our own subjective experience of perception that we interpret as the external reality. Other senses such as touch, taste, hearing, and smell all involve physical confirmation by more than one sensory organ, colour is accessed only by sight, which cannot be physically corroborated and thus only ‘exists’ as a concept in our minds (Finlay 2007: 401). But is colour really a subjective experience? Is colour a property of objects or a property of the mind? An objectivist approach to colour holds that colour is a property of objects, whether or not they are perceived by human beings and a subjectivist view may lead to the conclusion that variation in colour vision leads to variation in scene segmentation (Hilbert 1992: 38). This is perhaps what the universalist-relativist debate comes down to in the end; it can be regarded as ‘offspring’ of the early opposition in works on colour by Newton and Goethe. Newton regarded colour as being in our head, whereas Goethe opted that colour is in the world (Finlay 2007: 386).

4.1.2 DIVIDING THE SPECTRUM

In section 1.4.1, I discussed Carey’s (2009: 221) polarity between BLACK and WHITE, which does not exist between the colours of the spectrum according to him, and thus forming a continuum. Yet, a lot of the literature on the neurophysiology of colour – which I shall not further discuss here – points out two additional physiological polarities of visual perception: YELLOW-BLUE and GREEN-RED (Wooten and Miller 1997: 70). Each of these channels forms a polarity, rather than a continuum: RED can be mixed with BLUE or YELLOW, but not with GREEN, there is no such hue as ‘greenish red’ or ‘reddish green’ (McNeill 1972: 29). If RED predominates the mixture we obtain unsaturated tones of RED and if GREEN predominates we obtain unsaturated tones of GREEN.

Under these terms, an Irish colour term such as *glasrua* does not refer to ‘greenish red’ but to an unsaturated subset of RED, or to a greyish tone of RED. This ‘polarity’ compound seems to be the only one included in the FGB dictionary, yet it does not have any tokens in the NCE, and only one of my informants (informant 9) recognised it as a colour compound. My informants did mention these other ‘polarity’ compounds: *dubhgeal* (lit. ‘black-white’ or ‘black-bright’; informants 3, 9, 10, 15, and 16); *buighorm* (lit. ‘yellow-blue’; informants 13 and 18); *deargghlas* (lit. red-grue’; informants 2 and 12); and *ciarbhán* (lit. ‘black-white’; informants 15, 16, and 19). Other languages

also seem to have colour words that denote polarities: Pukapuka (Cook Islands) has a colour term that translates into English as ‘yellow, blue’ (McNeill 1972: 24-25), and Karajá (Brazil) and Lele (Chad) both have terms that denote YELLOW or GREEN or BLUE (information obtained from the Typological Database System).

These polarities, which are physiological channels of colour vision, do not influence colour perception or classification. The way the colour spectrum is divided into discrete colours, can still be culturally dependent: to state there is no intermediary hue between RED and GREEN is just as subjective as to state that a technologically advanced society should have a term for PINK and/or ORANGE.

4.2 COLOUR LINKED WITH OTHER PERCEPTUAL QUALITIES

Berlin and Kay imply that the number of BCTs in a language is associated with the technological advancement of a society (Berlin and Kay 1969: 16). I find it not only insulting, but also unacceptably self-righteous to link the evolutionary sequence to technological advancement. The ancient Greek and Egyptian societies were the prototype of high and established culture for a long time, many societies since then modelled their ideals upon these ancient cultures, for example during the Renaissance. These cultures did not have a stage VII system back then, yet no one would deduce from this that these societies were somehow ‘inferior’ – which is not something explicitly stated by Berlin and Kay, but it is universally interpreted as such.

In comparison to colour terms, Van Brakel points out that people in the Western world do not have ‘Basic Odour Terms’, but that this does not mean that our sense of smell is underdeveloped, just that it has a different functional importance (Van Brakel 1993: 116). In other cultures, odour is embedded in language in the same way that colour is in the Western world. Something along the same lines is discussed by Wierzbicka, who states that the absence of a colour term has sometimes been explained as a ‘lexical gap’. Speakers of English do not have an equivalent word for the Warlpiri (Australia) term *kuruwarri-kuruwarri* (lit. ‘grass-grass’), yet nobody would claim that there is a lexical gap in English here, or in other words that the concept is there but the word denoting it is absent (Wierzbicka 2008: 411). Wierzbicka argues that the absence of colour words in Warlpiri is similar to the absence of *kuruwarri-kuruwarri* in English, and that it is not a lexical gap but a matter of different ways of conceptualising the world (Wierzbicka 2008: 417). I also do not find the argument of a lexical gap compelling, nor a satisfactory explanation for the absence of colour words in many languages. A gap implies that something is missing, yet it is held as

an axiom among linguists that you can talk about *anything* in *any* language and therefore assuming a gap is very unlikely (be it lexical or conceptual). It is evident that this has nothing to do with technological advancement, but indeed with different conceptualisations of the world. Or, as Van Brakel puts it: '*why would there be one concept of colour which serves all purposes?*' (Van Brakel 1993: 107).

When we look at other languages for comparison, colour is often intertwined with perceptual qualities other than hue, brightness, and saturation. It is mainly modern languages in the western world that have a strong hue-bias at the expense of dimensions such as size, shape, location, fluctuation, sparkle, glitter, texture, transparency, glossiness, flow, fluorescence and iridescence (Van Brakel 1993: 113). For example, ancient Greek colour terms are problematic from a modern anglo-centric viewpoint because they have more to do with brilliance and lustre than with hue (Saunders and Van Brakel 1997: 176); the Xhosa of South Africa distinguish 26 cattle colours, but do not have words denoting BLUE and GREEN (Saunders and Van Brakel 1997: 178); in Mursi (Ethiopia) all colour terms denote in the first place certain species of cattle, or describe cattle patterns and when asked to name a colour chip, some informants answered 'there is no such beast' rather than 'I do not know that colour' (Turton 1980: 326-27); in Warlpiri (Australia), colour terms denote brightness, shine, and contrast (Wierzbicka 2008: 413); the colours of the Navaho (USA) are intertwined with earth substances (McNeill 1972: 23); Pukapukan (Cook Islands) colour terms denote stages of ripeness of the talo plant (McNeill 1972: 24-25); and Paliyan (India) has five BTCs for degrees of brightness, but none for differences in hue (Van Brakel 1993: 114). In other cases, colour words in general have connotations besides being strictly colour-related, the word for 'colour' in ancient Japan was *iro*, which originally denoted beautiful women as well as desire for sex with one (Finlay 2007: 405); and the (ancient) Chinese word for colour, *se*, carried connotations of beauty but also referred to emotion, such as anger or passion (Finlay 2007: 411). Furthermore, in *The Ignis Fatuus of Semantic Universalia: The Case of Colour* (1994) Van Brakel outlines semantic features of colour naming in languages all over the world. Many of these features do not have anything to do with hue, or are inseparable from it (Van Brakel 1994: 772).

In Irish, colour has always been very salient among its speakers, but it has not always had a strong correlation with hue either, which seems to be the defining criterion for BCT status. The importance for colour in Irish has often been reported, for example: '*Irish authors have been praised for their vivid and variegated sense of colour, but actual categories of colour are quite rare*' (Carey 2009: 228). The salience of colour also becomes apparent when we take into account the dathogham.

Furthermore, Carey mentions in his article on the colour system of Early Irish that the system is far more advanced than what is attested elsewhere (2009: 231). This can still be seen in Irish today: the sense of colour is profuse, yet Irish does not have eleven BCTs. This does not mean that Irish has (or had) a limited set of colours compared to English. The language has only just started to develop into a stage VII system after conforming to the English standard, indeed by adopting English loanwords denoting PINK and ORANGE (and thus not officially qualifying for BCT status). The basicness of a colour term is perhaps not very important, or in any case not relevant for a classification of colour terms. It does not express important notions about the importance of colour in a specific culture.

4.3 THE GRUE CATEGORY

In this section, I will stick to the Berlin and Kay evolutionary sequence, not because I believe in its universality, but because it expresses the evolutionary path of the Irish language. At the same time, I believe it is a good tool to index the colour systems of a language – independently of whether or not it is universal.

The Irish GRUE category is an anomaly within the Indo-European systems of colour classification. The only case of GRUE in Indo-European languages (other than the Celtic languages) can be found in some Italian dialects, in which speakers use *verde* to refer to both GREEN and BLUE (Van Brakel 1993: 117). The case of Irish is slightly different – and a lot more unusual. Within the GRUE range there are three terms denoting GRUE, covering two (arguably three) micro-categories that cover parts of the anglocentric categories GREEN and BLUE.

| | | |
|----------------------|--------------|------------------------------------|
| GRUE ₁ : | <i>glas</i> | unsaturated: GREEN, BLUE, GREY |
| GRUE ₂ : | <i>gorm</i> | saturated: BLUE, GREEN, DARK |
| [GRUE ₃ : | <i>uaine</i> | saturated and bright: GREEN, BLUE] |

Figure 19: The micro categories of GRUE in Irish

Generally speaking, languages with a term denoting GRUE are at stages III or IV in Berlin and Kay's evolutionary sequence. Before they reach this stage, the language will likely have a LIGHT and DARK distinction (plus RED at stage II), in which the DARK category consists of one term denoting BLACK, GREEN and BLUE and possibly other dark colours. Apart from Irish, I have not found another language that has a stage V (or higher) colour system with a term denoting GRUE, because at this stage both GREEN and BLUE are expected to be lexicalised items in the language – and when BLUE becomes

lexicalised, the sense of GRUE shifts to GREEN.

Theoretically, there are a couple of possibilities for the existence of a grue category:

- 1) Stage IIIa language with a term for GREEN: BLUE is encoded in BLACK *or* GREEN *or* both; some of these languages will have a GRUE term, others might not;
- 2) Stage IIIb language with a term for YELLOW: there is DARK category including BLUE, GREEN, PURPLE, GREY, and dark (tones of) colours; these languages will not have a GRUE category;
- 3) Stage IV language with term for GREEN and YELLOW: the term for GREEN may denote both GREEN and BLUE *or* BLUE may still be encoded in BLACK;
- 4) Later stages without a lexicalized category for BLUE; BLUE is expressed through terms denoting GRUE *or* DARK;

However, I think it is far more likely that the existence of a GRUE category depends upon the evolutionary path that a language follows and that it makes a difference whether a language first lexicalises YELLOW *or* GREEN/GRUE. When YELLOW is lexicalised first, the DARK category still denotes both GREEN and BLUE in a relatively 'late' stadium of the colour evolution of that language, this makes it more likely that subsequently separate terms for BLUE and GREEN will be lexicalized, rather than a GRUE macro category. On the other hand, if GRUE becomes the fourth BCT, then it is more likely it includes both GREEN and BLUE. In short, I hypothesise that GRUE categories develop out of stage IIIa systems and languages without a GRUE category follow the stage IIIb route. In other words, the existence of a GRUE category is linked with the evolutionary sequence of that language. When we look at this hypothesis in more detail, we get the following schemata:

IIIa systems: categories: DARK, LIGHT, RED, GRUE

The evolutionary path is expected to be: GRUE > YELLOW > BLUE > etc

If we assume BLUE is lexicalized at stage V, then before this time:

Option 1: BLUE is encoded in GRUE > there is a GRUE category

Option 2: BLUE is encoded in BLACK > there is a DARK category

Option 3: BLUE is encoded in both GRUE and DARK > there is a distinction

In brightness and/or saturation;

IIIb systems: categories: DARK, LIGHT, RED, YELLOW

The evolutionary path is expected to be: YELLOW > GREEN > BLUE > etc

If we assume BLUE is lexicalised at stage V, then before this time:

Option 1: BLUE and GREEN are encoded in BLACK > there is a DARK category

About stage IIIb systems, Berlin and Kay say that both BLUE and GREEN are necessarily expressed by BLACK (Berlin and Kay 1969: 28-29). Therefore, it is safe to assume that not every language has had a GRUE category in the past. It follows then, that when the language was at a stage IV system, having terms denoting both YELLOW and GREEN, then this does not lead to the conclusion that BLUE was necessarily denoted by GREEN, but that there is a possibility of BLUE still being denoted by BLACK (or DARK). According to my hypothesis, the latter option is far more likely iff the system followed the IIIb route (exactly because of the assumption that not *every* language has had a GRUE category). This hypothesis can be tested by looking for stage IV languages that do not have a GRUE category and at languages which have both DARK and GRUE categories.

Irish followed the IIIa route, separating GRUE from the DARK category at this stage of the language. The colour term denoting GRUE was used for both GREEN and BLUE, conform this hypothesis. Figure 20 shows a (non-exhaustive) list of languages which have a term denoting GRUE. It is immediately apparent that, apart from the Celtic languages, no other Indo-European language has a GRUE category:

| | |
|------------|---|
| Canada: | Okanagan, Songish |
| USA: | Mikasuki, Cahuilla; Lushootseed; Navaho; Twana; |
| Mexico: | Tohono O'dham; Seri; Huarijo; Tarahumara; Huastec; Acatepec Me'phaa; Chiquihuitlán Mazatec; Texmelucan Zapotec; Peñoles Mixtec; Lealao Chinantec; Tlapanex; |
| Guatemala: | Aguateco; |
| Honduras: | Tol; Pech; |
| Panama: | Teribe; Border Kuna; |
| Colombia: | Guahibo; Guambiano; Yucuna; |
| Ecuador: | Chachi; Cofán; Colorado; Waorani; |
| Peru: | Arabela; Ocaina; Ticuna; Chayahuita; Matsés; Shipibo-Conibo; Amaraakaeri; |

| | |
|-------------------|---|
| | Machiguenga; |
| Brazil: | Tucano; Yaminahua; Pirahá; Alpinayé |
| Bolivia: | Ese Ejja; Chácobo; Tacana; Cavineña; Sirionó |
| Suriname: | Saramaccan |
| Côte d’Azur: | Abidji |
| South Sudan: | Murle; Didinga |
| South Africa: | Zulu |
| Kenya: | Nandi |
| Nigeria: | Nupe |
| India: | Vasavi; Bhihi; Mawchi; Halbi |
| Philippines: | Cagayan Agta; Tboli |
| Russia: | Central Siberian Yupik |
| Australia: | Warlpiri |
| Papua New Guinea: | Sursurunga; Iduna; Maring; Menya; Iwam; Bahinemo; Kalam; Kamano; Agarabi; Safeyoka; Patep; |
| Indonesia: | Bauzi; Berik; Kemtuik; Tabla; |
| France: | Breton; |
| Scotland: | Scots Gaelic; |
| Ireland: | Irish Gaelic; |

Figure 20: List of languages with a GRUE category (data obtained from the Typological Database System and Van Brakel 1994: 772). This list is not exhaustive.

In conclusion, it seems that it depends upon the evolutionary path of a language if BLUE is encoded in GREEN or in BLACK, before it becomes lexicalized at stage V. When a language follows the IIIa path, the BLUE category is derived from the GRUE category, whereas a language following the IIIb path will have its BLUE category derived from the DARK category.

4.4 COMPLEXION

In Irish, the adjective *gorm* ‘blue’ can be used to modify the noun *fear* ‘man’ in the NP *an fear gorm* ‘the black man’. *Gorm* specifies the complexion, whereas if *dubh* ‘black’ would have been used in this case, creating the NP *fear dubh*, the meaning would be ‘black-haired man’. What strikes me is

that this feature of the Irish colour system is also found in Norse. The Norse colour term *blár* ‘blue’ is compounded to form *blámenn* ‘black people’ (Wolf 2006: 184).

This could lead to the rather hasty conclusion that the Norsemen have influenced Irish during the period of their settlements in Ireland. However, it is not unthinkable that the influence occurred in the opposite direction: the Scandinavians were seafaring people and must have picked up linguistic elements during their scavenges throughout Europe. Whether it was Irish influencing [Old] Norse, or vice versa, it seems unlikely that both languages developed this extension of the BLUE category independently of one another. Especially since Indo-European had a stage IIIb colour system, which means that it had not yet developed a BCT for BLUE before the language developed into distinct languages (Shields 1979: 146) – i.e. this is not a common feature in the Indo-European family. Linguistic correspondences in genetically related languages can result from different causes, i.e. common inheritance or common innovation (Schmidt 1996: 12). As inheritance cannot have been the case here, they either developed these features independently of one another, or this similarity is, in fact, due to language contact.

Another similarity between Irish and Norse is that both use terms denoting GREY to describe the complexion of sick people: Irish *glas san aghaidh* ‘pale, sickly-hued; green in the face’ and Norse *gráleitr* is used to describe the complexion of seasick people (lit. ‘grey-colour’) (Wolf 2009: 234).

4.5 HAIRCOLOUR

Most Germanic³ colour terms refer to complexion when it comes to describing people, in Irish they refer to haircolour instead. In both cases, the colour term imposes semantic restrictions upon the clause when it comes to human referents. The exception in Irish is *gorm* ‘blue’, which denotes black skin colour.

- (1) Irish:
- | | |
|-----------------------|---|
| <i>an fear dubh</i> | ‘the black-haired man’ (also ‘the devil’) |
| <i>an cailín rua</i> | ‘the red-haired girl’ |
| <i>an duine liath</i> | ‘the grey-haired person’ |

In section 3.3.5 on the GRUE category, I pointed out that *liath* is the colour adjective that describes

³ I only refer to Germanic languages by comparison here, because language contact between Celtic and Germanic has been extensive (Scandinavian and English).

GREY haircolour in humans, and *glas* is used for GREY animals. Similarly, it is not possible to refer to RED hair in Irish by using *dearg*: *an cailín dearg* ≠ ‘the red-haired girl’.

(2) English:

- the black man* ‘the man with black skin’
the red girl ‘the girl who is red in the face’ (ambiguous)
the grey person ‘the grey-haired person’ (ambiguous)

In English, modifying nouns with colour terms seems more contextualized than in Irish. Forms such as *the red girl* and *the grey person* are marked and can have multiple interpretations. The latter can mean ‘the boring person’, ‘the person with grey clothes’, as well as ‘the person with grey hair’. The terms *black* and *white* are unambiguous and have a strong correlation with race. For other terms, ambiguity can be avoided by further specification: ‘the yellow skinned person’.

(3) Dutch:

- de zwarte man* ‘the man with black skin’
het rode meisje ‘the girl who is red in the face’ (ambiguous)
het grijze persoon ‘the person with grey hair’ (ambiguous)

The same is the case in Dutch, although *het rode meisje* seems to have a stronger correlation with skin tone than is the case in English (based on native speakers I have questioned on English and Dutch). It expresses a temporary state of being flushed, rather than being of Indian descent (*Redskin* and Dutch *Roodhuid* are a derogatory terms for Native Americans, both employing the colour adjective for RED to modify the term for ‘skin’). The equivalent of *het grijze persoon* seems to be the most ambiguous, as it can also be associated with boringness in both English and Dutch. In Dutch, the word *grauw* ‘drab, pale, grey’ would better describe a greyish complexion, even though GREY is only marginally encoded in the word sense.

In both Irish, English, and Dutch, colour terms referring to animate beings are interpreted as semantically restricted terms referring to either skin colour or haircolour. This restriction is not present when describing an inanimate referent, it is then interpreted as an abstract colour category with a wide array of possible meanings. This does not lead to the conclusion that any of these sets of colour terms are semantically restricted in general, it only follows that there is a base line interpreta-

tion from which can be deviated when it comes to specific referents, i.e. animate referents, with a further distinction in animal and human referents, as I showed at the beginning of this section.

4.6 THE WORLD'S LANGUAGES CONFORMING TO THE ENGLISH STANDARD

The globalisation of English contributes to the conformation of the languages of the world to a European (mainly Germanic) standard in one way or another. Globalisation had already set in around the time Berlin and Kay carried out their work trying to prove the universality of colour. It is not surprising they concluded BCTs are universal, because many languages of the world already started to model their colour categories on those of English (see also Van Brakel 1994 for specificities on this topic).

Saunders and Van Brakel point out the case of Bellona, a Polynesian language spoken on the Solomon Islands. Berlin and Kay identified seven BCTs for Bellona, but according to Saunders and Van Brakel, Bellona does not seem to have BCTs prior to the conformation to the Western European standard. None of their 'colour words' seem to fit BCT status, even though they have a sophisticated system denoting what we would call 'colour' (Saunders and Van Brakel 2001: 544).

This conformist trend in Irish was already established by Lazar-Meyn in 1988 (Lazar Meyn 1988: 239) and since then it steadily progressed. In Chapter 3 I concluded that Irish colour terms are undergoing a semantic shift from restricted senses to universally applicable hue senses. Since 1988, colour terms such as *corcra* and *donn* have become more salient and lost any restricted usages, and English loanwords such as *pinc* and *oraíste* have gained in popularity at the expense of original Irish compounds *bándearg* and *flannbhuí*. A similar process has assimilated *liath* in the past.

On one hand, it can be argued that these changes are due to language contact with English. But opposite processes are also witnessed, which seem to go against the conformation to Western European standards, for example the 'reverse' shift from hue to brightness by *geal*, and the shift from BCT to restricted term by *fionn*. These processes stand in opposition to English colour terms, which all have strong (even exclusively) hue senses, even though they were once based in brightness. Thus it seems that these changes are not only brought on by language contact, but that it was in part the natural course of events in the development of Irish, in which functional importance plays a large role. This can be stressed by the fact that by far the majority of Irish speakers are in the first place native (bilingual) speakers of English.

Either way, it is a mistake to confuse the cultural evolution of mankind with the history of the progressive domination of Western practises (Saunders and Van Brakel 1997: 178). The English

colour classification is just *one* system, *one* possibility, and it is a pity for language diversity that the languages of the world are ‘modelled’ on it. Researchers such as Berlin and Kay, and everyone who follows in their tradition, try to make languages fit their model(s) with alarming frequency. Instead of observing what is going on in a language, many scientists cannot seem to put aside their assumption, presuppositions and hypotheses. On the other hand, the researchers following in the relati-vist tradition can be said to do the same thing, albeit the other way around. English is often used as the metalanguage, in either tradition, as well as the language of written report, and this is one of the main issues with semantics in general: you cannot talk about language *in* language without being biased by your own language use. For this very reason, philosophers and formal semanticists use logic as their metalanguage. Hardly anyone has ever adopted a formal approach in colour studies, trying to ban out assumption and presuppositions that their native language imposes on the research they do. The whole debate on colour is evolved around English, replies are made back and forth between Western linguists *in English*, while talking about other languages ‘and their indigenous colour terms’.

As an example, I would like to point out a study in Kwakw’ala: there is one word *lhenxa* for what is called either GREEN or YELLOW in English. If we were to adopt the assumption that technical advancement is associated with the number of BCTs, the anomaly might be expected to disappear if speakers knew that YELLOW and GREEN are two different unique colours. But, though most contemporary speakers of Kwakw’ala are bilingual and know perfectly well the difference in English between YELLOW and GREEN, they stick to *lhenxa* in Kwakw’ala (Saunders and Van Brakel 2001: 548). Once more, this example underlines (but not proves!) that language does impose a conceptual framework on our perception and conceptions of the world.

4.7 CONCLUSION

My intention of the word ‘unusual’ in the heading of this chapter was to mark anomalies within the IE colour systems and assess if the ‘unusual features’ occur in other non-IE languages. After closer inspection, anomalies can be found in languages where ever and whenever one looks for it. The fact that Modern Irish has a ‘different’ colour classification system than other IE languages does not say very much in itself.

In this chapter I have discussed incompatibility between the Irish language and the Berlin and Kay paradigm by revisiting some issues within the colour naming debate. Irish is one of the languages of the world that does not comply with the ideas postulated by Berlin and Kay which

have been held as an axiom for the last couple of decades. During this discussion, I have pointed out that the Irish BCTs are not drawn from the eleven BCCs formulated by Berlin and Kay. In fact, the division of the spectrum in the GRUE range is very different. I argued that there are two, possibly even three, micro categories within the GRUE range that do not line up with the traditional GREEN and BLUE categories. I do not mean ‘micro’ in the narrow sense of the word, as these categories cover ranges of both GREEN and BLUE. I call them micro categories because they cover only parts of the single GRUE category as a whole. Apart from this, there are also microcategories for GREEN and BLUE, which are denoted by the GRUE terms *glas* and *gorm* respectively, in addition to their GRUE sense. Therefore I claim that both *glas* and *gorm* have multiple senses: a GRUE sense and a hue sense, as can be seen in figure 21 below:

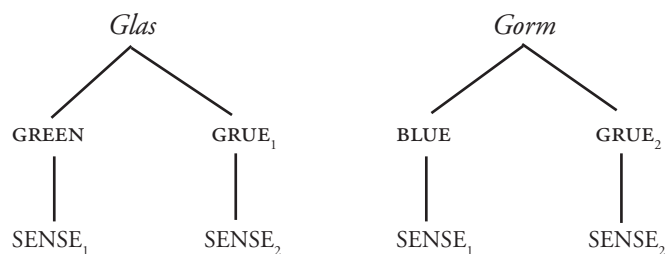


Figure 21: Polysemy relations of the GRUE terms in Irish

With GRUE₁ being a unsaturated subset of GRUE, covering GREEN, BLUE, and GREY; and GRUE₂ being a saturated subset of GRUE, covering BLUE, GREEN, and DARK.

Terms denoting GRUE are not an anomaly worldwide and can be found in many other languages. However, none of these other languages are part of the Indo-European language family. In this respect, the division of the spectrum in the Celtic languages is an anomaly within IE. Even worldwide, the microcategorical division of the GRUE range that is found in Irish has (as far as I am aware) not been attested elsewhere. This has to do with the fact that GRUE terms are generally speaking found in languages with a stage III or IV colour system, and not, as is the case in Irish, in languages with a stage V or higher, in which separate terms for BLUE and GREEN are lexicalized.

The GRUE category in general causes serious problems for the Berlin and Kay universality principle, which I have discussed in section 4.1. For the development of a GRUE category in any language, I have postulated a hypothesis which states that it depends on the evolutionary path whether BLUE is encoded in GREEN or in BLACK, before it becomes lexicalized at stage V. When a

language follows the IIIa path, the BLUE category is derived from the GRUE category, whereas a language following the IIIb path will have its BLUE category derived from the DARK category.

Other problems concerning the Berlin and Kay principles, deal with the exclusion of perceptual qualities other than hue, brightness, and saturation. These qualities include texture, glossiness, shine, contrast, background and surroundings and so on. Furthermore, their assumption of the association between the number of BCTs and technological advancement of a society is the prototype of imposing an anglocentric perspective upon languages with different (and incommensurable) colour systems. One more problem with the Berlin and Kay theory is the use of Munsell colour chips, although it has also been pointed out that because of this methodology, we now know which features are excluded by it and should ultimately be taken into account in future methodologies or revisions.

All in all, I do think that the Berlin and Kay approach has been one of the best attempts to classify colour systems in languages, yet I do not think that the proposed evolutionary sequence should be held to be universal. For one, Irish follows this sequence, but still deviates from many of the principles, consequences, and conclusions that are drawn from it or otherwise linked with it.

Additionally, I have discussed the features of complexion and haircolour in Irish. There is a similarity between the expression of black skin in the Irish and Norse languages, which does not seem to have been a common feature of IE. They either developed this feature independently of one another, which I think is highly unlikely, or one of the languages influenced the other during the periods of extensive language contact. I established that Irish colour terms, when referring to human beings, refer to haircolour, rather than complexion, as is the case in for example English and Dutch.

Lastly, I looked into conformism of languages to the Western European standard. In the tradition of Berlin and Kay, a focus on hue is imposed upon languages around the world. Very often, this is not the case. Even after extensive language contact with English, Irish has not been influenced in shifting all colour terms from brightness to hue. Reverse processes can also be found and this goes against the idea that Irish is conforming to English. Perhaps language revitalisation plays a role in the sustenance of the Irish colour system. At the same time, English did influence Irish when it comes to borrowings for PINK and ORANGE, in favour of the traditional compounds. Neither compounds nor loanwords qualify for BCT status, so this attempt at becoming a 'proper' stage VII system is more psychological than linguistic.

CONCLUSIONS 5

In this final chapter I will look back on the things I have encountered during my research into the colour classification system of Modern Irish. To begin with, in Chapter 1 I made some initial remarks upon the different theories of colour semantics, which was further elaborated upon in Chapter 4. In Chapter 4 I expressed my opposition to the Berlin and Kay theory: it is based upon presuppositions and assumptions which they hold as universal truths, for example that languages have abstract colour concepts, or that all colour terms are based in hue, or even that all languages have lexicalised expressions of colour at all. In other words, they impose an anglocentric perspective upon non-Indo-European languages, which leads to many languages being incompatible with the system, including Irish. Because their presumptions are intertwined with their methodology, it is no wonder they found colour terms to be universal. Another problem I have pointed out is the association between the number of BCTs with the technological advancement of a society, which is also clearly not the case in Irish – nor I think in any other language for that matter.

The reason I kept using their evolutionary sequence is that it does express the evolutionary path of the Irish language. I want to stress again that I do not believe this sequence to be universal. I have also stuck with their terminology, such as BCCs and BCTs, I have done this because it is not necessary to reinvent the wheel in order to built a new car. On a more positive note, I think the Berlin and Kay theorem is one of the best attempts at colour classification thus far.

I initially started out with recognising 7 BCTs in Modern Irish, making Irish a stage VI language system according to the evolutionary sequence postulated by Berlin and Kay. These BCTs

are: *dubh* ‘black’, *bán* ‘white’, *dearg* ‘red’, *glas* ‘grue, green’, *buí* ‘yellow’, *gorm* ‘grue, blue’, and *liath* ‘grey’. Based on my analysis of the information I have obtained from informants and token frequencies in the NCE, I must conclude that *donn* ‘brown’ can certainly be regarded as a BCT as well, and *corcra* can technically also be included. Thus, I opt for the inclusion of both these terms. In the case of *liath*, I had doubts about its BCT status and looked into the possibility of its exclusion. This turned out to be unwarranted, although *liath* is not as unrestricted in terms of denotations as other BCTs in this system. My main concern was that *liath* strictly denoted hair colour until quite recently, and was thus a semantically restricted colour term.

Another interesting feature I looked into is the denotation of the Irish terms for GRUE. Within the GRUE range, I initially assumed that *glas* denoted the light GRUE range and *gorm* the dark GRUE range, but I proved this to be incorrect. Instead, *glas* denotes the desaturated range between GREEN, BLUE and GREY and *gorm* denotes the saturated range between GREEN and BLUE. This leaves us with an unusual set of microcategories, namely GRUE₁, GRUE₂, #BLUE and #GREEN. The hashtag before GREEN and BLUE is there purely for convenience, to distinguish them from the English categories GREEN and BLUE, which denote a larger range of hues and are specifically limited to hue – they do not have a distinction in saturation.

| | |
|-------------------|--|
| GRUE ₁ | unsaturated set of GREEN, BLUE and GREY |
| GRUE ₂ | saturated set of BLUE, GREEN, DARK |
| #GREEN | subset of what is denoted by English GREEN |
| #BLUE | subset of what is denoted by English BLUE |

Both *glas* and *gorm* are BCTs. Additionally, *uaine* can be regarded as a third term denoting GRUE, but this term is not a BCT and is in fact so infrequently used by informants and its token frequency in the NCE is so low, that the term cannot be regarded as psychologically salient. Informants have said they would more likely choose between *glas* or *gorm* to denote what is theoretically denoted by *uaine*.

Additionally, I have postulated a hypothesis regarding GRUE categories in languages. The hypothesis states that it depends upon the evolutionary path of a language if the BLUE category is extracted from the GRUE category or from the DARK category, when it becomes lexicalised at stage V. A language that follows the IIIa path will derive BLUE from the GRUE category, whereas a language that follows the IIIb path will derive BLUE from the DARK category. The reason for this is that a stage IIIb language will lexicalise YELLOW before GRUE/GREEN, which means that both GREEN and BLUE are still expressed through the DARK category in a relative late stadium of the language, thus it is more

likely that separate terms for BLUE and GREEN will be lexicalised next, rather than a macrocategory including both. If this hypothesis holds true, then it can be regarded as evidence against the claim made by Berlin and Kay that BCTs are expressed through eleven universal colour categories.

I have shown that terms denoting the GRUE category are not an anomaly world wide, but within the Indo-European language family, the Celtic languages are the only ones that express such a category. Additionally, it is an anomaly to have multiple terms denoting different subsets of GRUE. For other categories, this is not true, as multiple BCTs in RED, BLUE or BROWN categories are often found.

In conclusion, colour does not seem to be universal to me. There is a dimension to colour naming which is culture-specific. Apart from the 11 basic categories, texture, opaqueness and material of the object may play a role in the conceptualization of colour. These additional dimensions, cannot be discarded or generalised, which seems to have happened in the Berlin and Kay model and the researchers who followed in their tradition.

REFERENCES

- Ball, M. and Müller, N. (eds) (2010) *The Celtic Languages* (2nd Edition). London: Routledge (1st edition 1993).
- Berlin, B. and Kay, P. (1999) *Basic colour terms: their universality and evolution*. Stanford: CSLI Publications (original publication (1969) Berkeley: University of California Press).
- Biggam, C. (2012) *The Semantics of Colour: A Historical Approach*. Cambridge: Cambridge University Press.
- Van Brakel, J. (1994) The Ignis Fatuus of Semantic Universalia: The Case of Colour. *The British Journal for the Philosophy of Science* **45**: 2 pp 770-783.
- Van Brakel, J. (1993) The Plasticity of Categories: The Case of Colour. *The British Journal for the Philosophy of Science* **44**: 1 pp 103-135.
- Carey, J. (2009) The three sails, the twelve winds, and the question of Early Irish colour theory. *Journal of the Warburg and Courtauld Institutes* **72** pp 221-232.
- Casson, R. (1997) Color shift: evolution of English color terms from brightness to hue. In: Hardin, C. and Maffi, L. (eds) (1997) *Color categories in thought and language*. New York: Cambridge University Press.
- Chadwick, N. (1975) The Vikings and the Western World. In: Ó Cuív, B. (ed) (1975) *The impact of the Scandinavian Invasions on the Celtic-speaking Peoples c. 800-1100 A.D.* Bhaile átha Cliath: Institiúid Ard-Léinn pp 13-42.
- Crowley, T. (2005) *War of Words: the politics of language in Ireland 1537-2004*. Oxford: Oxford University Press.
- Curtis, E. (1988) Norse Dublin. *Dublin Historical Record* **41**: 3 pp 86-97.
- De Bhaldraite (1959) *English-Irish Dictionary*. Retrieved from: <http://www.teanglann.ie/en/eid/> [accessed January 5, 2015].

- De Brún, F. (2013) Temporality and Irish Revivalism: Past, present and becoming. *New Hibernia Review* **17**: 4 pp 17-47.
- Dochartaigh, C. (1984) Irish. In: Trudgill, P. (ed) (1984) *Language in the British Isles*. Cambridge: Cambridge University Press pp 289-305.
- eDIL (2013). *Dictionary of the Irish Language*. Retrieved from <http://edil.qub.ac.uk/dictionary/search.php> [accessed February 21, 2015].
- Edwards, J. (1984) Irish and English in Ireland. In: Trudgill, P. (ed) (1984) *Language in the British Isles*. Cambridge: Cambridge University Press pp 480-498.
- Eska, J. (2010) The emergence of the Celtic languages. In: Ball, M. and Müller, N. (eds) (2010) *The Celtic Languages* (2nd Edition). London: Routledge (1st edition 1993).
- Fife, J. (2010) Typological aspects of the Celtic languages. In: Ball, M. and Müller, N. (eds) (2010) *The Celtic Languages* (2nd Edition). London: Routledge (1st edition 1993).
- Filppula, M. Klemola, J and Paulasto, H. (2008). *English and Celtic in Contact*. Oxford and New York: Taylor and Francis.
- Foley, W. (1997). Colour. In *Antropological linguistics*. Oxford: Blackwell Publishers Inc. pp 150-165.
- Finlay, R (2007) Weaving the Rainbow: Visions of Color in World History. *Journal of World History* **18**: 4 pp 383-431.
- Hardin, C. (1997) Color-order systems: A guide for the perplexed. *Behavioral and brain sciences* **20**: 2 pp 190-91.
- Hardin (1992) Color for pigeons and philosophers. *Behavioral and brain sciences* **15**: 1 pp 37-38.
- Hegarty, N. and Keane, F. (writers), & Connolly, M. (director). 2011. The age of Conquest [Television series episode]. In M. Connolly (Producer), *The Story of Ireland*. Northern Ireland: BBC ONE Northern Ireland.
- Hilbert, D. (1992) Comparative color vision and the objectivity of color. *Behavioral and brain sciences* **15**: 1 pp 38-39.
- Jackson, K. (1975) The Celtic languages during the Viking period. In: Ó Cuív, B. (ed) (1975) *The impact of the Scandinavian Invasions on the Celtic-speaking Peoples c. 800-1100 A.D.* Bhaile átha Cliath: Institiúid Ard-Léinn pp 3-11.
- Kay, P. and Regier, T. (2002). *Color naming and sunlight: commentary on Lindsey and Brown*. Berkeley: University of Chicago.

- Lazar-Meyn, H.A. (1988) The Colour Systems of the Modern Celtic Languages: Effects of Language Contact in: Ureland, P. and Broderick, G. (eds). *Language Contact in the British Isles: proceedings of the Eighth International Symposium on Language Contact in Europe, Douglas, Isle of Man, 1988*. Tübingen: Max Niemeyer Verlag pp 227-242.
- Lazar-Meyn, H. A. (2004) Colour naming: ‘Grue’ in the Celtic languages of the British Isles. *Psychological Science* **15**: 4 pp 288.
- Lewis, H. and Pederson, H. (1937) *A Concise Comparative Celtic Grammar*. Göttingen: Vandenhoeck & Ruprecht.
- Mac Giolla Christ, D. (2004) *The Irish Language in Ireland: From Goidel to Globalisation*. Oxford and New York: Taylor and Francis.
- Matasovic, R. (2009) *Etymological dictionary of Proto-Celtic*. Leiden: Brill.
- MacKinnon, K. (2004) Reversing Language Shift: Celtic Languages Today – Any Evidence? *Journal of Celtic Linguistics* **8** pp 109-132.
- McCubbin, J. (2010) Irish-language policy in a multiethnic state: competing discourses on ethnocultural membership and language ownership. *Journal of Multilingual and Multicultural Development* **31**: 5 pp 457-478.
- McManus, D. (1983) A Chronology of the Latin Loan-Words in Early Irish. *Ériu* **34** pp 21-71.
- McNeill, N. (1972) Colour and Colour Terminology. *Journal of Linguistics* **8**: 1 pp 21-33.
- McRae, K. (2009) The Principle of Territoriality and the Principle of Personality in Multilingual States. *Linguistics* **13**: 158 pp 33-54.
- Moseley, C. (ed.). 2010. *Atlas of the World's Languages in Danger*, 3rd edn. Paris, UNESCO
Retrieved from: <http://www.unesco.org/culture/en/endangeredlanguages/atlas>.
- Nolan, B. (2012) *The structure of Modern Irish: A functional account*. Sheffield: Equinox Publishing Ltd.
- Nua Chorpas na hÉireann. Extractions of the colour terms retrieved from <http://focloir.sketchengine.co.uk/run.cgi/index> [accessed February 17, 2015].
- Ó Baoill (2010) Irish. In: Ball, M. and Müller, N. (eds) (2010) *The Celtic Languages* (2nd Edition). London: Routledge (1st edition 1993).
- Ó Cuív, B. (ed) (1975) *The impact of the Scandinavian Invasions on the Celtic-speaking Peoples c. 800-1100 A.D.* Bhaile átha Cliath: Institiúid Ard-Léinn.
- Ó Dónaill (1977). Fócloir Gaeilge-Béarla. Retrieved from <http://breis.focloir.ie/en/fgb/> [accessed January 5, 2015].

- Ó Laoire, M. (2012) Language policy and minority language education in Ireland: re-exploring the issues. *Language, Culture and Curriculum* **25**: 1 pp17-25.
- Ó Sé, D. The colour terms of Irish (Unpublished). Dublin: UCD School of Irish.
- Ó Siadhail, M. (1989) *Modern Irish: Grammatical Structure and Dialectal Variation*. Cambridge: Cambridge University Press.
- Plag, I. (2003) *Word-Formation in English*. Cambridge: Cambridge University Press.
- Saunders, B. and Van Brakel, J. (1997) Are there nontrivial constraints on colour categorization? *Behavioral and brain sciences* **20**: 2 pp 167-228.
- Saunders, B. and Van Brakel, J. (2001) Rewriting colour. *Philosophy of the Social Sciences* **31**: 4 pp 538-556.
- Schmidt, K. (1986) The Celtic languages in their European context. In: Ellis Evans, D., Griffith, J., and Jope, E. (eds) (1986) *Proceedings of the Seventh International Congress of Celtic Studies* 1983. Oxford: Cranham Press pp 199-221.
- Schmidt, K. (1996) *Celtic: A Western Indo-European Language?* Innsbruck: Institut für Sprachwissenschaft.
- Shields, K. (1979) Indo-European Basic Colour Terms. *Canadian Journal of Linguistic* **24**: 2 pp 142-146.
- Sommerfelt, A. (1975) The Norse influence on Irish and Scottish Gaelic. In: Ó Cuív, B. (ed) (1975) *The impact of the Scandinavian Invasions on the Celtic-speaking Peoples c. 800-1100 A.D.* Bhaile átha Cliath: Institiúid Ard-Léinn pp 73-77.
- Stifter, D. (2010) Early Irish. In: Ball, M. and Müller, N. (eds) (2010) *The Celtic Languages* (2nd Edition). London: Routledge (1st edition 1993).
- Sveinsson, E. (1957) Celtic elements in Icelandic tradition. *Béaloides: The Journal of the Folklore of Ireland Society* **xxv**, 2-24.
- Thomson, R. (1984) The history of the Celtic languages in the British Isles. In: Trudgill, P. (ed) (1984) *Language in the British Isles*. Cambridge: Cambridge University Press pp 241-258.
- Trudgill, P. (ed) (1984) *Language in the British Isles*. Cambridge: Cambridge University Press.
- Turton, D. (1980). There's No Such Beast: Cattle and Colour Naming Among the Mursi. *Man* **15**: 2 pp 320-338.
- Typological Database System; accessed through: <http://languagelink.let.uu.nl/tds/index.html>.
- Wierzbicka, A. (2008) Why there are no 'colour universals' in language and thought. *Journal of the royal Anthropological Institute* **14** pp 407-425.

- Wolf, K. (2006) Some comments on Old Norse-Icelandic colour terms. *ANF* **121** pp173-192.
- Wooten, B. and Miller, D. (1997) The psychophysics of color. In: Hardin, C. and Maffi, L. (eds) (1997) *Color categories in thought and language*. New York: Cambridge University Press pp 59-88.

APPENDIX I

COLOUR CLASSIFICATION OF IRISH

This classification is structured as follows:

A Basic colour terms

BCTs in the order of the evolutionary sequence postulated by Berlin and Kay.

B Secondary colour terms: non-derived forms

Non-derived secondary colour terms, in the order of their absolute frequency in the NCE.

C Secondary colour terms: derived forms

Derived forms which are the equivalent of the recent loanwords which are presented in section D; there are a lot more derived forms than are given credit here, I have excluded other terms from this classification as I chose to only take into consideration those colour terms that are salient to most speakers.

D Secondary colour terms: recent loanwords

Recent loanwords from English that are equivalent to the derived form in section C.

E Obsolete terms in Modern Irish

Terms that I initially took into consideration, but that turned out to be obsolete according to my informants as well as absolute frequency in the NCE.

Each entry in this classification is set up as follows:

[Irish colour term] [spelling] ['equivalent in English']

[NCE: absolute token frequency in the Nua Chorpas na hÉireann, plus
in brackets the percentage relative the total amount of tokens]

[FGB: entry in the Foclóir Gaeilge-Béarla]

[DIL: entry in the Dictionary of the Irish language (eDIL)]

[EPC: Etymology of Proto-Celtic (Matasovic (2009))]

[Other sources]

'Spelling' indicates the spelling that was contemporary at different stages of the Irish language; the English equivalent, or transliteration, is my preliminary suggestion based upon the information in obtained from the FGB, eDIL, and EPC; in the entry of the NCE the absolute token frequency of a term is stated, plus the absolute frequency in percentages – 100% being the 30 million lexemes that the Corpus contains; in the entry of the DIL the absolute token frequency is stated alongside lexical information; in the EPC entry etymological background information of the term is provided, starting with the (reconstructed) form of Proto-Celtic; additionally, sometimes other sources are indicated when I consider this necessary.

The colour terms of Irish

A Basic colour terms

Bán PI, OI, MI and MO *bán* 'white, fair, bright'

NCE: 5018 (0,017%);

FGB: white, fair, pale, pallid;

Verbalisation: bánaigh (V t+i): white, bleach, dawn (of day); **collocations:** *Is deise*

an bán ná an dubh ort ‘white looks nicer than black on you’; *bán na súl* ‘albinism’; *gruaig bhán* ‘fair hair’; *aghaidh bhán* ‘pale, pallid, face’; **compounds:** generally used to weaken the meaning of the word; *bánach* ‘fair haired person’, *bánchorcra* ‘light purple/mauve’, *bánbhuí* ‘offwhite, cream’, *bándearg* ‘pink’;

DIL (126): white, fair, bright, pure, holy, blessed, blank (of a page);

Verbalisation: *bána(ig)id* (V t+i): ‘to turn pale’; **compounds:** *abbán* (*ab+bán*) ‘very white’;

EPC: *bāno- ‘white, shining’

PIE *b^heh₂- ‘shine’

Proto-Celtic *bāno- is from deverbial adjectival PIE *b^heh₂-no-

| | | |
|-----------|----------|-------------------------------|
| Cognates: | Sanskrit | <i>bhāti</i> ‘shines’ |
| | Avestan | <i>bānu-</i> ‘beam of light’ |
| | Greek | <i>phainō-</i> ‘show, appear’ |

Dubh PI and OI *dub*, MI *dub(h)*; MO *dubh* ‘black, dark’

NCE: 7205 (0,024%);

FGB: black (cloth, horse), dark or gloomy;

Collocations: *an oíche dhubh* ‘the black night’; *spéir dhubh* ‘inky sky’; *tá an áit dubh le daoine* ‘the whole place is black with people’; **tá sé dubh dorcha** ‘it is pitch-dark’; *tá mé dubh dóite de* ‘I am heartily sick of it’; *an fear dubh* ‘the devil’; **compound:** *dubh-* (before vowels and fh) and *dú-* (before consonants) ‘black, intense, downright, evil, unknown’; *dubhuaine* ‘dark green’; *dubhghorm* ‘blue-black’; **verbalisation:** *dubhaigh* (V t+i) ‘blacken, darken’;

DIL (99): black (of hair), swarthy (of complexion), dark, dark (i.e. red) wine;

Related: *dobur* ‘dark, unclean, impure, foul, gloomy darkness’; **collocations:** *is fearr le fiach dubh* ‘corpse’; *is dub ar duine is do[r]cha ar fiadhnaise* ‘it is dark when applied to a person, and it means obscure of testimony’; **verbalisation:** *dubaid* (form of *duibhthe*) (V t+i) ‘grow dark, turn black, discolour, blacken’;

EPC: *dubu- ‘black’

OI dub

PIE *d^hub^h- ‘black’

Cognates: Greek *typhlós* 'blind'

See: *dubro- 'dark, unclean'

*dubro- 'dark'

MI *dobur* 'black, unclean'

PIE *d^hub^h- 'black'

OI also has substantivized adjective *dobur* 'water' which presumably developed from the syntagm 'dark water'

Dearg PI, OI and MI *derg*; MO *dearg* 'red, tawny'

NCE: 4045 (0,013%);

FGB: red, bloody, scarlet, raw (meat, wound);

Collocations: *pluca dearga* 'rosy cheeks'; *súile dearga* 'red, bloodshot, eyes'; Na Fir

Dhearga 'the Redskins, Red Indians'; **prefix:** *dearg-* 'red, real, intense, utter'

compound: when compounded, it intensifies the meaning of the modified

noun or adjective; it can also mean 'evil'; *cródhearg* 'blood-red'; **verbalisation:**

deargadh (V t+i) 'reddening, blushing, making red, lighting (a cigarette or pipe)';

DIL (77): *derg* 'red, ruddy' (used of colour of blood, flame, also of orange or tawny hue

as ale, gold, etc); **collocations:** *dearg a grúaidh* 'the red of his cheek';

verbalisation: *dergaid* (V t+i) 'reddens, makes red (of bloodshed), burns';

EPC: *dergo- 'red, blood-red'

OI: *derg*

PIE: *d^herg- 'dark'

Cognates: Old English *deorc* 'dark'

Lithuanian *dárgana* 'bad weather'

Buí PI and OI *buide*; MI *buide*, MO *buí* 'yellow, chestnut, tan'

NCE: 1918 (0,006%);

FGB: yellow, gold, sallow (of complexion), tan;

Collocations: *solas buí gréine* 'golden sunlight', *bróga buí* 'tan shoes'; **compound:**

crónbhuí 'dark yellow, coppery'; *gealbhuí* 'bright and pale yellow,

tawny'; *flannbhúí* 'orange'; **verbalisation** *buígh* (t+i) 'turn yellow', 'ripening', 'tanning';

DIL (177): *buide* 'yellow, August, jaundice';

Compounds: *Apuide* (*ap* + *buide*) 'very yellow'; *buidechair* 'the yellow plague'; *buidecht* 'yellowness'; **verbalisation:** *buidid* 'become yellow'; *buidigid* 'make yellow';

EPC: *bodyo 'yellow'

PIE: *bodyo- 'yellow'

Cognates: Latin *badius* 'bay, chestnut brown'

likely a loanword from a non-Indo-European source

Blá *blāwo- 'yellow'

OI *blá*

PIE *b^hleh₂- 'yellow'

Cognates: Latin: *flāvus* (matches perfectly with OI, either connected or OI loaned it from Latin)

Glas PI, OI, MI & MO *glas* 'grue, green, blue, grey'

NCE: 2245 (0,007%);

FGB: green (of gras, foliage, fields); fresh, unripe; grey; pale, sickly hued (of complexion), light blue (of eyes); inexperienced;

Collocations: *is glas na cnoic i bhfad uainn* 'far-off hills are green'; *nach mé atá glas agat?* 'how gullible do you think I am?'; *capall glas* 'grey horse'; *caora ghlas* 'grey sheep'; *glas san aghaidh* 'green in the face'; *an gall glas* 'the iron-clad viking'; *aimsir ghlas* 'raw weather (cold stingy, grey)'; **prefix:** *glas-* 'green, greenish, grey, greyish, pale, pallid, immature, inexperienced'; **compounds:** *glasrua* 'reddish grey'; *glasbhán* 'pallid, pale green'; *fionnghlas* 'light green'; **verbalisation:** *glasaiigh* (t+i) 'to become green' (of vegetation or skin turning a sickly shade) or 'to become grey' (of hair or weather);

DIL (349): various shades of green and blue, passing from grass-green to grey, of green or greenish hue (of growing things, grass, trees), green hazel; wan (of

complexion); **Collocations:** *forsna cloidmib comglasa*; *co roscaibh comglasa cainnleacha*; *na mara glastonnacha* ‘blue-waved’; **compounds:** *Agglas* (*ad+glas*) ‘very blue’; *comglas* ‘very (equally) grey, green, blue’; *foglas* ‘of a greenish or bluish tint; a minor bruise’; *dubglas* ‘cerulean, dark blue’; *glasban/glasbhán* ‘pallid’; *glasbuide*; *glasruad* ‘reddish grey, russet’; *glasodhar*; *glaisliath*; *glasmartre* ‘a stage of self-mortification midway between *bánmartre* and *dergmartre* (*glas* being an intermediate hue)’; *glas-ghall* ‘a Viking’ (so called from their steel armour); *glas-chullach* ‘a grey stallion’; *cú glas* (derogatory) ‘an immigrant from overseas (lit. grey wolf)’; *glasach* ‘greyish’; **verbalisation:** *glasaid* (t+i) ‘grow pale or livid, become yellowish, make green’;

EPC: *glasto- ‘green, blue’

PIE *g^hlh₃-stó; PIE root: *g^helh₃- ‘yellow, green’ (as in *gelo-)

Other sources: *grue*, a more common term to describe green (than *uaine*), sits between *uaine* (green) and *gorm* (deep grue) in the spectrum (Stahl 2006: 16)

Gorm OI, MI, MO *gorm* ‘blue, dark green’

NCE: 2352 (0,008%);

FGB: blue, dark-blue, livid, purple, blue-tinted; when describing a person: mean, stingy, cold; black (skin);

Collocations: *fear gorm* ‘black man’; *chomb gorm le plúirín*, *le mála an ghoirm* ‘as blue as indigo, as a blue-bag’; *féar gorm* ‘blue(-green) grass’; *gorm san aghaidh* ‘blue in the face’; **compounds:** when compounded with other adjectives or nouns, it serves as an intensifier meaning ‘very’ or ‘truly’; **verbalisation:** *gormaigh* (t+i) ‘to colour blue’, ‘to become tinged with blue’;

DIL (104): blue, deep-blue, cerulean, crystal, metallic sheen (‘blue’ of steel);

Collocation: *creach na nGall ngorm* ‘of the swarthy Norsemen’; *ar feadh fedha gormdhuille* ‘green foliage’; **compound:** *gormchorcraí* ‘olive-hued’; *gabair gormglasa* ‘dark grey’;

EPC: *gurmo- ‘dun, dark’

MI *gorm* ‘blue’

there are no cognates in other IE languages, so this adjective was probably

borrowed from a non-IE source.

Other sources: refers primarily to brightness (Lazar-Meyn 288); green; black; overlaps with *glas*, but is generally brighter or darker and more saturated than *glas* (Stahl 2006: 18)

Liath PI, OI *líath*; MI *líath/liath*; MO *liath* 'grey'

NCE: 1475 (0,005%);

FGB: grey (of hair, beard), pale;

Collocations: *duine liath* 'greyhaired person'; *tá mo cheann liath agaibh* 'you are giving me grey hairs, wearing me out'; *is minic duine liath lúfar* 'grey hairs need not signify old age'; *ní chiorfaidh sí ceann liath go brách* 'she will never live to comb grey locks'; *bainne liath* 'watery milk'; *arán liath* 'mouldy bread'; *uisce liath* 'water coloured with milk'; **compounds:** as a prefix it is equivalent to the English 'light'; *liathghorm* 'light blue, pale blue'; *liathchorcra* 'lilac'; *geal-liath* 'white of hair'; **verbalisation:** *liath* (t+i) 'to turn grey' (of hair), 'fading' (of colour);

DIL (101): grey, grey-haired, aged, of the hair, grey beard;

Collocations: *liath na trí mbenn* 'the grey one of the three antlers';

compounds: *liath-ghlasa* 'grey-blue'; **verbalisation:** *líathaid* 'make or become grey, turn livid';

EPC: *flēto- 'gray'

OI líath

PIE *pelHi- 'gray'

Cognates sanskrit *palitá* 'grey'

Latin *pallidus* 'pale'

Greek *pelitnós* 'pale, greyish'

B Secondary colour terms: underived forms

Geal PI, OI, MI *gel*; MO *geal* 'bright white'

NCE: 4031 (0,013%);

FGB: white, bright; of a brilliant white colour; fair (of skin); fondness/gladness;

Collocations: *fiacra geala* ‘white teeth’; *rudat a ní go geal* ‘to wash things white’; *solas geal* ‘bright light’; *uisce geal* ‘clear water’; *is geal leis a bhfeiceann sé* ‘he likes what he sees/ he sees things through rose-coloured glasses’; *is geal an scéal liom é* ‘it is glad news to me’; **compounds:** *gealbhreac* ‘variegated with white’; *gealbhúí* ‘pale yellow, tawny’; **verbalisation:** *geal* ‘whiten, brighten’; *balla a ghealadh* ‘to whiten a wall’; *éadach a ghealadh* ‘to bleach cloth’; *mar a ngealann grian* ‘where the sun shines bright’;

DIL (101): *Gel* ‘fair, white, bright, shining, illustrious, whiteness, bright-coloured’;

Collocations: *na c[h]orp c[h]omgeal* ‘all-white’; *tulach géiggeal* ‘brightly-foliaged’; **compounds:** *comgel* ‘(equally, very) bright, fair’; *gelbán*; *gelbrecc* ‘variegated with white’; *geldearg* ‘bright red’; *gelglas* ‘bright blue’;

EPC: *gelo- ‘yellow, green’

OI *gel* ‘white, fair, shining’

PIE *g^helh₃- ‘yellow, green’

| | | |
|----------|----------|-------------------------------|
| Cognates | latin | <i>heluus</i> ‘honey, yellow’ |
| | Greek | <i>khlōros</i> ‘pale green’ |
| | Sanskrit | <i>hári-</i> ‘green’ |
| | OE | <i>geolu</i> ‘yellow’ |

Rua PI, OI, MI *riúad*; MI *rua* ‘brownish, dark, red’

NCE: 1208 (0,004%);

FGB: red (of hair), reddish brown, russet, copper brown; wild, strong;

Collocations: *gruaig rua* ‘red hair’; *duine rua* ‘red-haired person’; *capall rua* ‘chestnut horse’; *an Mhuir Rua* ‘the Red Sea’; *oíche rua* ‘wild night’; *cath rua* ‘fierce, bloody, battle’; **compound:** *flannrua* ‘bloodred’; *ruabhreac* ‘char’; *fiannrua* ‘light, sandy red’; *ruachorcra* ‘pale pink’; *for-rua* ‘deep red’; **verbalisation:** *ruaigh* (t+i) ‘to redden’, ‘to make or become reddish brown’;

DIL (93): *riúad* ‘red, brownish dark red’;

EPC: *rowdo- ‘red’

OI *riúad*
 Ogam ROD-AGNI
 PIE *h₁rewd^h- 'red'
 Cognates: Sanskrit *rudhirá-*
 Latin *ruber*
 Greek *erythós*
 OE *réad*

Breac PI, OI, MI *brecc*; MO *breac* 'variegated, speckled'

NCE: 1054 (0,004);

FGB: speckled, dappled;

Collocations: *bó bhreac* 'speckled cow'; *capall breac* 'dapple-grey horse';
obair bhreac 'not very good work'; *breac-Ghaeilge* 'broken Irish';
breac-Ghaeltacht 'mixed Irish- and English-speaking districts'; **prefix:** *breac-*
 'middling, partly, odd'; **compound:** gives modified noun or adjective a
 subsequent meaning of variegation: *gealbhreac* 'variegated with white';
breac-Ghaeilge 'broken Irish', *breacghlas* 'speckled green'; **verbalisation:**
breac(aigh) (t+i) 'speckle, dapple, variegate'; middling (of (weather) conditions
 and health, being indifferent, neither here nor there); **collocations of the**
verb: *éadach a bhreacadh* 'to variegate cloth'; *urlár a bhreacadh* 'to spatter a
 floor'; *páipéar a bhreacadh le scríbhinn* 'to cover a paper with writing'; *tá an lá ag*
breacadh 'the day is dawning';

DIL (36): *brecc* 'speckled, spotted, variegated, patterned, ornamented';

Collocations: *a bruig, breccas graig* 'studded with horses'; *i fil ilmíli mbrec*
mban 'of women (in) variegated (dress)'; *brec mor* 'great dotting' (a form of
 Ogham alphabet); *breacsolas* 'the morning or evening twilight'; **verbalisation:**
breccaid 'to speckle, make chequered, to variegate';

EPC: *brikko- 'speckled'

OI *brecc*
 PIE *prk- 'speckled'
 Cognates sanskrit *prśni-*

Greek *perknós*

Donn PI, OI, MI, MO *donn* 'dun, brown, chestnut'

NCE: 1015 (0,003%);

FGB: brown (of hair and substances);

Collocations: *arán donn* 'brown bread'; *siúcra donn* 'brown sugar'; *buachaill donn* 'brown-haired boy'; *cailín donn* 'brown-haired girl'; used as an intensifying term: *an duine donn deireanach* 'the very last person'; **compound:** *donnbhúí* 'biscuit coloured, yellowish brown'; *ciardhonn* 'dark brown', *donndearg* 'reddish brown' (also used for the colour of healthy blood); **verbalisation:** *donnaigh* (t+i) 'to brown, to rust, to tan';

DIL (139): *dun* (forms: *donnfiach*): *dun*, brown, a light brown inclining to yellow or red, chestnut;

EPC: **dusno-* 'dark, brown'

PIE **d^hews-* 'dark'

Cognates Latin *fuccus* 'dusky'

OE *dox* 'dark coloured, dusky'

OI *donn* à 'noble' is a different word derived from PIE **d^hus-no-*

Fionn PI *find*; OI, MI *finn*; MO *fionn* 'blonde, white, light'

NCE: 657 (0,002%);

FGB: white, bright, clear; fair (of complexion);

Compound: *finn-genti* 'Norsemen' (lit. white heathens); *fionnbhán* 'fair, light coloured'; *fionnbhúí* 'light yellow'; *fionnliath* 'grey-white'; *fionngheal* 'white, fair haired'; **verbalisation:** *fionn* (t+i) 'to whiten', 'to clear', 'to brighten'; also 'to discover': *ná fionnadh d'athair ort é* 'you had better not let your father find out about it';

DIL (48): white, bright white, lustrous, fair, light hued (of complexion, hair, etc);

finn 'a Gael, an Irishman'; **compounds:** *findban*; *findbuidé* (*findgil*);

EPC: **windo-* 'white'

OI *find*

Ogam VENDO-GNI

Corcra OI *corcur*; MI *corcair/corcra*; MO *corcra* 'purple, scarlet'

NCE: 300 (0,001%);

FGB: purple (variant: *corcardha*);

Related: *corcair* '(lichen producing) kind of purple dye'; **compounds:**

gealcorcra 'rosy';

DIL (36): *corcair* 'dye-plant, lichen (giving crimson dye)';

EPC: -

Uaine PI *úanne*; OI *úaine*; MI, MO *uaine* 'verdant, verdure, vivid green'

NCE: 236 (0,0007%);

FGB: vivid green, verdant;

DIL (77): *úaine* 'green, verdant (of fields, hills, estuaries, rivers,ec), blue or green';

Collocations: *a chnuic uaine an feoir bharr-chlaoín*; in descriptions of people, of the eye: *a rosg uaine* 'grey'; *ruisg uaine na n-aoibhlibh corcra* 'her grey eyes flash crimson'; *criostal an chriostail a guirm-ruisc rinn-uaine* 'tinged with green';

EPC: -

Other sources: focal green, the greenest of all grue words (Stahl 2006: 18); referring primarily to brightness (Lazar-Meyn 2004: 288);

Crón PI, OI, MI, MO *crón* 'brown, reddish-brown, tawny'

NCE: 150 (0,0005%);

FGB: dark yellow, tawny, tan;

Collocations: *craiceann crón* 'swarthy skin';

DIL (18): brown, reddish-brown, dark yellow, swarthy, the abyss, hell;

Compounds: *brat gorm crónchorcra*; *cróderg*;

EPC: -

C Secondary colour terms: derived forms

Bándearg 'pink' (lit. white-red)

NCE: 303 (0,001%);

FGB: pink; *bándeirge* (genitive SG) 'pinkness';

DIL (0): -

Flannbhuí 'orange' (lit. red-yellow)

NCE: 127 (0,0004%);

FGB: (of colour) orange;

DIL (0): -

D Secondary colour terms: recent loanwords

Pinc 'pink'

NCE: 118 (0,0004%);

FGB: pink;

DIL (0): -

Oraiste (N) 'orange'

NCE: 473 (0,002%) (this number includes both the colour term and the fruit);

FGB: orange; *dath oraiste* 'orange colour';

DIL (1): romance loanword meaning 'an orange';

E Obsolete terms in Modern Irish

Odhar PI, OI, MI *odar/odor*; MO *odhar* 'dun, greyish brown'

NCE: 60 (0,0002%)

FGB: dun, greyish brown, dull, dark

Compounds: *odharbhúí* ‘dun-yellow’; verbalisation: *odhraigh* (t+i) ‘to make or become dun-coloured, discoloured’

DIL (14): *odor* ‘dun, greyish brown; of persons: dark, sallow complexion’

Collocations: *tuc builli dó ind-odhur a chiche* ‘in the dun of his breast (i.e. the nipple)’; **compounds:** *odharghorm* ‘livid, wan’; *odharbuidé* ‘dun-yellow’;

EPC: *ud-ro- ‘water’ [N]

PIE *wod-r / *uden- ‘water’

OI *odar* ‘brown, dun’

semantic difference between rootform and derived OI adjective is considerable (Matasovic 2009: 395)

Lachna PI, OI, MI *lachtna*; MO *lachna* ‘grey, dull’

NCE: 32 (0,0001%)

FGB: dull grey; dun; drab

DIL (4): *lachtna* ‘the colour of milk, grey, dun, the colour of unbleached wool’

Collocations: *i riocht fhir an bhruit lachtna* ‘disguised as a man with a grey cloak’; *fer broit lachtna* ‘the man in a grey mantle’; **compounds:** *dublachtna*

EPC: -

Ciar PI, OI *ciar*; MI, OI *ciar* ‘black, dark, gloomy, swarthy’

NCE: 24 (0,00008%)

FGB: dark, swarthy (of colour or complexion)

Compound: darkens meaning; *ciardhubh* ‘pitch black, jet black, sable, raven, inky’; *a duail chiardhubha* ‘her raven locks’; *ciardhonn* ‘dark brown’;

DIL (43): *Ciar* ‘dark, murky, black, shady, gloomy’

EPC: -

Teimhleach OI *teimen*, MI *te(i)men*, MO *teimhleach* (obsolete) 'dark, gloomy'

NCE: 4 (-)

FGB: dark, gloomy, tarnished, stained

Verbalisation: *teimhligh* (t+i) 'to darken', 'obscure', 'tarnish';

DIL: -

EPC: -

Flann PI *fland*; OI, MI, MO *flann* 'blood red'

NCE: 0 (-)

FGB: blood (N), blood red (Adj), bloody

Compounds: when used as a compound, it suggests an association with blood;

flannbhui 'orange'; *flanndearg* 'vermillion'; *flannrua* 'bloodred';

DIL (14): red, blood red

EPC: *wlanno- 'blood red'

MI *flann*

PIE *welh₂- 'hit, wound'

Cognates Latin *uolnus* 'wound'

Hittite *walahzi* 'strikes'

Riabhach PI, OI, MI *riabach*, MO *riabhach* 'brindled, speckled, striped'

NCE: 0 (-)

FGB: streaked, striped, brindled, speckled grey; dull, gloomy

Collocations: *bó riabhach* 'brindled cow'; *cat riabhach* 'tabby cat'; *aimsir*

riabhach 'dismal, variable, weather'; *tá go riabhach!* 'It is too bad!'; *smúr-riabhach*

'Black-faced (of sheep)' or 'dark-featured, swarthy (of persons)';

DIL: -

EPC: -

Alad: OI *Alad*, MI ?, MO obsolete ‘piebald, variegated’

DIL (25): piebald, variegated

Compounds: *aladbreacca*, *aladbreca*

FGB: -

The term is extinct, but its compound with breac is still used: *alabhreac* ‘piebald, pied’;

EPC: -

APPENDIX II

CORPUS DATA

Irish data: The New Corpus for Ireland (30 million entries)

English data: British National Corpus (100 million entries)

| Irish (30 million) | | | English (100 million) | | |
|--------------------|------|---------|-----------------------|-------|--------|
| | | % | | | % |
| Bán | 5018 | 0,017 | White | 23445 | 0,023 |
| Dubh | 7205 | 0,024 | Black | 23883 | 0,024 |
| Dearg | 4045 | 0,013 | Red | 14562 | 0,015 |
| Buí | 1918 | 0,006 | Yellow | 4354 | 0,004 |
| Glas | 2245 | 0,007 | Green | 14251 | 0,014 |
| Gorm | 2352 | 0,008 | Blue | 10048 | 0,01 |
| Liath | 1475 | 0,005 | Grey | 5445 | 0,005 |
| Fionn | 657 | 0,002 | Blonde | 1000 | 0,001 |
| Uaine | 236 | 0,0007 | | | |
| Corcra | 300 | 0,001 | Purple | 1255 | 0,001 |
| Geal | 4031 | 0,013 | Fair | 8969 | 0,009 |
| Odhar | 60 | 0,0002 | Brown | 8428 | 0,008 |
| Ciar | 24 | 0,00008 | Dark | 12623 | 0,013 |
| Teimhleach | 4 | - | Light | 22544 | 0,023 |
| Crón | 150 | 0,0005 | Tan | 570 | 0,0006 |
| Flann | 0 | - | | | |
| Rua | 1208 | 0,004 | Pink | 3147 | 0,003 |
| Donn | 1015 | 0,003 | Dun | 377 | 0,0004 |
| Lachna | 32 | 0,0001 | Milky | 279 | 0,0003 |
| Breac | 1054 | 0,004 | Variegated | 150 | 0,0002 |
| Ríabhach | 0 | - | Turquoise | 213 | 0,0002 |

COMPOUNDS

This dataset is set up as follows: the left columns present compounds that have been attested in the Nua Chorpas na hÉireann (NCE), it states how many of the informants recognised the term as a colour compound. The total number of informants that took part in this section is 17.

The right columns present colour compounds that were not found in the NCE. Some of these terms have been attested elsewhere, which is indicated in the rightmost column by 'FGB' when the lemma was found in Foclóir Gaeilge-Béarla (ó Dónaill (1977)) and by roman numerals for the number of informants who recognised the compound as a colour term.

Attested forms in the corpus (NCI) and informants: Unattested or attested elsewhere

| | Frequency | Informants | | Source |
|-------------|-----------|------------|--------------|--------|
| Bán | | | | |
| Bándearg | 303 | XVII | Bánchorcra | FGB |
| Bánbhuí | 78 | V | *Bándhubh | |
| Bánliath | 15 | III | *Bánuaine | |
| Bánghorm | 12 | IV | *Bánfhionn | |
| Bánghlas | 8 | IV | Bánghéal | V |
| Bánbhreac | 4 | II | *Bánfhlan | |
| Bánrua | 2 | III | *Bánchrón | |
| | | | *Bánchiar | |
| | | | *Bánlachna | |
| | | | *Bánodhar | |
| | | | *Bándhonn | |
| Dubh | | | | |
| Dubhghlas | 75 | IX | *Dubhbhuí | |
| Dubhán | 62 | - | *Dubhfionn | |
| Dubhghorm | 17 | XI | Dubhgheal | V |
| Dubhuaine | 4 | - | *Dubhchorcra | |
| Dubhdhonn | 4 | VI | *Dubhfhlan | |
| Dubhdhearg | 3 | IV | *Dubhchrón | |
| Dubhrua | 3 | - | *Dubhchiar | |
| Dubhliath | 1 | II | *Dubhlachna | |
| | | | Dubhbhreac | I |

| | | | | |
|--------------|----|-----|---------------|---------|
| | | | *Dubhodhar | |
| Dearg | | | | |
| Deargdhonn | 6 | III | *Deargbhán | |
| Deargbhuí | 5 | - | Deargghlas | II |
| Deargdhubh | 1 | - | *Deargghorm | |
| Deargliath | 1 | - | *Dearguaine | |
| Deargrua | 1 | II | *Deargfhionn | |
| | | | *Dearggheal | |
| | | | *Deargchorcra | |
| | | | *Deargfhlan | |
| | | | *Deargchrón | |
| | | | *Deargchiar | |
| | | | *Dearglachna | |
| | | | *Deargbhreac | |
| | | | *Deargodhar | |
| Buí | | | | |
| Buídhonn | 32 | III | *Buídhubh | |
| Buíbhán | 24 | II | Buíghorm | II |
| Buíghlas | 21 | III | *Buíuaine | |
| Buídhearg | 19 | I | Buífhionn | III |
| Buírua | 3 | - | *Buíchorcra | |
| Buíliath | 2 | - | *Buífhlan | |
| Buígheal | 2 | I | *Buíchrón | |
| | | | *Buíchiar | |
| | | | *Buílachna | |
| | | | *Buíbreac | |
| | | | *Buíodhar | |
| Glas | | | | |
| Glasbhuí | 25 | II | Glasrua | FGB / I |
| Glasuaine | 25 | I | *Glasdhubh | |
| Glasghorm | 20 | II | *Glasdhearg | |
| Glasliath | 18 | II | *Glasfhionn | |
| Glasbhán | 4 | I | Glasgheal | II |
| Glasodhar | 1 | - | *Glaschorcra | |
| | | | *Glasfhlan | |
| | | | *Glaschrón | |
| | | | *Glaschiar | |
| | | | *Glaslachna | |

| | | | | |
|--------------|----|-----|---------------|----------|
| | | | Glasbhreac | I |
| | | | *Glasdhonn | |
| Gorm | | | | |
| Gormbhán | 47 | I | *Gormbhuí | |
| Gormghlas | 30 | II | *Gormfhionn | |
| Gormliath | 9 | IV | *Gormfhlann | |
| Gormchorcra | 7 | - | *Gormrua | |
| Gormdhubh | 2 | I | *Gormchrón | |
| Gormdhearg | 2 | - | *Gormchiar | |
| Gormuaine | 2 | I | *Gormlachna | |
| Gormgheal | 2 | III | *Gormbhreac | |
| | | | *Gormodhar | |
| | | | *Gormdhonn | |
| Liath | | | | |
| Liathbhán | 86 | V | Liathfhionn | II |
| Liathchorcra | 54 | - | *Liathfhlann | |
| Liathghlas | 36 | III | *Liathchrón | |
| Liathghorm | 30 | III | *Liathchiar | |
| Liathdhonn | 22 | I | *Liathlachna | |
| Liathbhuí | 17 | I | *Liathodhar | |
| Liathdhearg | 15 | I | | |
| Liathdhubh | 6 | II | | |
| Liathgheal | 5 | II | | |
| Liathrua | 3 | - | | |
| Liathbhreac | 2 | - | | |
| Liathuaine | 2 | - | | |
| Fionn | | | | |
| Fionnghlas | 46 | V | Fionnliath | FGB / II |
| Fionnrua | 17 | V | *Fionndhubh | |
| Fionnbhán | 11 | IV | Fionndhearg | I |
| Fionnbhuí | 3 | V | *Fionnghorm | |
| Fionngheal | 1 | VII | *Fionnuaine | |
| Fionndhonn | 1 | - | *Fionnchorcra | |
| | | | *Fionnfhlann | |
| | | | *Fionnchrón | |
| | | | *Fionnchiar | |

| | | | |
|---------------|---|----|---------------|
| | | | *Fionnlachna |
| | | | *Fionnbhreac |
| | | | *Fionnodhar |
| Uaine | | | |
| Uaineghorm | 1 | | Uainebhán I |
| | | | Uainedhubh I |
| | | | *Uainedhearg |
| | | | *Uainebhuí |
| | | | Uaineghlas I |
| | | | *Uaineliath |
| | | | *Uainefhionn |
| | | | *Uainegheal |
| | | | *Uainechorcra |
| | | | *Uainefhlann |
| | | | *Uainerua |
| | | | *Uainechrón |
| | | | *Uainechiar |
| | | | *Uainelachna |
| | | | *Uainebhreac |
| | | | *Uaineodhar |
| | | | *Uainedhonn |
| Corcra | | | |
| Corcradhearg | 2 | II | *Corcrabhán |
| Corcraghorm | 1 | II | *Corcradhubh |
| | | | *Corcrabhuí |
| | | | *Corcraghlas |
| | | | *Corcraliath |
| | | | *Corcrauaine |
| | | | *Corcrafhionn |
| | | | *Corcragheal |
| | | | *Corcraflann |
| | | | *Corcraua |
| | | | *Corcrachrón |
| | | | *Corcrachiar |
| | | | *Corcralachna |
| | | | *Corcrabhreac |
| | | | *Corcraodhar |

| | | | | |
|--------------|----|------|---------------|-----------|
| | | | *Corcradhonn | |
| Geal | | | | |
| Gealbhán | 18 | VI | Gealbhreac | FGB |
| Gealghorm | 13 | V | Gealchorcra | FGB |
| Gealbhuí | 9 | IV | *Gealdhubh | |
| Gealuaine | 2 | - | *Gealdhearg | |
| | | | Gealghlas | IV |
| | | | *Gealliath | |
| | | | *Gealfhionn | |
| | | | *Gealflann | |
| | | | *Gealrua | |
| | | | *Gealchrón | |
| | | | *Gealchiar | |
| | | | *Geallachna | |
| | | | *Gealodhar | |
| | | | *Gealdhonn | |
| Odhar | | | | |
| Odharbhuí | 3 | II | Odharbhán | I |
| Odhardhearg | 1 | - | Odhardhubh | I |
| Odhardhonn | 1 | - | *Odharghlas | |
| | | | *Odharghorm | |
| | | | *Odharliath | |
| | | | *Odharuaine | |
| | | | *Odharfhionn | |
| | | | *Odhargheal | |
| | | | *Odharchorcra | |
| | | | *Odharflann | |
| | | | *Odharrua | |
| | | | *Odharchrón | |
| | | | *Odharchiar | |
| | | | *Odharlachna | |
| | | | *Odharbreac | |
| Ciar | | | | |
| Ciardhubh | 57 | VIII | Ciardhonn | FGB / III |
| Ciarbhuí | 4 | IV | *Ciarbhán | III |
| Ciarchrón | 1 | - | *Ciardhearg | |
| | | | *ciarghlas | |
| | | | *ciarghorm | |

| | | | |
|--------------|-----|-----|---------------|
| | | | *ciarliath |
| | | | *ciaruaine |
| | | | *ciarfhionn |
| | | | *ciargheal |
| | | | *ciarchorcra |
| | | | *ciarfhlan |
| | | | *ciarrua |
| | | | *ciarlachna |
| | | | ciarbhreac I |
| | | | *ciarodhar |
| Crón | | | |
| Crónbhuí | 9 | | *Crónbhán |
| Crónuaine | 1 | | *Crónhubh |
| | | | *Cróndearg |
| | | | *Crónghlas |
| | | | *Crónghorm |
| | | | *Crónliath |
| | | | *Crónfhionn |
| | | | *Crónghéal |
| | | | *Crónchorcra |
| | | | *Crónfhlan |
| | | | *Crónrua |
| | | | *Crónchiar |
| | | | *Crónlachna |
| | | | *Crónbhreac |
| | | | *Crónodhar |
| | | | *Cróndhonn |
| Flann | | | |
| Flannbhuí | 127 | III | *Flannbhán |
| Flanndearg | 5 | II | *Flannhubh |
| Flannrua | 1 | I | *Flannghlas |
| | | | *Flannghorm |
| | | | *Flannliath |
| | | | *Flannuaine |
| | | | *Flannfhionn |
| | | | *Flannghéal |
| | | | *Flannchorcra |
| | | | *Flannchrón |

| | | | | |
|---------------|----|----|---------------|-----|
| | | | *Flannchiar | |
| | | | *Flannlachna | |
| | | | *Flannbhreac | |
| | | | *Flannodhar | |
| | | | *Flanndhonn | |
| Rua | | | | |
| Ruadhonn | 11 | I | Ruachorcra | FGB |
| Ruabhúí | 4 | - | *Ruabhán | |
| Ruabhreac | 3 | - | *Ruaghlas | |
| Rualíath | 1 | - | *Ruaghorm | |
| Ruadhubh | 1 | - | *Ruauaine | |
| Ruadhearg | 1 | II | *Ruafhionn | |
| | | | *Ruagheal | |
| | | | *Ruafhlann | |
| | | | *Ruachrón | |
| | | | *Ruachiar | |
| | | | *Rualachna | |
| | | | *Ruaodhar | |
| Donn | | | | |
| Donnrua | 52 | IV | *Donndhubh | |
| Donnbhúí | 37 | IV | *Donnuaine | |
| Donnghlas | 36 | I | *Donngheal | |
| Donndearg | 12 | I | *Donnfhlan | |
| Donnliath | 4 | I | *Donnchrón | |
| Donnfhionn | 3 | - | *Donnchiar | |
| Donnbhreac | 3 | - | *Donnlachna | |
| Donnbhán | 2 | I | *Donnodhar | |
| Donnghorm | 1 | | | |
| Donnchorcra | 1 | | | |
| Lachna | | | | |
| | | | *Lachnabhán | |
| | | | *Lachnadhubh | |
| | | | *Lachnadhearg | |
| | | | *Lachnabhúí | |
| | | | *Lachnaghlas | |
| | | | *Lachnaghorm | |
| | | | *Lachnaliath | |

Breac

| | | |
|-------------|---|-----|
| Breacliath | 6 | III |
| Breacdhearg | 2 | III |
| Breacrua | 2 | III |
| Breacbhán | 2 | - |
| Breacghlas | 1 | V |
| Alabhreac | 1 | I |
| Breacbhúí | 1 | III |
| Breacghlas | 1 | - |

*Lachnauaine
*Lachnafhionn
*Lachnagheal
*Lachnachorcra
*Lachnafhlann
*Lachnarua
*Lachnachrón
*Lachnachiar
*Lachnabheac
*Lachnaodhar
*Lachnadhonn

| | |
|---------------|-----|
| Breacdhubb | II |
| *Breacghorm | |
| *Breacuaine | |
| *Breacfhionn | |
| Breacgheal | I |
| *Breacchorcra | |
| *Breacfhlan | |
| *Breacchrón | |
| *Breacchiar | |
| *Breaclachna | |
| *Breacodhar | |
| Breacdhonn | III |

APPENDIX III

RESULTS OF SURVEY

1. Informants

| | Gender | Age | Proficiency* | Language use** |
|--------------|--------|-------|--------------|----------------|
| Informant 1 | M | 18-24 | 3 | 1 |
| Informant 2 | F | 18-24 | 2 | 1 |
| Informant 3 | M | 55-64 | 2 | 2 |
| Informant 4 | M | 55-64 | 1 | 1 |
| Informant 5 | M | 45-54 | 1 | 2 |
| Informant 6 | M | 45-54 | 1 | 4 |
| Informant 7 | M | 35-44 | 4 | 1 |
| Informant 8 | F | 35-44 | 1 | 1 |
| Informant 9 | F | 18-24 | 2 | 3 |
| Informant 10 | F | 18-24 | 1 | 1 |
| Informant 11 | M | 35-44 | 1 | 1 |
| Informant 12 | M | 25-34 | 3 | 1 |
| Informant 13 | M | 55-65 | 1 | - |
| Informant 14 | F | 45-54 | 3 | 4 |
| Informant 15 | M | 45-54 | 1 | 1 |
| Informant 16 | M | 65+ | 1 | 1 |
| Informant 17 | M | 65+ | 3 | 1 |
| Informant 18 | F | 55-65 | 3 | 1 |
| Informant 19 | F | 55-65 | 3 | 1 |
| Informant 20 | M | 45-54 | 3 | 1 |
| Informant 21 | M | 65+ | 1 | 1 |
| Informant 22 | M | 65+ | 3 | 1 |
| Informant 23 | F | 45-54 | 1 | 1 |
| Informant 24 | F | 25-34 | 4 | 1 |
| Informant 25 | M | 45-54 | 1 | 1 |
| Informant 26 | F | 45-54 | 4 | 1 |

*Proficiency: 1: native (fluent) 2: native (good) 3: non-native (fluent) 4: non-native (good) 5: non-native (practical) 6: non-native (elementary)

**Language use: 1: daily basis 2: only with specific people (family, friends, tutors, etc) 3: only in specific circumstances (home, school, work, etc) 4: often 5: hardly ever

2. The Survey

Question 1: Please describe in our own words what the following terms mean:

Bán

| | |
|--------------|--|
| Informant 1 | White |
| Informant 2 | White |
| Informant 3 | white, light |
| Informant 4 | white, or 'not written on', or 'fallow' (untilled land) |
| Informant 5 | - |
| Informant 6 | as a noun, means the colour white. As an adjectival verb it can also mean a clearance or desolation of a landscape or similar. |
| Informant 7 | White |
| Informant 8 | the colour white |
| Informant 9 | white or plain |
| Informant 10 | White |
| Informant 11 | White, bright, pale skinned, blank, pure |
| Informant 12 | White or fallow (agricultural) |
| Informant 13 | White; can also mean unploughed or fallow land |
| Informant 14 | As adjective white, empty, desolate, as noun a meadow, undefined grassy area |
| Informant 15 | White, fair, blonde; talamh bán: waste land/deserted |
| Informant 16 | As a colour, it usually means 'white'; it also has the meaning of 'blank'. I have heard it used as a 'pet name' used by a mother for her favourite son, e.g. Seán Bán: 'my darling' |
| Informant 17 | White |
| Informant 18 | White, empty (as in leathanach bán) |
| Informant 19 | White |
| Informant 20 | White |
| Informant 21 | White, blank, a lea(ley) |
| Informant 22 | White; it can also mean 'blank' e.g. a blank page; or, as a noun, 'grassland'; gruaig bhán = fair hair |
| Informant 23 | White |
| Informant 24 | White |
| Informant 25 | White |
| Informant 26 | The colour white; it can mean fair haired and is often part of someone's name e.g. Seán Bán Breathnach, indicating that they are blonde. There is also a verb form 'bánaigh' which means to wipe out/destroy, often crops/people from a place; bhí an áit bánaithe = the place was wiped out |

Dubh

| | |
|-------------|--|
| Informant 1 | black (associated with sadness, evil and maliciousness, the unknown). An fear dubh is another word for the Devil in Irish; generally fear dubh means a man that is mysterious, keeps things private. |
| Informant 2 | Black |

| | |
|--------------|--|
| Informant 3 | black, dark |
| Informant 4 | black, or 'sad' or 'crowded with people' |
| Informant 5 | - |
| Informant 6 | colour black |
| Informant 7 | Black |
| Informant 8 | the colour black |
| Informant 9 | Black |
| Informant 10 | Black |
| Informant 11 | Black, strong (dubh ina éadan means strongly opposed to), crowded (dubh le daoine means very crowded) |
| Informant 12 | Black |
| Informant 13 | Black; can describe colour, emotions and many other things |
| Informant 14 | Black, swarthy, blight |
| Informant 15 | Black, depressed |
| Informant 16 | Black (colour); also used for darkness, and as an adjective with 'galar' (illness), 'an galar dubh' refers to depression |
| Informant 17 | Black, dark haired |
| Informant 18 | Black, crowded (dubh le daoine) |
| Informant 19 | black |
| Informant 20 | Black or (relating to a person) black-haired |
| Informant 21 | Black, gloomy, melancholy |
| Informant 22 | Black; as a noun it can mean dark(ness): dubh na hoíche = the dark of the night |
| Informant 23 | Black |
| Informant 24 | Black |
| Informant 25 | black |
| Informant 26 | - |

Dearg

| | |
|--------------|--|
| Informant 1 | artificial red, not that colour of living things. Dearg is also associated with intensity in Irish exp. Ar dhearg-mheisce = to be really drunk |
| Informant 2 | Red |
| Informant 3 | red, ruddy |
| Informant 4 | red or 'blatant or total' –as in dearg-bhréag 'a total untruth' |
| Informant 5 | - |
| Informant 6 | colour red |
| Informant 7 | Red |
| Informant 8 | the colour red |
| Informant 9 | Red |
| Informant 10 | Red |
| Informant 11 | Red, fiery, bloody, raw (flesh/wound) |
| Informant 12 | Red or to emphasise emotions (an t-ádh dearg orm) |
| Informant 13 | Red; can also be used describing emotions |

| | |
|--------------|---|
| Informant 14 | Bright red, blood red |
| Informant 15 | Red |
| Informant 16 | Red (colour); it is also used as a prefix for some adjectives to describe an extreme state, such as ‘bhí sé ar dearg-mhire’ = he was livid, literally ‘he was in a red-madness’ |
| Informant 17 | Red (excluding hair) |
| Informant 18 | Red; absolutely with negative emotion (dearg-gháin) |
| Informant 19 | Red |
| Informant 20 | Red |
| Informant 21 | Red, intense |
| Informant 22 | Red; it can mean ‘undersoil’: an dearg a chur in uachtar = to turn up the soil |
| Informant 23 | Red |
| Informant 24 | Red |
| Informant 25 | Red |
| Informant 26 | - |

Buí

| | |
|--------------|--|
| Informant 1 | yellow (buí/buidhe) is a colour that denotes a generic happy feeling; it is associated with joy and gratefulness in Irish. It’s where we get the word buíochas from. |
| Informant 2 | Yellow |
| Informant 3 | Yellow |
| Informant 4 | - |
| Informant 5 | - |
| Informant 6 | Yellow |
| Informant 7 | Yellow |
| Informant 8 | the colour yellow |
| Informant 9 | Yellow |
| Informant 10 | Yellow |
| Informant 11 | Yellow |
| Informant 12 | Yellow |
| Informant 13 | Yellow |
| Informant 14 | Yellow; for skin: darkish |
| Informant 15 | - |
| Informant 16 | Yellow colour |
| Informant 17 | Yellow |
| Informant 18 | Yellow |
| Informant 19 | Yellow |
| Informant 20 | Yellow |
| Informant 21 | yellow |
| Informant 22 | Yellow; it can mean ‘thanks’: a bhuí le Dia = thanks be to God |
| Informant 23 | Yellow |
| Informant 24 | Yellow |
| Informant 25 | yellow |

Informant 26 -

Glas

Informant 1 usually translated as 'green', but it's kind of a mixture of grey and blue and a bit of green; the colour of the sky and a running stream could be considered glas, in my opinion. It's also the colour given to living things, such as grass and other plants.

Informant 2 Green

Informant 3 grey, green

Informant 4 green or grey (in Connemara Irish), or 'clear' (of poitín, illicit whiskey)

Informant 5 -

Informant 6 green as in nature (not an artificial colour)

Informant 7 green

Informant 8 the colour green

Informant 9 green

Informant 10 green

Informant 11 Mainly green, but also shades of green, grey and blue

Informant 12 Green (generally used to refer to artificial green materials e.g. clothes)

Informant 13 Green

Informant 14 Fresh green, like grass

Informant 15 Colour green; lock; also the colour grey

Informant 16 Green colour; 'glas' as a noun means 'lock'; it occurs in the word 'glasraí' meaning 'vegetables' or 'greens'

Informant 17 Green (plants); grey (animals); blue (eyes)

Informant 18 Green (could also be called 'uaine')

Informant 19 Green

Informant 20 Green

Informant 21 Grey, green, colourless

Informant 22 Green; also grey: 'caora ghlas' = a grey sheep; as noun: a lock

Informant 23 Green

Informant 24 Green

Informant 25 -

Informant 26

Gorm

Informant 1 blue, of the dark variety, i.e. royal blue; a light blue, with under tones of grey, would be considered glas. Gorm is associated with nobility and high status.

Informant 2 blue or referring to a black person 'duine gorm'

Informant 3 blue, green

Informant 4 Blue

Informant 5 -

Informant 6 Blue

Informant 7 Blue

| | |
|--------------|---|
| Informant 8 | the colour blue |
| Informant 9 | Blue |
| Informant 10 | Blue |
| Informant 11 | Blue, but also blue grey/grey |
| Informant 12 | Blue |
| Informant 13 | Blue |
| Informant 14 | Blue as the sky |
| Informant 15 | Blue |
| Informant 16 | Blue |
| Informant 17 | Blue; black (skin colour/race) |
| Informant 18 | Blue |
| Informant 19 | Blue |
| Informant 20 | Blue, or (relating to a person) black (e.g. African-American) |
| Informant 21 | Blue |
| Informant 22 | Blue also 'negro': fear gorm = a negro |
| Informant 23 | Blue |
| Informant 24 | Blue |
| Informant 25 | Blue |
| Informant 26 | - |

Liath

| | |
|--------------|---------------------------------|
| Informant 1 | dark grey |
| Informant 2 | Grey |
| Informant 3 | Grey |
| Informant 4 | grey (only of grey hair) |
| Informant 5 | |
| Informant 6 | Grey |
| Informant 7 | Grey |
| Informant 8 | the colour grey |
| Informant 9 | cream |
| Informant 10 | Grey |
| Informant 11 | Grey and greyish blue |
| Informant 12 | Grey |
| Informant 13 | Grey |
| Informant 14 | Grey, pale |
| Informant 15 | Grey |
| Informant 16 | Grey |
| Informant 17 | Gray (excluding animals) |
| Informant 18 | Grey or certain shades of green |
| Informant 19 | Grey |
| Informant 20 | Grey |

| | |
|--------------|---|
| Informant 21 | Grey |
| Informant 22 | Grey; as verb 'to colour': tae a liathadh = to colour tea (with milk) |
| Informant 23 | Grey |
| Informant 24 | Grey |
| Informant 25 | Grey |
| Informant 26 | - |

Fionn

| | |
|--------------|--|
| Informant 1 | blond, used to express hair colour, hence the given name Fionn 'the blonde one' |
| Informant 2 | blonde |
| Informant 3 | blonde, light |
| Informant 4 | - |
| Informant 5 | - |
| Informant 6 | fair/blond colour |
| Informant 7 | blonde |
| Informant 8 | the colour blonde |
| Informant 9 | blonde or baise |
| Informant 10 | Blonde |
| Informant 11 | Blonde, bright, white (but usually I would use bán instead of fionn) |
| Informant 12 | Blonde/fair |
| Informant 13 | Fair, especially of hair |
| Informant 14 | Blond (hair) |
| Informant 15 | Fair haired/blond |
| Informant 16 | Fair haired, or blonde; it is also a man's name, which presumably had the origin meaning 'the fair one' |
| Informant 17 | Fair haired; white |
| Informant 18 | Blonde |
| Informant 19 | Fair |
| Informant 20 | Fairhaired |
| Informant 21 | Fair, blonde |
| Informant 22 | Fair; also a personal name: Fionn Mac Cumhail; as verb: to ascertain, discover: Rud a fhionnadh ar dhuine = to find out something about a person |
| Informant 23 | Fair-haired |
| Informant 24 | Fair/blonde |
| Informant 25 | Fair |
| Informant 26 | - |

Uaine

| | |
|-------------|---|
| Informant 1 | green that's used to describe the colour of inanimate objects |
| Informant 2 | - |
| Informant 3 | Green |
| Informant 4 | Green |

| | |
|--------------|--|
| Informant 5 | - |
| Informant 6 | green in the sense of artificial colour |
| Informant 7 | Cream |
| Informant 8 | the colour dark green |
| Informant 9 | light green |
| Informant 10 | Cream |
| Informant 11 | Green, more definite than glas |
| Informant 12 | Green (used for natural green colours) |
| Informant 13 | Green |
| Informant 14 | Green, darker than glas |
| Informant 15 | Green |
| Informant 16 | Green; it is not a word that I have used much. I associate it with 'greenish' because it appears to be the genitive case of 'uain', therefore would mean 'of green (colour)' |
| Informant 17 | Green (excluding plants) |
| Informant 18 | Green |
| Informant 19 | Green |
| Informant 20 | Green |
| Informant 21 | Green |
| Informant 22 | Green |
| Informant 23 | Green (a lovely green) |
| Informant 24 | Green |
| Informant 25 | Dark green |
| Informant 26 | - |

Corcra

| | |
|--------------|-------------------|
| Informant 1 | Purple |
| Informant 2 | Purple |
| Informant 3 | Purple |
| Informant 4 | Purple |
| Informant 5 | - |
| Informant 6 | Purple |
| Informant 7 | Purple |
| Informant 8 | the colour purple |
| Informant 9 | Purpel |
| Informant 10 | Purple |
| Informant 11 | Purple |
| Informant 12 | Purple |
| Informant 13 | Purple |
| Informant 14 | Purple |
| Informant 15 | Purple |
| Informant 16 | Purple |
| Informant 17 | Purple |

| | |
|--------------|--------|
| Informant 18 | Purple |
| Informant 19 | Purple |
| Informant 20 | Purple |
| Informant 21 | Purple |
| Informant 22 | Purple |
| Informant 23 | Purple |
| Informant 24 | Purple |
| Informant 25 | Purple |
| Informant 26 | - |

Geal

| | |
|--------------|---|
| Informant 1 | bright, can also be used for some shades of white. Fear geal (a white skinned person) |
| Informant 2 | Bright |
| Informant 3 | white, light yellow |
| Informant 4 | Bright |
| Informant 5 | - |
| Informant 6 | Bright |
| Informant 7 | Bright |
| Informant 8 | a light colour |
| Informant 9 | Light |
| Informant 10 | Bright |
| Informant 11 | Bright, white, or sometimes blonde |
| Informant 12 | Bright |
| Informant 13 | Bright |
| Informant 14 | Light, bright, friendly, happy |
| Informant 15 | Fair or clear also fion geal = white wine |
| Informant 16 | 'bright white', or just 'bright' |
| Informant 17 | White (wine, skin colour); silver (coin); bright |
| Informant 18 | Bright |
| Informant 19 | Bright |
| Informant 20 | Bright or (relating to a person) white (e.g. Caucasian) |
| Informant 21 | Bright |
| Informant 22 | Bright |
| Informant 23 | Light |
| Informant 24 | Bright |
| Informant 25 | Bright |
| Informant 26 | - |

Odhar

| | |
|--------------|--|
| Informant 1 | it's a type of brown, though I have never heard it used in modern speech. It's used in the name of a manuscript compiled in the 1100, called Lebor na hUidre (leabhar na hUidhre); where uidhre is the genitive of odhar. It can be used to describe hair colour, hence the given name Odhrán (the lithe brown haired one) |
| Informant 2 | - |
| Informant 3 | - |
| Informant 4 | - |
| Informant 5 | - |
| Informant 6 | - |
| Informant 7 | Gold |
| Informant 8 | - |
| Informant 9 | - |
| Informant 10 | Gold |
| Informant 11 | Dull, dunn, a greyish-brown |
| Informant 12 | - |
| Informant 13 | Not in use in my dialect (Conamara) |
| Informant 14 | Brownish, dark green-brown |
| Informant 15 | Brown |
| Informant 16 | This is not a word that I have seen often, and never use in my own speech or writing. As far as I know it means a dull brown colour. It relates to the old manuscript 'leabhar na huidhre' (book of the Dun Cow), an old manuscript. |
| Informant 17 | Yellow/brown |
| Informant 18 | - |
| Informant 19 | Dark |
| Informant 20 | Brown |
| Informant 21 | - |
| Informant 22 | Dun cow |
| Informant 23 | Gold? |
| Informant 24 | - |
| Informant 25 | Yellowish |
| Informant 26 | - |

Ciar

| | |
|-------------|---|
| Informant 1 | intense black/dark colour, similar to 'jet black' in English. Ciar is often used to explain hair colour |
| Informant 2 | Dark |
| Informant 3 | - |
| Informant 4 | - |
| Informant 5 | - |
| Informant 6 | Comb |
| Informant 7 | - |
| Informant 8 | - |

| | |
|--------------|--|
| Informant 9 | - |
| Informant 10 | - |
| Informant 11 | Swarthy, dark |
| Informant 12 | Wax |
| Informant 13 | Comb (your hair) |
| Informant 14 | Very black (hair) |
| Informant 15 | Comb |
| Informant 16 | I have only ever heard of it in the phrase 'ciar dubh' meaning a dark complexion |
| Informant 17 | Very black (e.g. hair) |
| Informant 18 | Ciardhubh (jet black) |
| Informant 19 | Wax |
| Informant 20 | Wax? |
| Informant 21 | - |
| Informant 22 | Ciardhubh = jet black |
| Informant 23 | Black? |
| Informant 24 | - |
| Informant 25 | dark |
| Informant 26 | - |

Flann

| | |
|--------------|---|
| Informant 1 | a shade of vibrant red, colour of one's blood |
| Informant 2 | - |
| Informant 3 | - |
| Informant 4 | - |
| Informant 5 | - |
| Informant 6 | - |
| Informant 7 | - |
| Informant 8 | - |
| Informant 9 | - |
| Informant 10 | - |
| Informant 11 | - |
| Informant 12 | - |
| Informant 13 | Red |
| Informant 14 | Bright red, orangy |
| Informant 15 | - |
| Informant 16 | I am not aware of it as a colour, but it is the first name of a famous Irish writer Flann O'Brien |
| Informant 17 | Yellowish |
| Informant 18 | Flannbhuí (oráiste) |
| Informant 19 | - |
| Informant 20 | - |
| Informant 21 | - |

| | |
|--------------|---|
| Informant 22 | Blood, bloody. Also a personal name: Flann Ó Briain |
| Informant 23 | ?? |
| Informant 24 | - |
| Informant 25 | Russet |
| Informant 26 | - |

Rua

| | |
|--------------|---|
| Informant 1 | mixture of red and orange colour, used to describe the colour of hair and fur |
| Informant 2 | red (usually referring to hair colour) |
| Informant 3 | - |
| Informant 4 | - |
| Informant 5 | - |
| Informant 6 | rusty red (as in mada rua, a fox) |
| Informant 7 | Foxy |
| Informant 8 | a red colour for human hair of animal fur |
| Informant 9 | Auburn |
| Informant 10 | red/wine |
| Informant 11 | Red haired |
| Informant 12 | Red (older term); can be used as a term of endearment to describe someone with red hair - nickname |
| Informant 13 | Ginger |
| Informant 14 | Dark red or used for red hair |
| Informant 15 | Red haired |
| Informant 16 | Red-haired; as in 'cailín rua an ghleanna' – the red-haired woman of the glen |
| Informant 17 | Red haired |
| Informant 18 | Red as in red hair or the fox (an madra rua) |
| Informant 19 | Red |
| Informant 20 | Redhaired |
| Informant 21 | Red, roan |
| Informant 22 | Red; usually when applied to a person or animal: an sionnach rua = the red fox; fear rua = a red haired man; also 'wild': gaoth rua Mhárta = wild, withering March wind |
| Informant 23 | Red haired, so russet I suppose? Also, a fox is 'rua' but not dearg |
| Informant 24 | Red/ginger, mostly applicable to hair/fur |
| Informant 25 | Auburn |
| Informant 26 | - |

Donn

| | |
|-------------|---------------|
| Informant 1 | darkish brown |
| Informant 2 | Brown |
| Informant 3 | Brown |
| Informant 4 | Brown |
| Informant 5 | - |

| | |
|--------------|--|
| Informant 6 | Brown |
| Informant 7 | Brown |
| Informant 8 | the colour brown |
| Informant 9 | - |
| Informant 10 | Brown |
| Informant 11 | Brown, dull, grey-brown, muddy |
| Informant 12 | Brown |
| Informant 13 | Brown |
| Informant 14 | Brown |
| Informant 15 | Brown |
| Informant 16 | Brown colour, which I presume is related to the English word 'dun' as in the 'Dun Cow' |
| Informant 17 | Brown |
| Informant 18 | Brown |
| Informant 19 | Brown |
| Informant 20 | Brown |
| Informant 21 | Brown, dun |
| Informant 22 | Brown |
| Informant 23 | Brown |
| Informant 24 | Brown |
| Informant 25 | Brown |
| Informant 26 | - |

Lachna

| | |
|--------------|--|
| Informant 1 | dull grey |
| Informant 2 | - |
| Informant 3 | - |
| Informant 4 | - |
| Informant 5 | - |
| Informant 6 | - |
| Informant 7 | - |
| Informant 8 | - |
| Informant 9 | - |
| Informant 10 | - |
| Informant 11 | Drab |
| Informant 12 | - |
| Informant 13 | - |
| Informant 14 | - |
| Informant 15 | Grey |
| Informant 16 | I have only heard the title 'bodach an chóta lachna' – 'the tramp with the raggedy or drab coat' |
| Informant 17 | - |

| | |
|--------------|--|
| Informant 18 | Grey-green |
| Informant 19 | - |
| Informant 20 | Grey or dull |
| Informant 21 | - |
| Informant 22 | Grey |
| Informant 23 | ?? |
| Informant 24 | - |
| Informant 25 | I know this word as 'lachtna' which is a kind of dirty grey? |
| Informant 26 | - |

Breac

| | |
|--------------|---|
| Informant 1 | generally lots of sparkling colours like you see on a trout, which is called breac in Irish |
| Informant 2 | - |
| Informant 3 | Speckled |
| Informant 4 | speckled/mottled |
| Informant 5 | - |
| Informant 6 | spotted, speckled |
| Informant 7 | Speckled |
| Informant 8 | multi-coloured |
| Informant 9 | - |
| Informant 10 | - |
| Informant 11 | Speckled, spotty |
| Informant 12 | Trout (think it can also mean 'spotted') |
| Informant 13 | Speckled |
| Informant 14 | Spotty, freckled |
| Informant 15 | Speckled |
| Informant 16 | Speckled; 'lá breac' means 'an avarage day' |
| Informant 17 | Speckled; trout (sometimes fish in general) |
| Informant 18 | Spotted or speckled; or 'breac le botúin' (full of mistakes) |
| Informant 19 | Speckled |
| Informant 20 | Speckled or spotted |
| Informant 21 | Spotted |
| Informant 22 | Speckled, dappled; also a trout |
| Informant 23 | Black and white, or is it mottled? |
| Informant 24 | Speckled |
| Informant 25 | Speckled |
| Informant 26 | - |

Question 2: On a scale of 1 – 5 , how often do you use the following terms?

Bán

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | | x | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | |
| Informant 5 | | | | | x |
| Informant 6 | | | | x | |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | x | |
| Informant 12 | | | x | | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |
| Informant 16 | | | | | |
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | | x |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |
| Informant 23 | | | | x | |
| Informant 24 | | | x | | |
| Informant 25 | | | | | x |
| Informant 26 | | | | | |

Dubh

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|-------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | | x | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | x |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |

| | | | | | |
|--------------|--|---|--|---|---|
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | x | | | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |
| Informant 16 | | | | x | |
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | | x |
| Informant 21 | | | | | x |
| Informant 22 | | | | x | |
| Informant 23 | | | | x | |
| Informant 24 | | x | | | |
| Informant 25 | | | | | x |
| Informant 26 | | | | | |

Dearg

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | | x | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | x |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | | | x | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |

| | | | | |
|--------------|--|---|---|---|
| Informant 16 | | | x | |
| Informant 17 | | | | x |
| Informant 18 | | | | x |
| Informant 19 | | | | x |
| Informant 20 | | | | x |
| Informant 21 | | x | | x |
| Informant 22 | | | x | |
| Informant 23 | | x | | |
| Informant 24 | | | | x |
| Informant 25 | | | | |
| Informant 26 | | | | |

Buí

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | x | | |
| Informant 3 | | | x | | |
| Informant 4 | | | | | x |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | | |
| Informant 12 | | x | | | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |
| Informant 16 | | | | x | |
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | | x |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |
| Informant 23 | | | | x | |
| Informant 24 | | | x | | |

Informant 25 x
 Informant 26

Glas

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | x | | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | x |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | | x | | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |
| Informant 16 | | | | x | |
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | | x |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |
| Informant 23 | | | | x | |
| Informant 24 | | | x | | |
| Informant 25 | | | | | x |
| Informant 26 | | | | | |

Gorm

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|-------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | | x | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | x |

| | | | | | |
|--------------|--|---|--|---|---|
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | x | | | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |
| Informant 16 | | | | x | |
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | | x |
| Informant 21 | | | | | x |
| Informant 22 | | x | | | |
| Informant 23 | | | | x | |
| Informant 24 | | x | | | |
| Informant 25 | | | | | x |
| Informant 26 | | | | | |

Liath

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | x | | |
| Informant 3 | | | x | | |
| Informant 4 | | | | | x |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | x | | | | |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | | x | | |
| Informant 13 | | | | | x |

| | | | | | |
|--------------|--|--|---|---|---|
| Informant 14 | | | x | | |
| Informant 15 | | | | | x |
| Informant 16 | | | x | | |
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | | x |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |
| Informant 23 | | | | x | |
| Informant 24 | | | x | | |
| Informant 25 | | | | | x |
| Informant 26 | | | | | |

Fionn

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | x | | |
| Informant 2 | | | x | | |
| Informant 3 | | x | | | |
| Informant 4 | | | | | x |
| Informant 5 | | | | x | |
| Informant 6 | | | | x | |
| Informant 7 | | | | | x |
| Informant 8 | | | | x | |
| Informant 9 | x | | | | |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | | x | | |
| Informant 13 | | | | x | |
| Informant 14 | | x | | | |
| Informant 15 | | | | x | |
| Informant 16 | | | x | | |
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | x | |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |

| | | | | | |
|--------------|--|--|---|---|--|
| Informant 23 | | | x | | |
| Informant 24 | | | x | | |
| Informant 25 | | | | x | |
| Informant 26 | | | | | |

Uaine

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | x | | | |
| Informant 2 | | | x | | |
| Informant 3 | | | | | |
| Informant 4 | | | | | x |
| Informant 5 | | | x | | |
| Informant 6 | | | | | x |
| Informant 7 | | x | | | |
| Informant 8 | x | | | | |
| Informant 9 | | | x | | |
| Informant 10 | | | | | |
| Informant 11 | | | x | | |
| Informant 12 | | x | | | |
| Informant 13 | | | | x | |
| Informant 14 | | x | | | |
| Informant 15 | | | | x | |
| Informant 16 | x | | | | |
| Informant 17 | | | | x | |
| Informant 18 | | | | x | |
| Informant 19 | | x | | | |
| Informant 20 | | x | | | |
| Informant 21 | | | | x | |
| Informant 22 | | | x | | |
| Informant 23 | | x | | | |
| Informant 24 | | | x | | |
| Informant 25 | | x | | | |
| Informant 26 | | | | | |

Corcra

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|-------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | x | | | |
| Informant 2 | | | x | | |

| | | | | | |
|--------------|---|--|---|---|---|
| Informant 3 | x | | | | |
| Informant 4 | | | | x | |
| Informant 5 | | | x | | |
| Informant 6 | | | x | | |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | x | | | | |
| Informant 13 | | | | | x |
| Informant 14 | | | x | | |
| Informant 15 | | | | | x |
| Informant 16 | | | | x | |
| Informant 17 | | | | x | |
| Informant 18 | | | | | x |
| Informant 19 | | | | x | |
| Informant 20 | | | | x | |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |
| Informant 23 | | | | x | |
| Informant 24 | | | x | | |
| Informant 25 | | | | x | |
| Informant 26 | | | | | |

Geal

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | | x | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | x |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |
| Informant 8 | | | | x | |
| Informant 9 | | x | | | |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |

| | | | | | |
|--------------|--|--|---|---|---|
| Informant 12 | | | x | | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |
| Informant 16 | | | | x | |
| Informant 17 | | | | x | |
| Informant 18 | | | | | x |
| Informant 19 | | | | x | |
| Informant 20 | | | | | x |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |
| Informant 23 | | | x | | |
| Informant 24 | | | x | | |
| Informant 25 | | | | | x |
| Informant 26 | | | | | |

Odhar

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | x | | | | |
| Informant 2 | x | | | | |
| Informant 3 | x | | | | |
| Informant 4 | x | | | | |
| Informant 5 | | x | | | |
| Informant 6 | x | | | | |
| Informant 7 | x | | | | |
| Informant 8 | x | | | | |
| Informant 9 | x | | | | |
| Informant 10 | | | | | |
| Informant 11 | | | x | | |
| Informant 12 | x | | | | |
| Informant 13 | x | | | | |
| Informant 14 | x | | | | |
| Informant 15 | | x | | | |
| Informant 16 | x | | | | |
| Informant 17 | | x | | | |
| Informant 18 | x | | | | |
| Informant 19 | x | | | | |
| Informant 20 | x | | | | |

| | | | | | |
|--------------|---|--|---|--|--|
| Informant 21 | x | | | | |
| Informant 22 | x | | | | |
| Informant 23 | x | | | | |
| Informant 24 | x | | | | |
| Informant 25 | | | x | | |
| Informant 26 | | | | | |

Ciar

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | x | | | | |
| Informant 2 | | x | | | |
| Informant 3 | x | | | | |
| Informant 4 | x | | | | |
| Informant 5 | | x | | | |
| Informant 6 | | | | X* | |
| Informant 7 | x | | | | |
| Informant 8 | x | | | | |
| Informant 9 | x | | | | |
| Informant 10 | | | | | |
| Informant 11 | | | x | | |
| Informant 12 | x | | | | |
| Informant 13 | x | | | | |
| Informant 14 | | x | | | |
| Informant 15 | | x | | | |
| Informant 16 | | x | | | |
| Informant 17 | | x | | | |
| Informant 18 | | x | | | |
| Informant 19 | x | | | | |
| Informant 20 | | x | | | |
| Informant 21 | x | | | | |
| Informant 22 | x | | | | |
| Informant 23 | x | | | | |
| Informant 24 | x | | | | |
| Informant 25 | | x | | | |
| Informant 26 | | | | | |

* informant 6 thought it meant comb

Flann

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | x | | | | |
| Informant 2 | x | | | | |
| Informant 3 | x | | | | |
| Informant 4 | x | | | | |
| Informant 5 | x | | | | |
| Informant 6 | x | | | | |
| Informant 7 | x | | | | |
| Informant 8 | x | | | | |
| Informant 9 | x | | | | |
| Informant 10 | x | | | | |
| Informant 11 | x | | | | |
| Informant 12 | x | | | | |
| Informant 13 | x | | | | |
| Informant 14 | x | | | | |
| Informant 15 | x | | | | |
| Informant 16 | x | | | | |
| Informant 17 | | x | | | |
| Informant 18 | x | | | | |
| Informant 19 | x | | | | |
| Informant 20 | x | | | | |
| Informant 21 | x | | | | |
| Informant 22 | x | | | | |
| Informant 23 | x | | | | |
| Informant 24 | x | | | | |
| Informant 25 | | x | | | |
| Informant 26 | | | | | |

Rua

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|-------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | x | | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |

| | | | | | |
|--------------|--|---|---|---|---|
| Informant 8 | | | | | x |
| Informant 9 | | | | | x |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | x | | | |
| Informant 13 | | | | | x |
| Informant 14 | | | x | | |
| Informant 15 | | | | x | |
| Informant 16 | | | | x | |
| Informant 17 | | | | | x |
| Informant 18 | | | | x | |
| Informant 19 | | | | | x |
| Informant 20 | | | x | | |
| Informant 21 | | | | | x |
| Informant 22 | | x | | | |
| Informant 23 | | | x | | |
| Informant 24 | | | x | | |
| Informant 25 | | | | x | |
| Informant 26 | | | | | |

Donn

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | | | x | | |
| Informant 3 | | | | x | |
| Informant 4 | | | | | x |
| Informant 5 | | | | | x |
| Informant 6 | | | | | x |
| Informant 7 | | | | | x |
| Informant 8 | | | | | x |
| Informant 9 | x | | | | |
| Informant 10 | | | | | |
| Informant 11 | | | | | x |
| Informant 12 | | | x | | |
| Informant 13 | | | | | |
| Informant 14 | | | | x | |
| Informant 15 | | | | | x |
| Informant 16 | | | | x | |

| | | | | | |
|--------------|--|--|---|---|---|
| Informant 17 | | | | | x |
| Informant 18 | | | | | x |
| Informant 19 | | | | | x |
| Informant 20 | | | | x | |
| Informant 21 | | | | | x |
| Informant 22 | | | x | | |
| Informant 23 | | | | x | |
| Informant 24 | | | x | | |
| Informant 25 | | | | | x |
| Informant 26 | | | | | |

Lachna

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | x | | | | |
| Informant 2 | x | | | | |
| Informant 3 | | | | | |
| Informant 4 | | | | | |
| Informant 5 | | x | | | |
| Informant 6 | x | | | | |
| Informant 7 | x | | | | |
| Informant 8 | x | | | | |
| Informant 9 | x | | | | |
| Informant 10 | | | | | |
| Informant 11 | | | x | | |
| Informant 12 | x | | | | |
| Informant 13 | x | | | | |
| Informant 14 | x | | | | |
| Informant 15 | | x | | | |
| Informant 16 | | x | | | |
| Informant 17 | x | | | | |
| Informant 18 | x | | | | |
| Informant 19 | x | | | | |
| Informant 20 | x | | | | |
| Informant 21 | x | | | | |
| Informant 22 | x | | | | |
| Informant 23 | x | | | | |
| Informant 24 | x | | | | |
| Informant 25 | x | | | | |

Informant 26

Breac

| | 1: Never | 2: Hardly ever | 3: Neutral | 4: Often | 5: Very often |
|--------------|----------|----------------|------------|----------|---------------|
| Informant 1 | | | | | x |
| Informant 2 | x | | | | |
| Informant 3 | x | | | | |
| Informant 4 | | | | | x |
| Informant 5 | | | | x | |
| Informant 6 | | | | x | |
| Informant 7 | | x | | | |
| Informant 8 | | | x | | |
| Informant 9 | x | | | | |
| Informant 10 | | | | | |
| Informant 11 | | | | x | |
| Informant 12 | | x | | | |
| Informant 13 | | | | | x |
| Informant 14 | | | | x | |
| Informant 15 | | | | x | |
| Informant 16 | | | x | | |
| Informant 17 | | | | | x |
| Informant 18 | | | | x | |
| Informant 19 | | | x | | |
| Informant 20 | | x | | | |
| Informant 21 | | | | x | |
| Informant 22 | | x | | | |
| Informant 23 | | | | | |
| Informant 24 | | | x | | |
| Informant 25 | | | | x | |
| Informant 26 | | | | | |

Question 3: Please use the following words in a sentence, if you cannot think of an appropriate situation to use this word in, please leave the space blank

Bán

| | |
|--------------|---|
| Informant 1 | - |
| Informant 2 | tá bád bán amach san fharraige |
| Informant 3 | - |
| Informant 4 | is deas í do léine bhán |
| Informant 5 | is é ban an dath is coitianta ar thithe |
| Informant 6 | Tá léine bán orm anois |
| Informant 7 | Ta gluaistean ban agam |
| Informant 8 | - |
| Informant 9 | Chuir Sarha an cupa ban ar an ular. (Sarha put the white cup on the floor) |
| Informant 10 | - |
| Informant 11 | bhí léine bhán air - he was wearing a white shirt. |
| Informant 12 | Bhí capall bán in aice liom |
| Informant 13 | Tá sé chomh bán leis an bpáipéar |
| Informant 14 | - |
| Informant 15 | D'fhag Joe bán a theach agus chuaigh sé síos go dtí an Talamh bán ag suirí le bean chomharsan Micí Dubh |
| Informant 16 | Mura bhfuil freagra agat faoi sin, fág bán é |
| Informant 17 | Is fearr liom an cat bán |
| Informant 18 | Fág an leathanach seo bán. |
| Informant 19 | Ta cat bán againn |
| Informant 20 | Bhain mé úsáid as péint bhán do na ballaí. |
| Informant 21 | Bhí cóta bán uirthi |
| Informant 22 | Tá dath bán ar an teach. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí sé chomh bán leis an bhfalla |
| Informant 26 | - |

Dubh

| | |
|-------------|--|
| Informant 1 | - |
| Informant 2 | tá an áit dubh le daoine |
| Informant 3 | - |
| Informant 4 | ní cheannóinn carr dubh |
| Informant 5 | is éan deas an lon dubh |
| Informant 6 | Oíche dubh, dorcha atá ann anocht |
| Informant 7 | Is maith liom cait dubh |
| Informant 8 | |
| Informant 9 | cad e an berla le high dhubh? (What is the English for Black?) |

| | |
|--------------|--|
| Informant 10 | - |
| Informant 11 | bhí an áit dubh le daoine - the place was black with people (ie, the place was very crowded) |
| Informant 12 | Bhí scamall dubh sa spéir |
| Informant 13 | Chomh dubh leis an ngual |
| Informant 14 | - |
| Informant 15 | Chuaigh Micí dubh \un aonaigh agus bhí an áit dubh le daoine |
| Informant 16 | Bhí ciar dubh air |
| Informant 17 | bhí mé ag obair ó dhubh go dubh. |
| Informant 18 | Bhí an áit dubh le daoine. |
| Informant 19 | Bhí gruaig dubh orm uair amháin |
| Informant 20 | Is fear liom dúch dubh a úsáid agus mé ag scríobh. |
| Informant 21 | Bhí mo chroí dubh |
| Informant 22 | Chonaic mé madra mór dubh ag trasnú an bhóthair. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí an oíche dubh dorcha |
| Informant 26 | - |

Dearg

| | |
|--------------|--|
| Informant 1 | - |
| Informant 2 | bhí mé at dearg buile leis |
| Informant 3 | - |
| Informant 4 | tá an-dúil agam sa bhfion dearg |
| Informant 5 | dath dearg a bhíonn ar fhoireann Liverpool |
| Informant 6 | Tá tine dearg ar lasadh |
| Informant 7 | Ta dath dearg ar an chuid is mo d'inneal doiteain |
| Informant 8 | - |
| Informant 9 | Feach me dearg, nuair a dunta se an duras. (I saw red when he closed the door) |
| Informant 10 | - |
| Informant 11 | - |
| Informant 12 | Bhí an t-ádh dearg orm. |
| Informant 13 | Bhí sé dearg le náire |
| Informant 14 | - |
| Informant 15 | Thit sé isteach sa chúl fáidh agus fágadh a chraiceann dearg |
| Informant 16 | Do las a aghaidh le deargfhearg |
| Informant 17 | Bhí mo lámh dearg le fuil |
| Informant 18 | Stop mé ag an solas dearg. |
| Informant 19 | Sin gúna deas dearg |
| Informant 20 | Fuair sé an cárta dearg an-luath sa chluiche. |
| Informant 21 | Rinneadar cosán dearg isteach san oifig |
| Informant 22 | An bhfuil peann dearg agat? |

| | |
|--------------|--------------------|
| Informant 23 | -s |
| Informant 24 | - |
| Informant 25 | bhí cóta dearg air |
| Informant 26 | - |

Buí

| | |
|--------------|--|
| Informant 1 | - |
| Informant 2 | bhí an ghrian buí ag lonrú sa spéir |
| Informant 3 | - |
| Informant 4 | B'fhearr liom bróga buí don Domhnach |
| Informant 5 | is buí an dath atá ar bhanana |
| Informant 6 | Tá cruitneacht buí ag fás sa ghort |
| Informant 7 | Bionn crutch bui is dubh ar beachanna |
| Informant 8 | - |
| Informant 9 | Ní maith liom bui, mar duirt gach daione “ gan aon ago I maith liom bui. (I dont like yellow because every person says “without a doubt I like yellow) |
| Informant 10 | - |
| Informant 11 | bhí solas buí na gréine ag teacht trí ghloine na fuinneoige - the yellow sunlight was coming through the window glass. |
| Informant 12 | Bhí gúna buí ag an gcailín sin |
| Informant 13 | Chomh buí le gine óir |
| Informant 14 | see www.seomraranga.com/wp-content/uploads/2010/09/danta.doc |
| Informant 15 | Dúirt sí nach bpósafadh sí an tseandúine ar ór bhuí na cruinne |
| Informant 16 | An Bonnán buí, 's é mo léan do luí, agus araile (dán) |
| Informant 17 | Tá an bláth buí ag fás. |
| Informant 18 | Bhí cóta buí uirthi. |
| Informant 19 | Tá dath buí ar mo theach |
| Informant 20 | Ná gabh thar an line bhuí. |
| Informant 21 | Tá brollach buí ar an éan sin. |
| Informant 22 | Bíonn líomóidí buí istigh is amuigh. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí bláthanna buí ag fás sa ghairdín |
| Informant 26 | - |

Glas

| | |
|-------------|---|
| Informant 1 | - |
| Informant 2 | tá léine glas air |
| Informant 3 | - |
| Informant 4 | is glas iad na cnoic i bhfad uainn |
| Informant 5 | mar a deir an seanfhocal 'is glas iad na cnoic i bhfad uainn' |
| Informant 6 | Tá gort glas féir ar bhruach na habhann |

| | |
|--------------|---|
| Informant 7 | Ta na glasrai glas an maith don slainte |
| Informant 8 | - |
| Informant 9 | Bionn an pariti glas an speculta (I think the green party ar very special) |
| Informant 10 | - |
| Informant 11 | is glas iad na cnoic i bhfad uainn - the grass is always greener on the other side. |
| Informant 12 | Glas an dath a bhí ar an hata sin. |
| Informant 13 | Is glas iad na cnoic i bhfad uainn |
| Informant 14 | - |
| Informant 15 | Chuir sé péint glas ar an ghlas |
| Informant 16 | Tá an dath glas le feiscint i mbrat na hÉireann |
| Informant 17 | tá an bhó ghlas sa phairc ghlas. |
| Informant 18 | Is glas iad na cnoic i bhfad uainn. |
| Informant 19 | Tá cóta glas agam |
| Informant 20 | Lean an carr ar aghaidh nuair a d'athraigh na soilse go glas. |
| Informant 21 | Is maith é an stuif glas (poitín)le haghaidh an tslaghdáin |
| Informant 22 | Tá dath glas ar fhéar. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí an féar deas glas tar éis na báistí |
| Informant 26 | - |

Gorm

| | |
|--------------|--|
| Informant 1 | - |
| Informant 2 | tá bróga gorm agam sa bhaile |
| Informant 3 | - |
| Informant 4 | tá an spéir gorm inniu |
| Informant 5 | níl mórán gorm den spéir le feiceáil |
| Informant 6 | Spéir gorm a bhí againn tráthnóna |
| Informant 7 | Is maith liom speir glan soleir is farraige gorm |
| Informant 8 | - |
| Informant 9 | chuir me dath gorm ar an doras (I painted the door blue) |
| Informant 10 | - |
| Informant 11 | Cuir ort an geansaí gorm ansin agus rachaimid amach - put on your blue jumper there and we'll go out. |
| Informant 12 | Bhíodh carr gorm agam. |
| Informant 13 | Spéir ghorm a bhí ann ar maidin |
| Informant 14 | - |
| Informant 15 | Tar éis na doinninne tháinig an soineann agus scaip na néalta agus shoilsigh an ghrian go h-ard sa spear ghorm |
| Informant 16 | Bhí spéir ghorm ann i rith an lae |
| Informant 17 | Tá an spéir gorm inniu |
| Informant 18 | Tá dath gorm ar an éadach sin. |

| | |
|--------------|--|
| Informant 19 | Ta súile gorm aici |
| Informant 20 | Éadaí gorma uile atá orm faoi láthair. |
| Informant 21 | Bíonn an fharraige gorm |
| Informant 22 | UJaireanta bíonn an spéir gorm. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | roghnaigh sé an léine ghorm |
| Informant 26 | - |

Liath

| | |
|--------------|--|
| Informant 1 | - |
| Informant 2 | tá gruaig liath aici toisc go bhfuil sí an sean |
| Informant 3 | - |
| Informant 4 | - |
| Informant 5 | faigheann cor dhuine liath roimh am |
| Informant 6 | Tá cuma liath ort! |
| Informant 7 | - |
| Informant 8 | - |
| Informant 9 | Ta cota fearthainne liath agam |
| Informant 10 | - |
| Informant 11 | bhí súile liatha ag an chailín óg - the young girl had blue-grey eyes. |
| Informant 12 | Chonaic mé luch liath inné. |
| Informant 13 | Tá sé éirithe chomh liath le broc |
| Informant 14 | - |
| Informant 15 | Tharraing Tom an cúirtín le scairt an choiligh agus d'amharc ar an spear liath agus chuaigh sé a chodladh arís |
| Informant 16 | bhí folt liath ar an seanfhear. |
| Informant 17 | Tá mé liath críona. |
| Informant 18 | Chonaic mé iora liath sa choill. |
| Informant 19 | An bhfuil do chuid gruaige liath anois ? |
| Informant 20 | Tá gruaig liath orm le fada an lá. |
| Informant 21 | Bhí cuma liath air. |
| Informant 22 | Liathaigh an tae le do thoil. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí an seandúine liath ina luí sa leaba |
| Informant 26 | - |

Fionn

| | |
|-------------|----------------------|
| Informant 1 | - |
| Informant 2 | tá gruaig fionn aici |
| Informant 3 | - |

| | |
|--------------|---|
| Informant 4 | tá gruaig fhionn air |
| Informant 5 | tá go leor daoine le gruaig fhionn i n-Éirinn |
| Informant 6 | gruaigh fionn a bhí air |
| Informant 7 | Ta gruaig fionn ag m'ionin |
| Informant 8 | - |
| Informant 9 | Bhi si ard agus bhi a gruaige fionn. she was Tall and his hair was blonde |
| Informant 10 | - |
| Informant 11 | nuair a bhí mé óg, bhí mé fionn ach anois tá mé chomh maol le hubh - when I was young I was blonde, but now I am as bald as a coot. |
| Informant 12 | Tá gruaig fhionn ag an mbean sin. |
| Informant 13 | Bhí cloigeann deas fionn air |
| Informant 14 | - |
| Informant 15 | Nach dath ó bhuidéal a úsáideann an chailín fionn úd |
| Informant 16 | - |
| Informant 17 | is buachal deas fionn é Fionn. |
| Informant 18 | Gruaig fhada fhionn a bhí uirthi. |
| Informant 19 | Ba mhaith liom bheith fionn cosúil le Marlyn |
| Informant 20 | Gruaig fhionn a bhí orm agus mé óg. |
| Informant 21 | Gruaig fhionn atá uirthi |
| Informant 22 | Fionn is ainm do mo mhac. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí gruaig fhionn ar an gcailín óg |
| Informant 26 | - |

Uaine

| | |
|--------------|---|
| Informant 1 | - |
| Informant 2 | - |
| Informant 3 | - |
| Informant 4 | bheadh dóchas agam as fir na ngeansaithe uaine |
| Informant 5 | caitheann foireann na hÉireann geansaí uaine |
| Informant 6 | Tá gluaisteán uaine agam |
| Informant 7 | - |
| Informant 8 | - |
| Informant 9 | uaine, ta se an dath go halliann (light green its a beautiful colour) |
| Informant 10 | - |
| Informant 11 | bhí gúna uaine uirthi lá fhéile Pádraig - she was wearing a green dress on St. Patrick's day. |
| Informant 12 | - |
| Informant 13 | Dath uaine a bhí ar a léine |
| Informant 14 | - |
| Informant 15 | Uaine bán is buí dath dath na brataí |

Informant 16 -
 Informant 17 Chuir ort do ghúna uaine inniu.
 Informant 18 Dath uaine a bhí ar mo gheansaí scoile.
 Informant 19 An bhfuil an loch sin uaine ?
 Informant 20 Bíonn brat na Poblachta uaine agus oráiste.
 Informant 21 Dath uaine atá ar an mbratach
 Informant 22 Ná trasnaigh an bóthar go bhfeice tú an fear uaine.
 Informant 23 -
 Informant 24 -
 Informant 25 bhí péint uaine ar phriomhdhoras an tí
 Informant 26 -

Corcra

Informant 1 -
 Informant 2 bhí dath corcra ar an balla
 Informant 3
 Informant 4 Feileanna an cóta corcra í
 Informant 5 is beag nach bhfuil dath corcra ar bhfion sin!
 Informant 6 Buidéal corcra agus cuppán bán
 Informant 7 Tá bad corcra ag mo deartfhear
 Informant 8 -
 Informant 9 cheannaigh me an mala nua, bhí se corcra. (I bought a new bag it was purple)
 Informant 10 -
 Informant 11 corcra - corcra an dáth ar na bláthanna a fuair mé le mo bhean chéile - the flowers I got for my wife were purple.
 Informant 12 Tá t-léine corcra á chaitheamh agam.
 Informant 13 Tá dath corcra le feiceáil sa bhogha ceatha
 Informant 14 -
 Informant 15 Baineann uaisleacht leis an dath seo
 Informant 16 Bhí brat corcra ar an sagart
 Informant 17 Dob iad Corcra agus Bán dathanna na scoile
 Informant 18 Ceann de dhathanna an bhogha báistí is ea corcra.
 Informant 19 Bhí cóta corcra agam uair amháin
 Informant 20 Is é corcra dath na rithe.
 Informant 21 Tá an créachtach corcra
 Informant 22 Caitheann an bhean sin clóca corcra i dtólamh.
 Informant 23 -
 Informant 24 -
 Informant 25 bhí gluaisteán gránna corcra páirceáilte os comhair mo thí inné
 Informant 26 -

Geal

| | |
|--------------|---|
| Informant 1 | - |
| Informant 2 | is silas geal é sin |
| Informant 3 | - |
| Informant 4 | is geal le mo chroí na laethanta saoire |
| Informant 5 | nach geal an oíche í le gaelach lán ann |
| Informant 6 | Solas geal a bhí lasta sa halla. |
| Informant 7 | La geal gan scamall sa speir |
| Informant 8 | - |
| Informant 9 | - |
| Informant 10 | - |
| Informant 11 | bhí sé ag cur baistí ar maidin ach bhí aimsir gheal ann sa tráthnóna - it was raining in the morning but there was bright weather in the afternoon. |
| Informant 12 | Lá geal a bhí ann. |
| Informant 13 | Tháinig dath geal air le faitío |
| Informant 14 | - |
| Informant 15 | Fíon geal na Spáinne is deise |
| Informant 16 | Le fáinne geal an lae, d'éirigh muid. |
| Informant 17 | B'fhearr liom fíon geal |
| Informant 18 | D'éirigh go geal liom./Gheal an lá./Bhí solas geal sa seomra. |
| Informant 19 | Is breá liom fíon geal |
| Informant 20 | Is mó an daonra geal anois i New Orleans. |
| Informant 21 | Bhí an lá geal |
| Informant 22 | Tá an lá ag gealadh. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | lá breá geal a bhí ann inné |
| Informant 26 | - |

Odhar

| | |
|--------------|--|
| Informant 11 | Bhí an troscán sa seomra sean agus odhar - the furniture in the room was old and drab. |
| Informant 19 | Bhí bó odhar ag m'athair |
| Informant 22 | Leabhar na hUidhre |
| Informant 25 | bhí dath odhar ar chraiceann an seandúine tinn san ospidéal |

Ciar

| | |
|--------------|--|
| Informant 6 | Tá ciar gruaige im phóca (i think there must be some confusion here - this word is not a colour in my usage) |
| Informant 11 | bhí cuma ciar air ina dhiaidh sin - he had a swarthy look after that. |
| Informant 15 | Is iondúil dath cairdhubh a bheith ar chraiceann daoine sa mhéanmhuir |
| Informant 16 | Bhí cuma ciardubh ar an strainséar. |

Informant 17 Tá folt deas ciardhubh uirthi
 Informant 18 Gruaig chiardhubh a bhí air.
 Informant 22 Tá a cuid gruaige ciardhubh.
 Informant 25 bhí gruaig chiardhubh ar an bhfear óg

Flann

Informant 17 Léine flannbhuí atá orm inniu
 Informant 18 Dath flannbhuí a bhí ar a cuid éadaí.
 Informant 25 bhí luisne i ngrua an cháilín óig a bhí chomh flann lena fuil tairbh

Rua

Informant 1 -
 Informant 2 tá gruaig rua aige
 Informant 3 -
 Informant 4 ba dheas a bheith pósta le bean an fhir rua
 Informant 5 ritheann an dath rua i muintir mo mháthair
 Informant 6 Bhí spéir rua ag dul faoi ghréine anocht.
 Informant 7 Tá faitios at na cearcanna don mhadrai rua
 Informant 8 -
 Informant 9 Bhi me ina choni i baile ceathra rua. (I was living in the town of the four red heads)
 Informant 10 -
 Informant 11 -
 Informant 12 Máire Rua.
 Informant 13 Chomh rua leis an sionnach
 Informant 14 -
 Informant 15 Nír ghlac Aodh Rua le comhairle Aodh Mór ag cath Cionn tSáile, dá nglacfadh Bheadh athrach scéala inniu ó Chion tSáile go Tír Chonaill
 Informant 16 Táim i ngrá le bean rua an ghleanna
 Informant 17 Tá an cailín rua anseo inniu
 Informant 18 An maidrín ruí, ruí, rua, rua, rua
 An maidrín rua éta gránna,
 An maidrín rua éna luí sa luachair,
 äGus barr a dhá chluais in airde
 An Cailín Rua (gruaig rua)
 Informant 19 An bhfuil gruaig rua uirthi ?
 Informant 20 Is cinnte go bhfuil daoine rua go forleathan in Éirinn
 Informant 21 Cloigeann rua atá air sin.
 Informant 22 Cailín rua is ea í.
 Informant 23 -
 Informant 24 -
 Informant 25 ní maith le daoine áirithe gruaig rua ar fhir, deirtear nach bhfuil sé fearúil go leor
 Informant 26 -

Donn

| | |
|--------------|--|
| Informant 1 | - |
| Informant 2 | tá súile donn aici |
| Informant 3 | - |
| Informant 4 | Faighim blas ar an gcáca donn |
| Informant 5 | níl an oiread caranna donna le fáil anois is mar a bhíodh fadó |
| Informant 6 | tá an talamh donn tar éis na prátaí a chur |
| Informant 7 | Ni mhaith liom an dath donn |
| Informant 8 | - |
| Informant 9 | - |
| Informant 10 | - |
| Informant 11 | Tháinig sé isteach ón ghairdín agus clabar donn ar na buataisí aige - he came in from the garden with brown muck on his boots. |
| Informant 12 | Bhí bó donn 'is bán sa ghort. |
| Informant 13 | Dath donn gruaige a bhí uirthi |
| Informant 14 | - |
| Informant 15 | Dath donn a bhí ar tharbh cUAILGNE |
| Informant 16 | Bhí hata donn á chaitheamh aige |
| Informant 17 | Beidh na duilleoga donn sa fómhar |
| Informant 18 | An Droimeann Donn Dílís/Dath donn a bhí ar a cuid gruaige. |
| Informant 19 | 'carraig Donn' sin ainm siopa |
| Informant 20 | Is iomaí duine a bhfuil gruaig dhonn orthu. |
| Informant 21 | Dath donn atá ar an móin |
| Informant 22 | Tá gruaig dhonn air. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí bó dhonn ag bun na páirce maidin inniu |
| Informant 26 | - |

Lachna

| | |
|--------------|--|
| Informant 11 | Leis na scamail fearthainne sa spéir, bhí an solas lachna with the rain clouds in the sky, the light was drab. |
| Informant 16 | Do tháinig bodach an chóta lachna go dtí an dorais inné |
| Informant 22 | Bodach an chóta lachna. |
| Informant 25 | níor chuala mé an focal seo in úsáid in áit ar bith ach i scéal bhodach an chóta lachna - agus an focal litrithe mar sin freisin |

Breac

| | |
|-------------|-------------------------------|
| Informant 1 | - |
| Informant 2 | - |
| Informant 3 | - |
| Informant 4 | bhí an tsráid breac le daoine |

| | |
|--------------|--|
| Informant 5 | tá cat breac ag mo chomharsan |
| Informant 6 | Bhí éan breac ar an dtorr. |
| Informant 7 | - |
| Informant 8 | - |
| Informant 9 | - |
| Informant 10 | - |
| Informant 11 | Bhí patrún breac ar an tolg - the sofa had a spotty pattern. |
| Informant 12 | Bhí breac san abhann. |
| Informant 13 | Capall breac atá ag Seán |
| Informant 14 | - |
| Informant 15 | Dath breac atá ar an bhó |
| Informant 16 | Ní raibh ann ach lá breac arís |
| Informant 17 | Tá an bhó bhreach ag breith. |
| Informant 18 | Bhí sé breac le botúin. D' eitil an snag breac suas sa chrann. Ithimid bairín breac Oíche Shamhna. |
| Informant 19 | Ta breac gaeltacht i nGaillimh |
| Informant 20 | Bhí an áit breac le daoine |
| Informant 21 | Bíonn craiceann an bhric breac |
| Informant 22 | D' ith mé breac ag an mbricfeasta. |
| Informant 23 | - |
| Informant 24 | - |
| Informant 25 | bhí an cáca breac le risíni |
| Informant 26 | - |

Question 5: Which terms do you consider a tint of another colour?

Informant 2

| Colour term: | Is a tint of: |
|---------------------|------------------------|
| Rua | of some lighter browns |
| Donn | Black |

Informant 3

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Dearg | Donn |
| Gorm | Glas |
| Fionn | Bán |
| Uaine | Gorm |
| Geal | Bán and buí |
| Rua | Donn |

Informant 5

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Fionn | - |
| Corcra | - |
| Odhar | - |
| Flann | - |
| Lachna | - |
| Breac | - |

Informant 6

| Colour term: | Is a tint of: |
|---------------------|-------------------------|
| Liath | Mix of black and white |
| Fionn | Mix of yellow and brown |
| Corcra | Mix of blue and red |
| Rua | Mix of red and yellow |

Informant 7

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Uaine | - |
| Odhar | - |
| Ciar | - |
| Flann | - |
| Rua | - |
| Lachna | - |
| Breac | - |

Informant 9

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Glas | - |
| Corcra | - |
| Rua | - |

Informant 11

| Colour term: | Is a tint of: |
|---------------------|---|
| Dearg | Related to rua |
| Glas | Related to gorm and liath and also to uaine |
| Gorm | Related to glas and liath |
| Liath | Related to gorm and glas |
| Fionn | Related to bán and geal |
| Uaine | Related to glas |
| Corcra | Related to dearg |
| Geal | Related to bán and fionn |
| Odhar | Related to donn |
| Ciar | Related to donn |
| Rua | Related to dearg |
| Donn | Related to ciar, lachna, odhar |
| Lachna | Related to donn |

Informant 15

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Liath | Dubh agus bán |

Informant 16

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Glas | Uaine |
| Fionn | Bán |
| Uaine | Uain |
| Corcra | Gorm? |
| Geal | Bán |
| Ciar | Dubh |
| Rua | Dearg |
| Breac | Bán |

Informant 17

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Fionn | Bán |
| Geal | Bán |
| Odhar | Buí |
| Ciar | Dubh |
| Flann | Buí |
| Rua | Dearg |

Informant 19

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| liath | - |
| Uaine | - |
| Corcra | - |
| Breac | - |

Informant 20

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Fionn | Bán |
| Uaine | Glas |
| Geal | Bán |
| Rua | Dearg |

Informant 22

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Bán | Fionn |
| Dubh | Dorcha |
| Dearg | Rua |
| Glas | Liath |
| Fionn | Bán |
| Ciar | Dubh |
| Rua | Dearg |
| Lachna | Liath |

Informant 25

| Colour term: | Is a tint of: |
|---------------------|----------------------|
| Glas | Liath |

Question 6: Is the use of any of the following terms restricted to specific contexts or the description of specific objects or substances?

Informant 2

| Colour term: | Restrictions: |
|---------------------|---|
| Buí | Refers to anything yellow, except hair |
| Fionn | Refers only to hair |
| Geal | Usually refers to light (e.g. sunshine) |
| Rua | Refers only to hair |

Informant 4

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Liath | Refers only to hair |
| Fionn | Refers only to hair |
| Rua | Refers only to hair |

Informant 5

| Colour term: | Restrictions: |
|---------------------|---------------------------|
| Fionn | Refers only to hair |
| Breac | Refers to black and white |

Informant 6

| Colour term: | Restrictions: |
|---------------------|---|
| Glas | Refers to things in nature (grass, leaves, etc) |
| Fionn | Refers only to complexion or hair |
| Uaine | Refers to green objects or inorganic things |
| Geal | 'bright': not colour specific |
| Breac | Refers only to natural specks, as on a fish or bird or animal |

Informant 7

| Colour term: | Restrictions: |
|---------------------|--------------------------|
| Fionn | Restricted to haircolour |
| Uaine | Restricted to animals |
| Odhar | Restricted to animals |
| Rua | Restricted to animals |
| Breac | Restricted to objects |

Informant 9

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Dubh | |
| Rua | |

Donn

Informant 11

| Colour term: | Restrictions: |
|---------------------|---|
| Fionn | Colour of hair, although bán is also used |
| Uaine | A very definite green, no other shades |
| Geal | More brightness than colour |
| Rua | Colour of hair |

Informant 12

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Fionn | haircolour |
| Uaine | nature |

Informant 13

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Fionn | Usually hair |
| Breac | animals |

Informant 15

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Breac | Ainmhi |

Informant 16

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Glas | Vegetation |
| Fionn | Hair, complexion |
| Uaine | Greenish slime |
| Geal | Brightness reflected |
| Ciar | complexion |
| Rua | Hair, complexion |
| Lachna | clothing |
| Breac | fish |

Informant 17

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Glas | Plants/animals |
| Fionn | hair |
| Ciar | hair |
| Rua | hair |

Informant 18

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Rua | Haircolour, animals |

Informant 20

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Gorm | complexion |
| Fionn | Hair colour |
| Geal | complexion |
| Rua | Hair colour |

Informant 21

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Fionn | Hair colour |

Informant 22

| Colour term: | Restrictions: |
|---------------------|----------------------|
| Fionn | Hair |
| Uaine | material |
| Geal | weather |
| Rua | Animals, people |

Informant 25

| Colour term: | Restrictions: |
|---------------------|---------------------------|
| Fionn | Haircolour |
| Odhar | complexion |
| Ciar | Haircolour and complexion |
| Flann | Haircolour and complexion |
| Rua | complexion |

Question 7: Which of the following terms are in your opinion existing words? *[A list of existing compounds, possible compounds and 'impossible' compounds was offered to the informants at this point. In the results below, I have only included the terms which the informants thought were existing words]*

| | |
|------------------------|---|
| Bándearg | 2, 4, 5, 6, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 22, 25 |
| Bánrua | 13, 15, 20 |
| Banbhuí | 3, 11, 15, 20, 22 |
| Bá nghorm | 5, 11, 18, 20 |
| Bá nghlas | 11, 15, 18, 20 |
| Bá bhreac | 11, 20 |
| Bá nchorcra | |
| Bá nuaine | |
| Bá nfhionn | |
| Bá ngheal | 6, 9, 16, 17, 18 |
| Bá nlachna | |
| Bá nliath | 5, 13, 16 |
| Dubhghlas | 3, 6, 9, 11, 16, 18, 19, 22, 25 |
| Dubhghorm | 4, 6, 10, 12, 13, 15, 16, 17, 19, 22, 25 |
| Dubh chiar | |
| Dubhreac | 13 |
| Dubhrua | |
| Dubhdhearg | 16, 18, 20, 25 |
| Dubhliath | 16, 18 |
| Dubhlachna | |
| Dubhdhonn (or dudhonn) | 2, 9, 10, 16, 20, 25 |
| Dubhodhar | |
| Dugheal (or dubhgheal) | 3, 9, 10, 15, 16 |
| Dearghdhonn | 3, 9, 15 |
| Deargodhar | |
| Deargghlas | 2, 12 |
| Deargghorm | |
| Deargbhán | |
| Deargbhuí | |
| Deargrua | 9, 15 |
| Deargfhlan | |
| Buídhonn | 9, 11, 15 |
| Buíbhán | 2, 18 |
| Buífhionn | 3, 9, 18 |
| Buíliath | |
| Buígheal | 9 |
| Buíghlas | 10, 13, 15 |
| Buíghorm | 13, 18 |
| Buídearg | 15 |
| Buírua | |
| Glasbhuí | 11, 13 |
| Glasliath | 9, 11 |
| Glasbhán | 11 |
| Glasfionn | |
| Glasgheal | 9, 15 |
| Glaslachna | |

| | |
|--------------|--------------------------|
| Glasbhreac | 15 |
| Glasghorm | 11, 18 |
| Glasuaine | 19 |
| Glasrua | 9 |
| Glasdhearg | |
| Glasdhonn | |
| Gormbhán | 3 |
| Gormliath | 9, 11, 15, 16 |
| Gormlachna | |
| Gormgheal | 9, 11, 15 |
| Gormfhionn | |
| Gormbhreac | |
| Gormghlas | 11, 16 |
| Gormuaine | 3 |
| Gormchorcra | |
| Gormdhubh | 9 |
| Gormrua | |
| Gormhearg | |
| Gormbhuí | |
| Liathbhán | 3, 6, 11, 15, 16 |
| Liathfhionn | 3, 15 |
| Liathlachna | |
| Liathbhuí | 11 |
| Liathgheal | 9, 16 |
| Liathbhreac | |
| Liathuaine | |
| Liathghorm | 11, 15, 16 |
| Liathghlas | 11, 16, 17 |
| Liathdhubh | 9, 16 |
| Liathchorcra | |
| Liathghonn | 11 |
| Liathrua | |
| Liathdearg | 11 |
| Fionnliath | 10, 11 |
| Fionnbhán | 11, 13, 15, 22 |
| Fionnbhuí | 11, 15, 17, 18, 22 |
| Fionngheal | 3, 9, 10, 11, 15, 16, 22 |
| Fionnghlas | 11, 15, 19, 22, 25 |
| Fionnghorm | |
| Fionnrua | 3, 11, 13, 15, 16 |
| Fionndhearg | 9 |
| Uaineghorm | |
| Uaineghlas | 12 |
| Uainebhán | 9 |
| Uainedhubh | 9 |
| Corcraearg | 10, 16 |
| Corcraghorm | 15, 16 |
| Gealbhán | 6, 11, 15, 16, 11, 25 |

| | |
|--------------|-------------------------------|
| Gealfhionn | |
| Gealbhuí | 3, 15, 22, 25 |
| Dealghorm | 11, 15, 16, 22, 25 |
| Gealuaine | |
| Gealghlas | 3, 11, 16, 25 |
| Gealbhreac | |
| Gealchorcra | |
| Odharbuí | 15, 17 |
| Odharbhán | 15 |
| Odhardhubh | 19 |
| Odhardhonn | |
| Odhardhearg | |
| Odharrua | |
| Odharbhreac | |
| Ciardhubh | 4, 11, 15, 16, 17, 18, 22, 25 |
| Ciarbhreac | 15 |
| Ciaddhonn | 11, 16, 22 |
| Ciarbhuí | 11, 15, 16, 25 |
| Ciarbhán | 15, 16, 19 |
| Flannbhuí | 17, 18, 22 |
| Flannbhán | |
| Flann(h)earg | 15, 17 |
| Flannrúa | 22 |
| Ruabhán | |
| Rualiath | |
| Ruabhuí | |
| Ruadhubh | |
| Ruadhearg | 15, 19 |
| Ruabhreac | |
| Ruadhonn | 15 |
| ruachorcra | |
| donnbhuí | 4, 11, 15, 22 |
| donnghlas | 15 |
| donnghorm | |
| donndhearg | 15 |
| donnrúa | 11, 15, 19, 22 |
| donnliath | 9 |
| donnfhionn | |
| donnbhán | 9 |
| donnbhreac | |
| donnchorcra | |
| breacliath | 13, 16, 22 |
| breacbhán | |
| breacgheal | 16 |
| breacdearg | 15, 16, 25 |
| breacrúa | 13, 15, 16 |
| breacghlas | 11, 15, 16, 22, 25 |
| breacbhúí | 15, 16, 25 |

| | |
|------------|------------|
| breacdhubb | 16, 25 |
| breacdhonn | 15, 16, 25 |
| alabhreac | 25 |