# Discourses of dementia in the British press: a corpus linguistic approach

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# Abstract

This study investigates discourses of dementia in the British national news media, examining a two million word collection of news articles about dementia published between 2012 and 2017. Using a mixed-methods approach, the study combines the quantitative techniques of corpus linguistics with the qualitative perspectives of Critical Discourse Analysis, a methodological combination that affords a means of identifying the most salient linguistic patterns and trends. In light of the stigma and cultural misunderstanding that popularly surrounds the syndrome, the study seeks to explore how dementia, and those living with dementia, are discursively represented in the British press.

The analysis identifies that dementia is prominently depicted in the news media from a biomedical viewpoint with a keen focus on the clinical pathology of the syndrome and possible treatments and cures, in addition to an overwhelming concern with memory loss and cognitive decline. News media representations of people with the syndrome, including celebrities with dementia, tend to foreground loss and tragedy above personhood and dignity, with a dominant portrayal of people with dementia as passive victims without hope.

The study considers the implications of these media representations of dementia, with a particular focus on the general public's knowledge of and attitudes towards the syndrome. Reflecting upon the role of the news media in disseminating information about health and illness, the study emphasises the value of exploring news media depictions of dementia in order to understand and critique dominant stereotypes and misinformation that may restrict public knowledge of the syndrome and contribute to stigma. The study highlights the utility of a corpus-assisted Critical Discourse Analysis in the examination of large samples of news media texts about health and illness, and suggests avenues for future research.

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# Chapter 1: Introduction

## 1.1 Dementia as a global health issue

Dementia is a global and pressing health issue, affecting approximately 50 million people worldwide (World Health Organization, 2017a). The term 'dementia' describes a collection of symptoms that cause progressive damage to the brain, leading to severe impairment in memory, cognitive abilities and behaviour (Alzheimer's Society, 2017a). Dementia is a major cause of disability among older adults, significantly impacting not only the individual with the syndrome but also the families and societies who care for them. The syndrome costs the global economy $1 trillion in health care costs, social care costs, and in the costs of informal, unpaid carers (Prince, 2015). In the United Kingdom, where approximately 850,000 people live with dementia, dementia has higher health and social care costs than cancer, heart disease and stroke combined (Luengo-Fernandez *et al.*, 2015). With the number of people with dementia expected to rise to 152 million worldwide by 2050 (Patterson, 2018), and as yet no cure or treatment which can effectively prevent its progression (Lock, 2013), dementia presents a significant challenge to society.

In response to the seriousness of the issue, the World Health Organization has called for international recognition of dementia as a public health priority, asking global communities to improve dementia care and services; increase the priority given to dementia research; and raise public understanding of and attitudes towards dementia (World Health Organization, 2012). This latter point is increasingly recognised as a vital part of any effective response to dementia, since greater public knowledge of dementia would facilitate early diagnoses and interventions, increase understanding of modifiable risk factors and thus work towards prevention of dementia, and reduce the stigma associated with the syndrome (Rosato *et al.*, 2019). It would also help to enhance the quality of life of people living with dementia (Cullum, 2013). Evidence suggests that lay knowledge of dementia is currently fairly poor and stigma of the syndrome is prolific in society (Cahill *et al.*, 2015), indicating an urgent need to address how the lay public understand dementia.

In Britain, a key source of information for the lay public on dementia is the news media (Corner & Bond, 2004; Devlin *et al.*, 2007). The news media is pervasive in daily life and exerts considerable influence, with the power to shape the attitudes, perceptions and behaviours of its audiences (Bednarek & Caple, 2019). Yet relatively few studies have considered the role

of the news media in communicating information about dementia, and fewer still have focused on the British news media. The research which has been conducted in this area predominantly originates from a sociological field of enquiry, analysing small samples of data collected from the news media to determine the major topics under discussion (Clarke, 2006; Kirkman, 2006; Kang *et al.*, 2010; Van Gorp & Vercruysse, 2012). While this research offers perspectives on the dominant themes associated with news reporting of dementia, a linguistic approach could generate insights not only into *what* is reported in the news media about dementia but also *how* dementia is conceptualised, constituted, negotiated and evaluated through language (Fairclough, 2003).

This study sets out to expand the scope of previous thematic research by exploring the discursive representation of dementia in the British news media, interrogating a much larger sample of data than has previously been examined. Discourse, in this study, is understood as the set of communicative resources by which people construe aspects of the world (Burr, 2015). Analysing discourse combines close linguistic examination with consideration of how linguistic features reflect and contribute to social practices and structures (Gee, 2014). This study interrogates the discourses used to conceptualise dementia in a collection of five years' worth of news articles about dementia, published in British national newspapers between 2012 and 2017.

## 1.2 Research questions and study outline

This study addresses three inter-related research questions:

1. How is dementia discursively constructed in the British news media?
2. How are people with dementia, and the experience of living with dementia, represented?
3. What are the implications of these representations for cultural attitudes and beliefs about dementia and the experience of living with it?

To answer these questions, the study adopts a mixed methods approach to data analysis. Although discourse analysis is primarily a qualitative venture, this study begins with the quantitative measures of corpus linguistics. Corpus linguistics entails the use of specialised computer software to analyse large amounts of linguistic data, enabling data to be quantified and measured in an accurate and impartial way (Baker, 2010). With the insights gained from the tools of corpus linguistics, the analysis takes a critical approach to discourse analysis. Critical Discourse Analysis combines a critique and interpretation of discourses with

consideration of how those discourses contribute to social reality (Fairclough, 2015). In this study, the analysis centres on the ways in which discourses perpetuate or challenge the stigmatisation and exclusion of people with dementia. By utilising this methodological combination of quantitative and qualitative tools, the study is able to interrogate the largest sample of data from the British news media that has, to date, been analysed, and identify and interpret the most salient discourses drawn upon to construct dementia and those people who live with the condition.

In answering the three overarching research questions, the aim of this thesis is to generate new and unique insights into the ways in which dementia is discursively represented in the context of the British news media. In light of the significant influence of the news media on public attitudes and behaviours towards health and illness (Seale, 2003), the findings from this study may hopefully shed light on the information available to the lay public about dementia and those with the syndrome. Moreover, since the language used to talk about dementia is a significant contributor to the stigma surrounding the syndrome (Swaffer, 2014), it is hoped that the study will illuminate the nature of stigma as it is constructed and perpetuated in the news media. More broadly, this study aims to demonstrate the utility of a corpus-based discursive approach in the analysis of news media reporting of health, as a means to investigate dominant cultural representations of illness and disease.

The study is laid out in nine chapters. Following this introductory chapter, Chapter 2 maps out the groundwork for the study. Beginning with an overview of the biological and clinical picture of dementia, the chapter considers the origins of the modern-day concept of the syndrome. Charting the discovery that dementia was a specific disease process distinct from human ageing to current debates regarding the best way to conceptualise dementia, this chapter details contemporary and historic cultural knowledge of dementia. The chapter then focuses on the news media, which provides the data for this study, offering an outline of the values by which the news media operates and presenting research that describes how the news media disseminates information about health and illness. Recent research which has analysed the news media's representation of dementia is described and evaluated, laying the foundation for the study.

In Chapter 3, the methodology adopted in the study is described. The tools of corpus linguistics, a computational approach to analysing electronic texts, are detailed with reference to how other linguistic researchers have utilised a corpus approach for similar ends, as well as

how corpus tools are used in the study. The perspectives of Critical Discourse Analysis, which form the qualitative side of this study, are then outlined, and the methodological advantages of combining the quantitative and qualitative approaches are discussed. The data for the study are then introduced – news articles published in national newspapers about dementia over a five year period – and the processes of data collection and corpus compilation are outlined. The resultant corpus, henceforth the Dementia News Corpus, is described.

The first of five analysis chapters, Chapter 4 offers an overview of the salient themes in the Dementia News Corpus utilising the statistical procedures offered through corpus linguistic tools. The chapter surveys the corpus to provide a broad picture of the most frequently occurring topics, as evidenced through keywords, highlighting avenues for further, qualitative investigation.

The analysis then proceeds with Chapters 5 and 6, which address the first of the three research questions posed above, considering how dementia as a syndrome is depicted in the British press. Combining quantitative measures with a detailed qualitative examination of the news articles in the corpus, Chapter 5 explores the dominant theme of medical and scientific practice. Through an analysis of a variety of keywords associated with the pathology of dementia, the treatment options for dementia, and a dementia cure, the chapter explores how the syndrome is depicted most commonly in medico-scientific terms. Chapter 6 adopts a similar methodological approach, focusing instead on salient words relating to memory loss. The analysis centres on the concepts of memory and forgetting to consider how these salient topics are linguistically articulated and explained in the context of dementia.

The latter two analysis chapters take as their focus the representation of people with dementia, attending to the second research question stated above. In Chapter 7, the most salient terms used to denote people with dementia in the corpus are interrogated in contextual detail. Examining the labels attributed to people with dementia reveals implicit and explicit evaluations and assumptions underlying the portrayal of those with the syndrome. Chapter 8 centres on specific people with dementia, namely a variety of celebrities diagnosed with dementia. In this chapter, the portrayal of celebrities living with and dying from dementia are explored, making connections and comparisons with the depiction of generic people with dementia in the preceding chapter.

Chapter 9 concludes the thesis with a discussion of the key findings and consideration of how they relate to previous scholarly work, addressing the third research question posed

above. The practical implications of the study are outlined, pointing to the contributions of the study to research, particularly the utility of a corpus-based approach to discourse analysis in the study of news media texts. Suggestions are made for journalists regarding alternative styles of reporting, with consideration given to the constraints placed upon newsmakers which may restrict their ability to change the way they report on dementia. The chapter also considers the implications of the study for policy makers and advocacy organisations seeking to raise public awareness of dementia. The limitations of the study are examined, and suggestions are made for future researchers working in related fields.

## 1.3 A note on terminology

As this study will argue, the language surrounding dementia plays a significant role in the stigma associated with the syndrome (Swaffer, 2014). Labels for people with dementia such as 'sufferer', 'victim' or 'demented' may feel patronising or offensive to people with dementia (Bould, 2018), as may sensational descriptions of dementia as an 'epidemic' or 'living death' (Dementia Engagement and Empowerment Project, 2014). However, it is important to note that language can also be empowering; for example, while one person with dementia might be distressed by the description of their syndrome as a 'fight' or 'battle', another person might take hope and comfort from this language (Gerritsen *et al.*, 2018). Advocacy organisations run by and for people with dementia emphasise that the best way forward is to use neutral language to refer to a person with the syndrome – 'person with dementia' or 'person living with dementia' – since these labels avoid making assumptions about the individual or their life with the condition (YoungDementia UK, 2019). To that end, the present study denotes people with dementia through the nomenclature 'people/person with dementia' or 'people/person living with dementia' to refrain from passing judgement on the individual experiences of that person.

The syndrome itself is a source of terminological confusion. The terms 'dementia' and 'Alzheimer's' are often used synonymously (Zeilig, 2015), although Chapter 2 clarifies that 'dementia' is an umbrella term for multiple diseases, of which Alzheimer's disease is the most common. Since this study is concerned with the representation of all types of dementia in the news media, the singular term 'dementia' will be used to reflect this, rather than attempting to differentiate between different types of dementia. However, it must be noted that the term 'dementia' itself is under scrutiny for the negative connotations it carries, with some professional and lay organisations across the world calling for the word to be retired or its meaning adapted (Whitehouse & George, 2013). As there is presently no agreed upon alternative in the English language, the term 'dementia' will be used in this study, but with the

acknowledgement that the term ‘reflects the negotiation between physicians and society for the appropriate labelling of individuals with diffuse cognitive impairment’ (Whitehouse & George, 2013, p. 373) and thus may be subject to change in the future. For stylistic variation, the terms ‘syndrome’ and ‘condition’ are also used to denote ‘dementia’.

# Chapter 2: Literature Review

## 2.1 Introduction

In contemporary society, dementia is largely regarded as a pathological process distinct from human ageing (World Health Organization, 2016). This conceptualisation of dementia has driven global research agendas and elicited public and governmental attention and support. However, this conceptualisation has come at a cost, with a central focus on the development of a cure for dementia at the expense of discussions around improving care for people currently living with the condition. Moreover, historic notions of dementia as a natural part of human ageing, and enduring anxieties about ageing, frailty and death, have contributed to intense cultural fear and stigma attached to a dementia diagnosis.

This chapter presents an overview of the relevant research which underpins the present study. The clinical presentation and prevalence of dementia is first outlined, with consideration given to the impact of dementia on those diagnosed with the condition. This is followed by a discussion of conceptualisations of dementia, as it emerged from an affliction considered a natural part of ageing to a specific disease category, and consideration of contemporary approaches to dementia care in response to these changes. The nature and issues of stigma in dementia are considered, leading into a review of the role of the news media in communicating information about dementia, and health and illness more broadly. Finally, research which has investigated the representation of dementia in various news media outlets is reviewed, and the chapter concludes by pointing out gaps in this insightful and comprehensive body of work.

## 2.2 Overview of dementia

The word ‘dementia’ is an umbrella term describing a set of symptoms that occur in the brain as a result of disease or injury. The diseases or injuries that cause dementia disrupt and damage the brain cells, which prevents the body from functioning normally (Alzheimer's Research UK, 2019). Dementia is chronic or progressive in nature, resulting in increasing impairments to cognitive functioning (World Health Organization, 2016). According to the Diagnostic and Statistical Manual of Mental Disorders (*DSM5*) (American Psychiatric Association, 2013), impairment in one or more of the following cognitive domains would indicate dementia: complex attention (concentration and processing information), executive function (planning and decision-making), learning and memory, language, perceptual-motor skills, and social cognition (recognition of emotions). These impairments are commonly accompanied by deterioration in control of one’s emotions, social behaviour and motivation (World Health

Organization, 2017b). The symptoms of dementia will gradually worsen, to the point that all aspects of daily life are affected (American Psychiatric Association, 2013).

It is difficult to estimate how many people in the United Kingdom (UK) are living with dementia, because of its gradual nature, mild early-stage symptoms and low diagnosis rates (Alzheimer's Research UK, 2018a). The Alzheimer's Society suggest it could be as many as 850,000, with a projected figure of more than two million people with dementia by 2051 (Alzheimer's Society, 2017b). However, this estimation is based on projections from data collected two decades ago and more recent research suggests a more likely estimation of 670,000 (Matthews *et al*., 2013). It is estimated that, of the total number of people with dementia in the UK, 5% are under the age of 65, equating to around 42,000 people (Prince *et al*., 2014). Meanwhile, a recent poll commissioned by the Alzheimer's Society suggests that 24.6 million people in the UK – 38% of the population – know a family member or close friend living with dementia (YouGov, 2012).

Dementia is the result of damage to brain cells and shrinkage of brain volume (Dening & Babu Sandilyan, 2015a). The most common cause of dementia is Alzheimer's disease, named after the psychiatrist, Alois Alzheimer, who first described it (Whitehouse & George, 2013). Alzheimer's disease causes 'plaques' and 'tangles' to form in the brain, which interfere with the functioning of brain cells (NHS, 2017). Alzheimer's disease accounts for between 50% and 75% of all cases of dementia (NICE, 2017). The second most common type of dementia, making up 20% of cases, is vascular dementia (NICE, 2017). Vascular dementia is caused by reduced blood supply to the brain, such as resulting from a stroke, leading to the death of brain cells (World Health Organization, 2016). Dementia with Lewy bodies, a condition related to Parkinson's disease and characterised by clumps of protein forming inside brain cells, is the third most common cause of dementia, accounting for up to 15% of diagnoses (NICE, 2017). Less common causes of dementia include frontotemporal degeneration, traumatic brain injury, Huntington's disease, Prion disease, human immunodeficiency virus (HIV) infection, and substance abuse (American Psychiatric Association, 2013).

Although dementia is not generally regarded as a normal part of ageing, the biggest risk factor for dementia is age (World Health Organization, 2016). It therefore often co-occurs with other age related diseases, which can complicate early diagnosis and treatment (American Psychiatric Association, 2013). Another risk factor is learning difficulties; up to 75% of people with Down's syndrome over the age of 60, for instance, develop dementia (NICE, 2017).

Cardiovascular disease risk factors, such as smoking, poor diet, obesity and high blood pressure, all increase the risk of dementia to varying degrees (Norton *et al.*, 2014). Genes appear to play a role in some cases of early-onset Alzheimer's disease, but in the vast majority of instances there is no clear pattern of inheritance (Dening & Babu Sandilyan, 2015a).

Dementia affects people in different ways, depending on the individual, the parts of the brain affected, and the progression of their individual disease. The World Health Organization (2017b) outlines that, generally, people in the early stages of dementia show signs of forgetfulness, losing track of the time, and becoming lost in familiar places. Those in the middle stages of dementia may become increasingly forgetful of recent events and names, may struggle with communication, and need help with personal care. In the later stages of dementia, common symptoms include becoming unaware of the time and place, not recognising family members, having an increased need for assistance in daily life, and difficulty walking.

There are many challenges that people with dementia have to face as their symptoms progress (Petty *et al.*, 2018). People with dementia who have participated in research have noted that problems with a failing memory often result in feelings of humiliation and frustration (Gillies, 2000; Phinney, 2002). There is also a fear of becoming lost in familiar places, or while undertaking familiar tasks (Phinney, 2002; Phinney & Chesla, 2003). The inability to recall past events and situations can lead to the person with dementia feeling like a stranger in their own life, disconnected from their past (Holst & Hallberg, 2003). This is aptly described as a feeling of emptiness: 'Yes, it feels empty, as if parts of my life are gone. It feels…yes it is tedious. Unfortunately, I have lost the foundation for my life' (Holst & Hallberg, 2003, p. 363). A sense of loss is prominently recorded in the literature, with losses including memory, the ability to initiate conversation or think clearly, control over the environment, purpose, and ultimately life (Ostwald *et al.*, 2002). Communication difficulties can cause feelings of insecurity and shame, thereby inhibiting the person with dementia from reaching out to those around them (Holst & Hallberg, 2003). There may be strong negative feelings about becoming a burden to family members (Ostwald *et al.*, 2002), since individuals may come to rely on family members for their wellbeing and day to day living (Snyder, 2002).

Drug treatments are available to help manage the symptoms of Alzheimer's disease – donepezil, rivastigmine and galantamine – in the mild to moderate stages, and memantine in the moderate to severe stages (Alzheimer's Research UK, 2018b). These drugs can help an individual feel more alert and focused, but it is not known whether they slow down the

progression of the illness, since it is difficult for ethical reasons to undertake extended placebo-controlled trials of the drugs (Dening & Babu Sandilyan, 2015b). There are also non-drug treatments available to manage symptoms, including cognitive stimulation therapy, cognitive rehabilitation, life story and reminiscence work, and arts therapies (James & Fossey, 2013). There is, however, no cure for dementia. As the following section will explore, despite decades of research seeking to accurately identify the neuropathological markers of dementia with the ultimate goal of finding a cure, there remain only four drug treatments for a single type of dementia, Alzheimer's disease, and these treatments only alleviate symptoms rather than slow the disease process (Lock, 2013). Nonetheless, dementia research remains committed to finding a cure or 'disease modifying therapy' in the near future (Department of Health & Social Care, 2013; Department of Health, 2015; Alzheimer's Society, 2017c; UK Dementia Research Institute, 2019). Additionally, scientific focus has broadened to consider preventative measures (Livingston *et al.*, 2017), with technologies being developed that might be able to detect molecular brain changes that could signal incipient dementia (Lock, 2013).

## 2.3 Historical and social context of dementia

### 2.3.1 Early origins of 'dementia' and 'senility'

To understand the cultural significance of dementia, and the way that people with dementia are treated and cared for, an outline of the historical context from which dementia has emerged is necessary. The word 'dementia' comes from the Latin root *demens*, meaning 'out of one's mind', and there is evidence of its usage throughout history (Berrios, 1987). It came to permeate European vernaculars at the end of the seventeenth century, being understood as an 'extinction of the imagination and judgement' that could be reversible and could occur at any age (Berrios, 1996). At this time, dementia was understood to be either genetic, a result of ageing, or of trauma or injury to the head. Prior to the eighteenth century, there was no clinical distinction between dementia, delirium and mania (Berrios, 1996). Across the next century, however, clinicians began to distinguish between different forms of cognitive impairment, refining a definition of what dementia encompassed. For instance, the French psychiatrist Esquirol distinguished between what he termed acute, chronic and senile dementia (Berrios, 1996). Acute dementia, he proposed, lasted for a short period, following a fever, haemorrhage or metastasis. Chronic dementia was irreversible and resulted from masturbation, melancholia, mania, hypochondria, epilepsy, paralysis and apoplexy. Senile dementia was a result of ageing, and this understanding of dementia permeated society for many decades to come (Ballenger, 2006).

There is a long history of associating old age with a natural process of cognitive decline, even if this state of being was not always given the name 'dementia'. One of the earliest references to cognitive decline in old age appears in around 500 BC; the Greek lawmaker, Solon, wrote that inheritance could be divided among non-familial heirs provided the heir was not impaired by old age (Fox, 1989). Soon after, Plato listed incapacity in old age as a reasonable justification for committing a crime. However, as Fox (1989) observes, dementia was not listed in Hippocrates' collection of mental disorders, and this was probably due to the belief that dementia was an inevitable part of ageing. An oft-quoted line from Shakespeare's *As You Like It* depicts the final stage of human life thus:

> Last scene of all, that ends this strange eventful history, is second childishness and mere oblivion, sans teeth, sans eyes, sans taste, sans everything.
>
> Shakespeare, *As You Like It*, Act 2 Scene 7

Citing this dialogue, Lock (2013) observes that the 'second childishness' that Shakespeare writes of was considered normal and inevitable at the end of life; until the 20th century, in fact, it was widely believed that everyone would eventually become 'senile' (Lock, 2013).

### 2.3.2 The emergence of the biomedical model

The conceptualisation of the word 'dementia' began to change in the early 20th century with the scientific discovery of the neuropathological markers that cause Alzheimer's disease. In 1906, the German psychiatrist Alois Alzheimer identified distinctive plaques and tangles in the brain of a 50-year-old woman who had experienced paranoia, progressive sleep and memory disturbance, aggression and confusion for the last five years of her life (Hippius & Neundorfer, 2003). This discovery led to the recognition that dementia was a distinct disease process, but it was not labelled as such until 1910, when Emil Kraepelin, Alzheimer's colleague, distinguished between pre-senile and senile dementia. He called the former Alzheimer's disease (Lock, 2013). Due to disagreements in the scientific community over Kraepelin's labelling a new disease, however, as well as the outbreak of the First World War, research into Alzheimer's disease and senile dementia ceased (Lock, 2013).

In the 1970s, with the development of the electron microscope and the formation of the National Institute of Aging (NIA) in the United States, it was recognised that Alzheimer's disease was the same as senile dementia, and therefore a pathologic process rather than a result of normal ageing (Fox, 1989). This scientific recognition meant that funding began to be directed towards research into distinguishing the many different disease processes that caused

dementia (Ballenger, 2006). The efforts to secure funding were assisted by the formation of the Alzheimer's Disease and Related Disorders Association (ADRDA), who were supported by the NIA, and who lobbied the United States government as well as fundraised for research into Alzheimer's disease (Lock, 2013). As Fox (1989, p. 59) writes, the classification of Alzheimer's disease as a distinct disease process served as 'a unifying construct that provide[d] a focus for political action'.

The NIA and ADRDA crafted a clear message to gain financial and political support. They replaced the term 'senility' with 'Alzheimer's disease' (George, 2010), generating a specific disease category which could become a legitimate research focus (Gilmour & Brannelly, 2010). The financial costs of dementia were painted in terms of a global crisis, suggesting that dementia could threaten the economic stability of the world (Basting, 2009). Language associated with disease epidemics – such as 'ticking time bomb' – and with military battles – 'fighting', 'halting' and 'arresting' dementia – dominated both the NIA and ADRDA's discourse (George *et al.*, 2016). There was a clear focus on the possibility of a cure, since 'hope must be sustained if funding is to keep flowing' (Lock, 2013, pp. 3-4). People with dementia were frequently presented as victims and nonpersons (Herskovits, 1995), and a stereotype emerged that distinguished between a previously respectable, competent self and a self that was confused and discredited as the disease progressed, heightening the fear associated with the condition (Ballenger, 2006).

These efforts raised the profile of Alzheimer's disease and other dementias from a condition that had been relatively unheard of before the 1970s to what was understood as the fourth most common cause of death in the United States (Kitwood, 1997). Funds were also dramatically increased – the total NIA budget allocated for research on dementia increased from $4 million in 1979 to $80 million in 1989 (Fox, 1989). Culturally, a conceptual shift took place in understanding dementia; it was no longer to be associated with a part of normal ageing, but was instead firmly placed within a biomedical model (Herskovits, 1995). However, this shift came at a price. Ballenger (2006) contends that the biomedical model of dementia did little to counter stigma against the elderly, when the dominant stereotype of a person with dementia presented them as a nonperson with no identity and no hope. Crafting fear of the disease in order to generate funds also created fear of the individual with dementia, attributing stigma and shame to the condition (Herskovits, 1995). Moreover, the fighting spirit which was so heartily encouraged through language promised more than science could ever hope to deliver, since despite scientific advancements and decades of research, there remains no cure

for dementia (George, 2010). With science at the forefront, and the person with dementia no more than a disease specimen, what was missing from the cultural understanding of dementia was recognition of the individual, their experiences and their social environment.

### 2.3.3 A social approach to dementia care

The pioneering work of Tom Kitwood and his colleagues in the Bradford Dementia Group opened the door to a new understanding of dementia, one that prioritised the person with dementia (Kitwood, 1997). Kitwood proposed that the biomedical model of dementia saw dementia as a technical problem, like that of a broken computer or car, ignoring the person in their social world. Furthermore, the standard model did not explore options for care, instead suggesting that there is no hope unless there is a medical breakthrough. 'Malignant social psychology' is the term he applied to dementia care which upheld these attitudes, consisting of the following elements: treachery, disempowerment, infantilisation, intimidation, labelling, stigmatisation, outpacing, invalidation, banishment and objectification.

Kitwood advocated instead the notion of person-centred care, which was premised on the notion of personhood: 'a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being. It implies recognition, respect and trust' (p. 8). In practice, person-centred care consists of four complementary elements: valuing the person with dementia and those who care for them; treating the person as an individual; looking at the world from the perspective of the person with dementia; and creating a positive social environment for the person with dementia (Brooker, 2004). For Kitwood, a model of dementia care that recognised the personhood of the individual had the potential to offset the deterioration of dementia, and allow that person to live well with and despite their dementia. Kitwood's book, *Dementia Reconsidered*, includes numerous vignettes which depict how person-centred care can have an enormously positive impact on individuals with dementia. For instance, a person-centred approach would seek to understand why a person with dementia is behaving in a particular way, such as repeated walking or 'wandering'. A knowledge of the individual's background might reveal that the individual is bored or frustrated at a lack of physical activity, and measures could then be put in place to engage the individual in an activity which they enjoy and which allows them to remain active. Person-centred care recognises behaviours which might be deemed 'challenging' in the biomedical paradigm as a form of attempted communication, and then seeks to address this (Babu Sandilyan & Dening, 2015).

Although Kitwood was the first to apply the term 'person-centred care' to dementia (Kitwood, 1988), many of his contemporaries were working towards the same goal of establishing care practices which were based on respect and recognition of the individual (Brooker, 2004). Chapman and Marshall (1993) reconsidered the skills that social workers ought to have when working with people with dementia. They focused on the individuality of both the person with dementia and the carer, foregrounding the need for empathy and to view the behaviour of the person with dementia not as a symptom of disease but as a method of self-expression. In Marshall's words, 'It is important…to remember that the person with dementia is first a person and second a person with a disease of the brain' (Marshall, 1993, p. 14). Likewise in the United States, Sabat and colleagues (Sabat & Harré, 1992; Sabat & Collins, 1999; Sabat, 2001; Sabat, 2002) found multiple ways that a person with dementia's individual self could continue to be maintained through compassionate treatment by those around them.

### 2.3.4 Extending the person-centred approach

In more recent years, arguments have been made for a more relationship-centred approach to caring for people with dementia. Critiquing the person-centred approach, Nolan and colleagues (2004) point out that personhood is an essential and fundamental concept in caregiving, but that the individual with dementia needs to be seen as part of their social environment of care too. That is to say that understanding the individual's needs requires an appreciation for the network of relationships and socio-cultural beliefs within which they are situated. This is further explored in the concept of citizenship. A citizenship perspective is concerned with discrimination and unequal civil, political and social rights (Bartlett & O'Connor, 2007). While personhood considers only the individual, citizenship acknowledges the power and structural forces that define the person with dementia's experiences (Gilmour & Brannelly, 2010), so that people with dementia are seen as active and equal citizens in society rather than as a marginalised and stigmatised group (Bartlett & O'Connor, 2007).

Some advocates call for dementia to be conceptualised as a disability rather than a fatal disease (Shakespeare *et al.*, 2017). Viewing dementia as a disability would mean focusing on the person's remaining abilities rather than their deficits; recognising how people with dementia are discriminated against and marginalised; listening to the experiences of the person with dementia; and acknowledging the influence of the social environment in enabling or disabling a person with dementia (Gilliard *et al.*, 2005). This approach to dementia would give people with dementia eligibility for the legal protection afforded by anti-discriminatory disability legislation, such as the United Nations Convention on the Rights of Persons with

Disabilities (United Nations, 2006), which promotes and protects human rights and equality of people with disabilities. These rights include the right to full access to medical services, and to social care services of the highest quality (Thomas & Milligan, 2018). Without negating the devastating effects that dementia can have on an individual, advocates of the disability model of dementia argue that this approach would create a society which accepts, facilitates, values and adapts to people with dementia (Swaffer, 2014; McGettrick & Williamson, 2015; Shakespeare, 2017; Shakespeare *et al.*, 2017).

There has certainly been a shift in the way that people with dementia are viewed and positioned within society. The phrases 'person-centred care' and 'culture of dementia' are now buzzwords in the field of dementia care (Harris, 2002), and in the UK there is a move towards 'dementia friendly communities', encouraging communities and organisations to make adaptations so that people with dementia feel valued and included (Alzheimer's Society, 2017d). People with dementia are increasingly harnessing their own experiences to speak out against stigma and challenge the stereotypes of dementia (Basting, 2009), and to become actively involved in shaping the agenda for dementia research (Bartlett & O'Connor, 2007). There is, moreover, growing acceptance of the idea that it is possible to continue to lead a full and active life after a dementia diagnosis – to 'live well with dementia' – with appropriate support (Swaffer, 2015; Mitchell, 2018).

There is, however, also a place for recognising the challenges associated with dementia. Gilleard (2018) argues that academic and societal attitudes towards ageing often seek to combat negative stereotyping of old age and focus on addressing social inequalities and disadvantages that worsen the experience of ageing. Yet in doing so, we devalue and discredit the suffering that is inherent in ageing. A truly ethical approach to human ageing, Gilleard advocates, would acknowledge that older people do experience suffering as a result of their ageing, regardless of their social contexts. Thus there may be value in recognising the suffering experienced by those with progressive illnesses like dementia because in this way, society can empathise with the real experience of human ageing (Bartlett *et al.*, 2017).

## 2.4 Dementia in society

### 2.4.1 Public knowledge of dementia

There is increasing global recognition that awareness of and knowledge about dementia among members of the public is vitally important (Cahill *et al.*, 2015; Rosato *et al.*, 2019). At the G8 Dementia Summit of 2013, in which health ministers from the G8 countries met and discussed

an effective international response to dementia, raising public knowledge of the condition was set as a key target (G8 Dementia Summit Declaration, 2013). Greater public awareness of dementia would mean that individuals might identify the signs of dementia in a loved one, or themselves, sooner and thus seek early treatment; the public might demand that the government prioritise dementia as a national issue; and discussion might be fostered among the public to lessen stigma (Rimmer *et al.*, 2005). Moreover, since many dementia risk factors are modifiable (Livingston *et al.*, 2017), there are economic, political and social benefits of a more well-informed public (Cahill *et al.*, 2015). There is a fine balance, though, between increasing public knowledge and causing undue anxiety about dementia (Devlin *et al.*, 2007). Surveys of the British public suggest that knowledge of dementia is variable, with some enduring and harmful misconceptions and intense cultural anxiety about dementia.

Survey and interview research with the British public suggests a lack of understanding about the distinction between normal ageing and dementia (Corner & Bond, 2004; Devlin *et al.*, 2007; Stevens *et al.*, 2018). This is an issue for governments and health care providers, because uncertainty about early-stage dementia symptoms could prohibit a person from seeking medical help (Devlin *et al.*, 2007). While there is evidence that the British public has reasonable awareness of the signs and symptoms of dementia (Hudson *et al.*, 2012), the literature indicates a lack of knowledge about the risk factors for dementia (Yeo *et al.*, 2007; Hudson *et al.*, 2012; McParland *et al.*, 2012; Rosato *et al.*, 2019). For instance, in McParland and colleague's (2012) survey of public knowledge and attitudes of dementia in Northern Ireland, 64% of respondents did not know that diet and lack of exercise were risk factors for dementia. This is a significant and concerning finding given that these risk factors are modifiable by the individual, and thus points to an important gap in knowledge among the public.

The predominant image of dementia among the British public seems to be a person in the later stages of the disease (Rimmer *et al.*, 2005; Devlin *et al.*, 2007). Public attitudes associate dementia with a loss of control, independence, identity and dignity (Corner & Bond, 2004; Devlin *et al.*, 2007; McParland *et al.*, 2012), and there is a prevailing belief among the general public that people with dementia are difficult to talk to (Crisp *et al.*, 2000; Stevens *et al.*, 2018). The idea that a person with dementia 'disappears' or becomes an 'empty shell' has been noted as prevalent across several studies of public attitudes (Corner & Bond, 2004; Devlin *et al.*, 2007; McParland *et al.*, 2012). A recent survey conducted by Alzheimer's Research UK found that half of all respondents feared being diagnosed with dementia more than any other

condition (Stevens *et al.*, 2018). The results from these studies highlight the cultural stigma that is attached to a dementia diagnosis.

### 2.4.2 Stigma and language

Stigma marginalises groups of people both symbolically and practically based on attributes that the group is perceived to hold (Major *et al.*, 2018). Stigma is a social construction, perpetuated and maintained by powerful members of a social group or society (Major *et al.*, 2018). Link and Phelan (2006) define stigma as the combination of five components: labelling differences, stereotyping, creating categories of 'us' and 'them', discriminating, and exercising power. Stigma impacts opportunities afforded to individuals, such as employment options, housing, and access to appropriate healthcare (Major *et al.*, 2018). In the case of serious illness, stigma causes the patient to be 'twice victimised' through societal rejection and exclusion in addition to being severely ill (Scheper-Hughes & Lock, 1986, p. 137).

Dementia stigma arguably reveals not only cultural aversions to people with the condition, but towards ageing in general. Herskovits (1995, p. 160) suggests that fear of dementia emerges in direct relation to fear of our own futures: 'The person diagnosed with Alzheimer's is, in many respects, a caricature or extreme version of the negative stereotype of the elderly […] therefore, to contemplate the self-as-monster in Alzheimer's is, implicitly, to reflect on and grapple with our own future potential monstrousness'. Thus stigma of dementia encompasses ignorance and misunderstanding, but also cultural anxieties of ageing, identity and death (Ballenger, 2006).

Stigma of dementia impacts those with dementia in a number of ways. Feelings of stigma can influence a person's decision to disclose their diagnosis of dementia in the first place (Snyder, 2001), and fear of the way others will react may lead some people with dementia to withdraw from social situations (Snyder, 2002). Harman and Clare (2006) reported that stigma surrounding dementia led to people with dementia being intentionally excluded from social interaction by others. Stigma may also impact whether or not an individual seeks support after their diagnosis (Swaffer, 2014). In fact, Swaffer (2015) coined the term 'prescribed disengagement' to describe what happens when a person receives a diagnosis of dementia and is advised by health care professionals to give up all aspects of their previous life and prepare for their deteriorating abilities. This practice, she argues, is common and insidious, leading to feelings of disempowerment, increased isolation and a loss of identity among people with dementia. People with dementia have recorded experiencing stigma throughout the progression

of the disease (Burgener *et al*., 2015). The stigma of dementia can profoundly impact an individual's quality of life and social wellbeing (Milne, 2010), to the extent that some researchers have argued that dementia is in fact a human rights issue, since societal stigma is so extreme that the diagnosed individual may face injustice, inequality and marginalisation (Boyle, 2010; Kelly & Innes, 2013; Cahill, 2018).

The language used to talk about dementia plays an important role in the stigma surrounding the condition (Swaffer, 2014). Stigmatising terms used to describe dementia, such as 'losing it', 'senile' and 'ga-ga', influence how people with dementia feel about themselves and how they interact with others (Milne, 2010). Thus, as Gerritsen, Oyebode and Gove (2018) argue, it is crucial to evaluate the language used to describe dementia and people with the condition, to consider whether this language is respectful of personhood and dignity, and presents a balanced and nuanced view of dementia. A key site within which cultural representations of dementia are produced, legitimated and sustained is the news media (Basting, 2009). As the following section will explore, the news media has significant influence over public attitudes towards dementia. Evidence from surveys of the British public suggest that the news media is one of the main sources from which the public access information about dementia (Corner & Bond, 2004; Devlin *et al.*, 2007). Recognising this, charities and advocacy organisations have produced various guidelines advising journalists and editors how to avoid stigmatising language in reporting on dementia (McGettrick & Williamson, 2015). Collectively, such documents tend to discourage words like 'senility', 'demented' or 'sufferer', which promote a negative view of dementia, and instead advocate language which emphasises the personhood of the individual, such as 'person living with dementia' (Dementia Engagement and Empowerment Project, 2014; The Alzheimer Society of Ireland, 2017; Alzheimer's Society, 2018; Bould, 2018; YoungDementia UK, 2019). Yet, as will be discussed below, these guidelines aimed at lessening the cultural stigma of dementia have yet to fully permeate into news reporting of dementia; research suggests that the news media is a channel through which stigma about dementia is created and perpetuated.

## 2.5 Health and illness in the news media

### 2.5.1 News media values

The news media is a vital source of information on health and wellbeing for the lay public (Lupton, 1999a; Gwyn, 2001; Ramon, 2006), and has the potential to exert considerable influence over its audiences, shaping public ideas and behaviours as well as those of governments and policy makers (Bednarek & Caple, 2019). Before interrogating the role of the

news media in disseminating information about health and illness, it is first necessary to situate and describe the values and criteria by which the news media operate. The term 'news media' describes the elements of the mass media that deliver news to the general public. Mass media is understood here as the channels that carry messages to a large number of people (Wimmer & Dominick, 2013). There are many different forms of news media, which may include newspapers, television and radio news documentaries, news and current affairs programmes, news interviews, news websites and blogs, as well as local, regional, metropolitan and national news (Bednarek & Caple, 2019). But what, exactly, constitutes 'news'?

Van Dijk (1988) outlines that in everyday usage, 'news' is taken to mean a text or discourse on the radio, television or in the newspaper which presents new information about recent events. Yet news is not simply that which happens; it is 'that which can be regarded and presented as newsworthy' (Fowler, 1991, p. 13). In other words, since the news media cannot report on all the events taking place across the world at any one time, there must be selection criteria that operate in order for an event to be considered as 'news' (McCombs & Guo, 2014). Galtung and Ruge (1965) famously hypothesised that the world is a metaphorical set of broadcasting stations, each emitting its own signal. For a signal to become intelligible and meaningful out of all the signals being emitted – for an event to register as 'news' – it has to cross a certain threshold. The set of criteria by which an event is judged to have crossed this threshold are collectively called 'news values', and the more of these values an event encompasses, the more likely it is that it will be reported (Cotter, 2010).

The exact properties of news values have been theorised by scholars from linguistics as well as journalism and communication studies. Galtung and Ruge (1965) laid the foundation for the study of news values in their examination of the Scandinavian press, and the factors they proposed that establish newsworthiness have been variously reproduced, amended and extended (e.g. Fowler (1991), Bell (1991), Richardson (2007) and Cotter (2010)). Reviewing the literature, Bednarek and Caple (2014) synthesise the main findings to produce the following list of news values:

- Negativity
- Impact
- Superlativeness
- Timeliness
- Proximity

- Novelty
- Consonance
- Eliteness
- Personalisation
- Unambiguity

Fowler (1991) emphasises that these values are cultural rather than 'natural'; there is no inherent reason why disasters should be more newsworthy than positive events, for example. Thus newsworthiness is a reflection of ideological beliefs and priorities held in society (Bell, 1991).

The value of *negativity* has been called the 'basic news value' (Bell, 1991, p. 156), reflecting the news worker adage that 'if it bleeds, it leads' (Bednarek & Caple, 2019, p. 52). An event like the Chernobyl nuclear accident is newsworthy because it is negative, featuring death, decay and destruction (Fowler, 1991). Negative events speak to what Furedi (2006, p. vii) calls a 'culture of fear', in which fear is no longer simply a response to a perceived threat but 'a cultural idiom through which we signal a sense of growing unease about our place in the world'. Cultural fears are shaped and driven by the media, Furedi argues, such as the fear of crime, which is often highly disproportionate to actual crime risk. Thus by selecting negative events as newsworthy, the news media informs societal knowledge of what topics to fear.

Related to negativity is the value of *impact*, which says that events with serious and far-reaching repercussions are more newsworthy than events which affect a smaller number of people (Fowler, 1991). Language which emphasises the scale of the event, such as quantification, or the consequences of the event on individuals, for example through references to emotion, can convey the value of impact (Bednarek & Caple, 2019). Emphasis on the scale of the event can also signal *superlativeness*, which says that the event that is the biggest, the most violent, the most destructive and so on is the most newsworthy (Bell, 1991).

*Timeliness* and *proximity* relate to the relevance of the story to the audience (Fowler, 1991). Recent events are more newsworthy than events which took place further in the past. Because news is produced daily in newspapers, or even hourly for news television or radio programmes, events whose duration fits into a 24-hour span are more newsworthy (Bell, 1991). Meanwhile, events which happened in geographical or cultural proximity to the audience have more news value; a minor accident might be reported in the town where it happened, but not on the national news (Bell, 1991). Bednarek and Caple (2014) outline that timeliness and

proximity are signalled through linguistic markers of time and place, respectively (such as 'yesterday', 'England). Proximity can also be conveyed through first-person plural pronouns which include the audience, such as 'our most precious national resource' (Bednarek & Caple, 2019).

Galtung and Ruge (1965) posit that news events which have *novelty* value are more newsworthy, based on what else has been reported as news during the news cycle. For instance, an insignificant national event may be more newsworthy if all other news reported that day has featured foreign events. Extending the concept of *novelty,* Fowler (1991) considers the importance of unexpectedness, meaning an event which is sudden and rare or unusual is newsworthy. Language which indicates newness or unexpectedness, or comparison with other events, can signal this value of *novelty* (Bednarek & Caple, 2014).

The value of *consonance* proposes that a story is newsworthy if aspects of that story fit with the stereotypes that people hold (Bednarek & Caple, 2014). As an example, Bell (1991) explains that the Western media continued to report on political and social changes in Eastern Europe in the 1990s using the stereotypes from the cold war, because this presentation was compatible with the preconceptions about Eastern Europe held by the audience. Consonance can be construed through such linguistic strategies as recurrent word combinations which invoke stereotypes, or with comparisons to similar events (Bednarek & Caple, 2019).

*Eliteness* refers to the newsworthiness of people, institutions and nations considered to be 'elite' (Bednarek & Caple, 2019). This value speaks to the cult of the celebrity, positing that famous individuals have more news value than 'ordinary' people. The eliteness of news stories can also be judged based on where the event took place; in the Western news media, nations of the first world are more newsworthy than any other country (Bell, 1991). Eliteness can be emphasised through such resources as titles (such as 'professor') or superlative adjectives (such as 'the city's top cop') (Bednarek & Caple, 2017).

The value of *personalisation* proposes that news items which can be given a 'personal' face, such as through involving the testimonies of eyewitnesses, describing emotional impacts, and citing information about individuals such as names, jobs, and personal appearances, can enhance the newsworthiness of a story (Bednarek & Caple, 2019). Generic references to mass groups of people provide weak personalisation in comparison with directly named individuals (Bednarek & Caple, 2017). Fowler (1991) speculates that personalisation is designed to elicit empathy from the audience, to allow them to identify with the event through the focalisation

of an individual, and to simplify complex institutional processes by naming one or two key individuals rather than a whole organisation.

The final value, that of *unambiguity*, is perhaps less of an individual value and more of a general objective of news writing (Bednarek & Caple, 2014). The news media must communicate in a way that is clear and unambiguous, in order that the reader can understand the information being communicated: 'If's, but's and maybe's are minimal' (Bell, 1991, p. 157). This means that complex or indeterminate phenomena are often simplified into black-and-white news stories, and problems are presented alongside clear solutions (Serani, 2008).

News values determine which events are reported and which are ignored in the news media, inherently establishing a partial view of the world (Fowler, 1991). Moreover, within one event or story, not everything can be said about an issue, so certain aspects of a story are included while others are left out (Wallack *et al.*, 1993). Through the process of news production, the event or story is reproduced so as to make some aspects more salient and to background others (Bednarek & Caple, 2014). In this way, news is not a neutral reflection of the world, but rather is channelled through the context in which it is produced and received (Matheson, 2005). As Richardson (2007, p. 13) observes, the news media has the ability 'to shape people's opinions not only of the world but also of their *place* and *role* in the world; or, if not shape your opinions on a particular matter, it can at the very least influence *what* you have opinions on; in sum, it can help shape social reality by shaping our *views* of social reality' (italics in original).

### 2.5.2 News stories of health and illness

For many lay people, the news media constitutes one of the main forms of information about health and illness (Ramon, 2006). Informing on a range of topics such as what it is like to be ill, what causes illnesses and the development of treatments and cures, the news media has the power to shape discourses surrounding health and illness (Seale, 2003). The news media's representation of health and illness can affect individuals' perceptions of risk and health behaviours (Lyons, 2000), and can exert significant influence on policymakers and public debate (Wallack *et al.*, 1993). Interrogating news stories of health and illness can reveal hegemonic discourses that are constructed and sustained through the news media, and which may influence public knowledge and attitudes towards heath topics (Kline, 2011).

Recognising the power and influence of the news media in shaping public beliefs and behaviours about health and illness, scholars from diverse backgrounds have examined the

depictions of various health issues in the news media. Two topics which have received considerable scholarly attention are HIV/AIDS (such as Nelkin (1991), Lupton (1994; 1999b) and Bardhan (2001)) and cancer (Henderson & Kitzinger, 1999; Clarke & Everest, 2006; Atkin *et al.*, 2008; Slater *et al.*, 2008; Jensen *et al.*, 2010). These conditions have both been historically stigmatised, are potentially fatal, and have been widely and sensationally reported in the news media, thus proving to be fruitful topics of investigation for analysts (Lupton, 1999b). More recent research has broadened the scope of enquiry to consider the representation of a range of health topics such as diabetes (Gollust & Lantz, 2009), mental illness (Anderson, 2003), obesity (Lawrence, 2004; Saguy & Gruys, 2010), swine flu (Hilton & Hunt, 2011), mad cow disease (Washer, 2006), sexually transmitted diseases (Davidson & Wallack, 2004), and the dangers of prescription medications (Prosser, 2010).

This body of work has recurrently highlighted that news reports of health and illness are determined and motivated by criteria of newsworthiness, rather than accurate reporting of health threats. Signorielli (1993) terms this 'health hype', the idea that what is newsworthy about health and illness is determined by what will sell. The media may exaggerate and dramatise stories of health and illness in order to create more entertaining content, ignoring stories which lack entertainment value or may conflict with the goals of media advertising. Thus stories of health and illness may not necessarily be truthful or accurate (Shuchman & Wilkes, 1997; Moynihan *et al.*, 2000), since the purpose of the news media is to entertain, rather than provide information about health and illness (Seale, 2003).

The notion of 'health hype' is evident in the types of health issues reported in the news media. Some health conditions are over-represented while other more prevalent issues are under-reported (Kline, 2011). A study of the content of Canadian newspapers, for instance, found that in a five-year sample there were almost as many articles published on variant Creutzfeldt-Jakob disease (mad cow disease) as there were on cardiovascular disease, even though the latter is the leading cause of death in Canada, and just one death was attributed to mad cow disease from 1979 to 2001 (Berry *et al.*, 2007). Evidence suggests that diseases with high mortality rates tend to prompt more news coverage than those with lower mortality rates, even if those non-fatal diseases, such as arthritis, are more prevalent (Adelman & Verbrugge, 2000). Other factors may also influence which diseases are reported on, including advocacy efforts, treatment and screening breakthroughs, and celebrity diagnoses (Slater *et al.*, 2008). By repeatedly focusing on some health topics and deflecting attention away from others, the news media effectively sets the agenda for the public in terms of which issues to be concerned

about (Kline, 2011). For example, demonstrating the influence of over-representation on public attitudes and beliefs, a survey by Covello and Peters (2002) reported that female respondents were more concerned about the risk of breast cancer than any other disease, even though breast cancer, which is overly-reported in the news media, has significantly lower incidence and mortality rates than, say, heart disease or lung cancer.

Moving beyond the health topics discussed in the news media to consider how news stories construct messages about health and illness, scholars have noted that, on the whole, news reports of health and illness tend to minimise societal, political and economic factors relating to disease while establishing and reinforcing the relevance of individual responses (Signorielli, 1993; Lyons, 2000). For instance, Gollust and Lantz (2009), examining articles about diabetes published in American newspapers, noted that behavioural causes of diabetes dominated the discussion. This focus on individual lifestyle factors and how these could both cause diabetes and help manage the condition placed the responsibility for addressing rates of diabetes on the individual, obscuring the importance of the medical system. Similarly, Brown and colleagues (2001) studied news reports of breast cancer in American newspapers and magazines, and identified that almost half of all articles in their sample mentioned ways that individual women could prevent breast cancer through altering lifestyle choices. By framing health conditions in terms of individual responsibility, the news media suggest that individuals are accountable for the cause and treatment of health threats (Kline, 2011).

Health issues are also generally framed in terms of biomedicine in the news media, meaning a focus on disease pathology and pharmacological treatments (Kline, 2011). Within this frame, the voices of medical and scientific experts predominate (Lyons, 2000). Doctors, in particular, are depicted as the voices of authority on medical matters, granted privileged access in the news media to comment on and frame health topics (Lupton, 2012). Medicine is usually presented as the solution to health problems, and preventative strategies are backgrounded or excluded altogether (Clarke & Everest, 2006). Indeed, Signorielli (1993) argues that the biomedical framing of health topics may come at the expense of consideration of preventative medicine.

Furthermore, health communication scholars have identified a number of recurrent linguistic tropes in news reports of health and illness. Gwyn (2001) proposes that the news media conventionally draws on the language of science fiction to report on health stories. The Ebola virus, for example, has been portrayed in terms of an apocalyptic disaster, with doctors

and scientists positioned on the frontlines of the fight against the disease, and vivid and shocking details provided to amplify the horror of the story. News reports of illness will often construct afflicted people either as innocent victims or guilty agents in the cause and transmission of disease (Gwyn, 1999), while doctors and scientists are hailed as heroes (Seale, 2003). The disease itself is frequently conceptualised as an invader of the body (Gwyn, 2001). For instance, media representations of HIV/AIDS recurrently describe the immune system as mounting a defence against invading alien bodies, using the body's defences and medicine to fend off the attack (Lupton, 2012).

Emerging from these tropes is a reliance on metaphor, particularly the military metaphor which depicts illness as war. Metaphor is the linguistic process of talking about one thing in terms of another (Demjen & Semino, 2016). Lakoff and Johnson (1980) famously argued that metaphor structures human thought such that we understand the world around us through a series of conceptual metaphors that link and understand one concept in terms of another, different concept. For example, the conceptual metaphor TIME IS MONEY (written in small capitals as is conventional in metaphor studies) is realised through linguistic expressions which represent the abstract concept of time as the process of saving and spending money, such as 'You're wasting my time' or 'I've invested a lot of time in her'. The prevalent use of metaphors to communicate science and medicine to the lay public is not surprising given that metaphors play an important role in communicating scientific theories and concepts (Boyd, 1993; Cameron, 2002; Aubusson *et al.*, 2006; Botha, 2009). Boyd (1993) distinguished between pedagogical metaphors that explain science to non-experts, and what he called 'theory-constitutive' metaphors that are fundamental to the development of scientific theories. One example of a theory-constitutive metaphor is that of the brain as a sort of computer, which has become so integral to the way we understand the human brain that it is difficult to theorise about the brain without using this metaphor. Metaphors can be used to make sense of complex phenomena for which little vocabulary already exists, such as the metaphor for DNA as a 'code', constructing an abstract concept 'in terms of visible, concrete processes involving objects and human activities' (Semino, 2008, p.142).

In discussions of health and illness, military metaphors have long been used to conceptualise the development and progression of disease within the body, as well as medical, scientific and political responses to illness (Sontag, 1978; Hodgkin, 1985). Phrases such as 'fight against disease' and 'lost the battle' frame medicine as a war against an invading disease, with doctors positioned as army generals taking charge of the battleground that is the patient's

body (Slobod & Fuks, 2012). Cohen (2011) suggests that military metaphors are prevalent in the media because they affirm criteria of newsworthiness by conveying the seriousness and dramatic nature of the issue. Such metaphors arouse fear in media audiences and mobilise individuals to 'fight' against a common enemy (Gwyn, 1999). Military metaphors have been found to be especially prominent in news media reports of cancer (Seale, 2001; Clarke & Everest, 2006; Grant & Hundley, 2008; Williams Camus, 2009), but have also been noted in news reporting of various other health topics such as infectious diseases (Gwyn, 1999; Leask & Chapman, 2002), genetic testing (Petersen, 2001) and pharmaceutical drugs (Coveney *et al.*, 2009).

A second type of metaphor common in news media representations of health and illness is that of the human body as a machine (Lupton, 2012). This metaphor is articulated through expressions that, for instance, render the digestive system as plumbing or the brain as a computer (Fleischman, 2001). A study of metaphors in British news reporting of cancer found that machinery metaphors were the third most common type of metaphor after military metaphors and the personification of cancer (Williams Camus, 2009). Williams Camus argues that machinery metaphors play an explanatory function in simplifying complex scientific processes for a lay audience. Similarly, Petersen (2005) observes that likening the human body to a machine allows the news media to describe bodily functioning in a clear way in news reporting of medical practice. The machinery metaphor reaffirms the biomedical framing of illness and disease, since the broken 'parts' of the human body can be fixed with scientific machinery and technology (Lupton, 2012).

## 2.6 Cultural representations of dementia

### 2.6.1 Dementia in the news media

Despite the keen academic interest in how other illnesses have been depicted in the news media, as explicated above, the topic of dementia has been relatively understudied. Yet the British public receive much of their information about dementia from the news media (Corner & Bond, 2004; Devlin *et al.*, 2007). Interrogating the stories told about dementia in the media can shed light on how dementia is currently conceptualised and understood (Basting, 2009). In turn, it might be possible to challenge stigma and misconceptions to improve the wellbeing of people with dementia and their caregivers (Swinnen & Schweda, 2015). The research that has been conducted into the portrayal of dementia in the news media is of an international scope, examining news items from across Europe, North America and Australia (predominantly higher income countries). This body of work has largely taken a thematic approach, considering

the content of messages about dementia in the news media and investigating a variety of news media data: newspaper articles and images, magazine articles, and television broadcast news. The findings from this research offer a useful contextualisation for the present study.

Several studies have observed that dementia is commonly framed from a biomedical perspective in the news media. A seminal study in the field is that of Kirkman (2006), who examined 15 New Zealand newspapers between 1996 and 2002 for reports that contained the terms 'Alzheimer's' or 'dementia'. A theme of biomedicine was present in some form, whether implicit or explicit, throughout the entire data set, comprising a focus on scientific discoveries and drug treatments, such as in the headline, 'Alzheimer vaccine passes crucial test'. Such language is problematic because it raises expectations and hopes of an imminent cure. Similarly, newspaper articles about dementia in the Australian press most commonly reported on causes, symptoms, treatments and research initiatives (Doyle *et al.*, 2012), while in U.S. television news media, Kang, Gearhart and Bae (2010) found that a focus on treatment was the most common issue in reporting of dementia. Harvey and Brookes (2019) interrogated stock images of dementia popularly found in the news media, and noted that images of brain scans, meaningless to a lay audience with no knowledge of neurobiology, commonly featured. Such images signal scientific authority and facticity, while reducing the person with dementia to their neurobiology.

The distinction between dementia and normal ageing is not necessarily entirely clear in the news media. Kirkman (2006) found that in some cases, newspaper articles about dementia presented the condition as an ordinary part of ageing, as seen in the phrase 'senior moments', suggesting that memory loss (and, implicitly, dementia) is to be expected among the elderly. An illustrative demonstration of this attitude is seen in the sentence, 'We accept dementia among the elderly. But what happens when Alzheimer's disease steals your forties or your fifties?'. The implication of this type of language is that dementia is unsurprising and uninteresting when it affects the elderly and there is only cause for concern when dementia occurs at a younger age. In this way, older people, and specifically older people with dementia, are stigmatised and cast out, shown to have no need for dignity or compassion.

Themes of personal responsibility and preventative behaviours have also been found to be prevalent in news reporting of dementia. Analysing five major Australian newspapers, Lawless and Augoustinos (2017) found articles which claimed to give 'advice' about dementia preventative behaviour. They identified two types of advice giving: conditional formulations

(*if X, then Y*) and direct imperatives. Readers were positioned as responsible for their brain health and as such, people with dementia were implicitly at fault for developing the illness. Likewise, the majority of articles in Mathews and colleagues' (2009) sample of American magazines about cognitive health listed some form of dementia preventative behaviour such as eating healthily, keeping active and refraining from smoking. This discourse was also identified in British national newspapers (Peel, 2014), in which advice, often contradictory, was offered as a means to prevent dementia. For example, Peel quotes two headlines: 'Can a low-fat diet stave off Alzheimer's?' and 'Stick to a high-fat diet to avoid Alzheimer's, say researchers'. This advice appeared paradoxically alongside news coverage which incited panic about the catastrophic 'tsunami' of dementia. Peel labels this a 'panic-blame' framework and highlights its insidious nature; people with dementia are constructed as being at fault for the 'global epidemic' that is dementia.

With the dominance of the biomedical understanding of dementia, and the stereotype of the elderly as cognitively deteriorating, the voices of people with dementia are rarely heard in media representations. Clarke (2006) reviewed articles about Alzheimer's disease from high-circulation Canadian magazines published in 1991, 1996 and 2001, and found a significant absence of the opinions and experiences of people with dementia. That is to say that there were many different voices throughout the articles, including caregivers, family members, medical practitioners or scientists, but never a person with dementia. This suggests that their experiences are irrelevant. In a similar way, Mathews and colleagues (2009) noted that articles about cognitive health published in American magazines most frequently cited universities or research institutions, followed by doctors, while the voices of lay people were rarely heard. Siiner (2017) observed that the Norwegian news media tended to recount individual stories of dementia through the voices and opinions of municipal authorities, such as the police or social services, rather than the individual themselves.

The absence of the experiences of people with dementia means that the predominant depictions of people with dementia focus on loss and deficit. Van Gorp and Vercruysse (2012) argue that positive portrayals of dementia are absent in the news media because the voices of people with dementia are absent. In their sample of Belgian news reports between 2008 and 2010, individuals with dementia were presented as losing their mind and leaving an 'empty shell' of a body, becoming a dependent 'child'. Without the input of people with dementia, Van Gorp and Vercruysse argue that there is nothing to counter these stigmatising portrayals. In the British news media, images of people with dementia recurrently depict loss, victimhood

and suffering (Brookes *et al.*, 2018). Participants in news images generally adopt passive poses, with vacant, pained expressions, and are often supported by a healthy other who is represented as taking care of them. Such images establish an 'us' and 'them' dichotomy, dividing the world into those with dementia and those without (Harvey & Brookes, 2019).

Dementia itself is recurrently conceptualised as an invader (Van Gorp & Vercruysse, 2012; Johnstone, 2013; Brookes *et al.*, 2018). For instance, in the British news media, Brookes and colleagues (2018) note language that frames dementia as a violent predator: 'our biggest killer', 'dementia kills more than heart disease'. One problem with this depiction, the authors argue, is that it backgrounds the possibility that people with dementia could live well. Instead, readers are encouraged to see people with dementia as victims. Clarke (2006), similarly, observes the personification of dementia as a powerful, stealthy and cruel invader in Canadian magazines, which contributes to the sense of fear surrounding the syndrome.

Some researchers have identified positive portrayals of dementia in the news media. Doyle and colleagues (2012) measured changes over time in news reports of dementia in Australian regional newspapers. They praised the news media for a lessening of sensationalism, outdated and offensive terminology, fewer negative stereotypes and many references to appropriate help services. The authors speculate that this improvement in overall quality could be in part a result of advocacy groups' campaigns for increased awareness and sensitivity. Kessler and Schwender (2012) considered images of people with dementia in German magazines. They hypothesised that, given the emphasis on deficit that Kirkman (2006) and Clarke (2006) identified in written media, images accompanying such articles would portray people with dementia as having negative emotions and low cognitive abilities, as well as either being alone or in hospitals or institutions. Conversely, the authors actually observed that four weekly news magazines most frequently presented images in which people with dementia had positive expressions, high cognitive functioning and three quarters were pictured with a social partner. Furthermore, the majority of participants were rated as being over the age of 60, with an equal number between 60 and 80 as over 80. While the authors acknowledge that these images might encourage a positive outlook of dementia and could decrease the taboo of living with the condition, the alternative is that overtly positive images could lead to an underestimation of the challenges of living with dementia, particularly with regards to policy makers who could influence improvements in quality of life. Accordingly, then, the media must balance a thin line in their presentation of images of dementia.

### 2.6.2 Cultural metaphors of dementia

The research described above has predominantly focused on thematic elements of how dementia is discussed in the news media, with relatively little attention paid to linguistic constructions of dementia. A key exception to this, however, is that many researchers have noted the prominent role that metaphor plays in communicating dementia to the lay public, not only in the news media but also literature, film, academic research, charity campaigns and political speeches. Although comprising a broader data set than the present study's exclusive focus on the news media, the insights generated from this body of work illuminate and evaluate some of the more pervasive linguistic strategies for constructing dementia in the cultural sphere.

Zeilig's (2013) overview of some of the metaphors inherent in cultural stories told about dementia uncovers several established metaphors. Dementia is often likened to a natural disaster, particularly relating to water and flooding. For example, Zeilig references the UK Prime Minister, David Cameron, proposing that Britain must change its attitude to the 'rising tide of people suffering with dementia'. Zeilig also finds biblical references within metaphors of dementia as a flood, suggesting that dementia is an overwhelming and ancient force. Another trope Zeilig identifies is that of dementia as an infectious disease, creating anxieties about 'epidemics'. Relating this to the emergence of Alzheimer's disease as a specific disease category, George, Whitehouse and Whitehouse (2016) outline how the language of a disease epidemic likens dementia to a treatable disease such as polio. Such language suggests that a cure for dementia is possible. There is merit to the idea that considering dementia as an infectious disease might offer comfort to family members observing changes in their loved ones, since the condition is framed as something which could be cured in the future, with appropriate scientific advances (George, 2010). Contrarily, however, the word 'epidemic' has become synonymous with death because of the associations with chaos and panic; accordingly, drawing upon the metaphor of dementia as an infectious disease incites fear about 'catching' dementia (Johnstone, 2013), and evokes feelings of enmity and revulsion towards people with the condition (George, 2010).

A condition which can be 'caught' motivates individuals to 'fight' against it; military metaphors abound in cultural representations of dementia (Zeilig, 2013) and have been identified in several different formats. Lane, McLachlan and Philip (2013) observe how Barack Obama declared a 'War on Alzheimer's disease' in 2012, and meanwhile the Alzheimer's Society UK's slogan is 'leading the fight against Alzheimer's disease'. In the field of health

sciences, Lane and colleagues (2013) find titles in medical journals such as 'Developing the framework for the international battle against Alzheimer's disease' and 'Dementia in Lewy body syndromes: A battle between hearts and minds'. As already mentioned earlier in the chapter, Brookes and colleagues (2018) similarly observe that news reports of dementia personify the syndrome as a 'killer' and implore the government to 'battle' and 'fight' dementia.

Curiously, there are many similarities between the way dementia and terrorism are presented as a 'war' (Zeilig, 2013). George and Whitehouse (2014) insightfully compare the political rhetoric around the American-led 'war on terror' and the 'war on Alzheimer's'. They argue that both terrorists and Alzheimer's disease are presented as scourges that can be destroyed, despite public awareness that both 'wars' are being lost. Furthermore, they note that politicians have focused on a single enemy (Saddam Hussein, and the plaques and tangles of the brain that cause Alzheimer's disease, respectively), presenting the 'battles' as such that once those individual enemies have been defeated, the wars will be over. George and Whitehouse (2014) propose that this simplification of the situation is an attempt to reinforce hope and sustain political support.

Johnstone (2013) breaks down the military metaphor into what she terms the *enemy frame* and the *alien invader frame*. Through words such as 'invades', 'strikes' and 'kills' she finds evidence of the metaphor of dementia as an enemy. This is distinct from language which presents dementia as an alien: 'consumes', 'sucks'. Dementia is also presented as a predatory thief, through such language as 'prowls', 'creeps about' and 'robs'. Johnstone argues that these metaphors work so effectively because they build on the fear incited through the epidemic metaphor, presenting dementia as an unstoppable bacterial agent that will always win. These linguistic constructions of dementia emphasise a complete lack of hope.

The emergence of a biomedical understanding of dementia in the 20$^{th}$ century fostered a need for militaristic language to generate political and financial support for dementia research (George *et al.*, 2016). However, military metaphors in the context of dementia have come to be heavily criticised as conceptual understandings of dementia shift from the biomedical paradigm to person-centred care. Military metaphors construct people with dementia as passive and inert victims (Brookes *et al.*, 2018), invoking fear and stigma about the condition (Johnstone, 2013). George, Whitehouse and Whitehouse (2016) argue that military metaphors present a highly misleading account of dementia by depicting a singular 'disease' that can be

fought through research and pharmaceutical treatments. In their opinion, militaristic language like 'halt', 'reverse', 'fight' and 'cure' has prevented a focus on anything other than amyloids, one pathological cause of dementia, and such language promises more than science can deliver.

A related metaphor used to describe dementia is that of dementia as a monster. Aquilina and Hughes (2006) begin their chapter with two quotes, one taken from the 1985 film *The Return of the Living Dead* and the other from a person describing their Alzheimer's disease:

> 'The pain! The pain of being dead!...I can feel myself rotting.'
>
> 'We are like the dead…we drift away from life, no longer fearing to die nor craving and striving for our place in the sun.'
>
> (Aquilina & Hughes, 2006, p. 143)

They find little difference between these two descriptions, arguing that the metaphor of the living dead is deeply embedded in cultural talk about dementia. This poses a moral and ethical challenge. Aquilina and Hughes explore the prevailing theories regarding identity among people with dementia, and identify that to treat people with dementia as though they have lost their 'self' is to consider them 'the living dead' of zombie films. Such an attitude, they argue, ignores the obvious signs of life and personhood in the individual and is, therefore, a deeply objectionable viewpoint. Extending this line of enquiry, Behuniak (2011) searches medical journals for references to zombies in relation to Alzheimer's disease. She draws upon the film *Night of the Living Dead* (Romero, 1968) for characteristics of the cultural idea of zombies: exceptional physical characteristics, lack of self-recognition, failure to recognise others, cannibalisation of living humans, spreading of the plague, resulting horror of the unafflicted, and a sense that death is preferable. Behuniak finds evidence of all of these characteristics in both the titles and works of articles in English language medical journals that discuss people with Alzheimer's disease. Some examples include, 'Alzheimer's is the closest thing to being eaten alive slowly', 'Alzheimer's is catching, often passed from parent to child through faulty genes' and 'Alzheimer's: No cure, no help, no hope'. Inevitably by aligning people with dementia with cultural understandings of zombies, there is a lessening of dignity and respect for people with dementia, instead encouraging fear and disgust.

Metaphors of monsters and zombies point to a cultural perception that dementia leads to a loss of identity (Mitchell *et al.*, 2013). By depicting people with dementia as the living dead, their humanity is called into question, thus contributing to fear and stigma of the

condition (Ballenger, 2006). The importance of providing person-centred care is seemingly mitigated by the attitude that the person is 'no longer there' (Gerritsen *et al.*, 2018). For example, Guendouzi and Muller (2006) interviewed carers of people with dementia and found that carers often described people with dementia as no longer 'present' and thus that there was little point in trying to communicate with people with dementia. The authors argue that this harmful attitude of 'loss of self' arises from and is sustained in cultural stories of dementia. George (2010) proposes that language that promotes a 'change in self' rather than a 'loss of self' would be more appropriate to people with dementia, attending to the remaining humanity of people with dementia. Nonetheless, the enduring belief that dementia leads to a loss of self is deeply embedded in cultural understandings of dementia and reflects societal fears of ageing and death (Herskovits, 1995).

## 2.7 Summary

In this chapter, research relevant to the present study has been presented and discussed, contributing perspectives from a range of academic disciplines, including clinical, psychological, sociological and linguistic fields of inquiry. The evolving and contested concept of dementia is situated within historic and contemporary society, along with a specific focus on British public attitudes towards and knowledge about the syndrome. Stigma associated with dementia emerged as a key concern, highlighted by governments, advocacy organisations and people with dementia as an issue which needs to be tackled in order to create a more inclusive and enabling society.

One way to address stigma is to consider and evaluate the representations of dementia being perpetuated in the mass media. Previous research has highlighted the importance of the news media as a vital source of information about dementia for the British public. Therefore, this study takes the news media as its focus. Accordingly, the chapter reviewed the role of the news media in communicating about health and illness. The news media has a key role to play in shaping and sustaining discourses about health topics, dementia included. A small number of international studies, which investigated the representation of dementia in the news media, were reviewed and their key findings elaborated and discussed, as well as depictions of dementia in other areas of the mass media. This body of work has largely taken a thematic approach to data analysis, with a need for a comprehensive linguistic investigation into the representation of dementia in the news media. The following chapter outlines the methodological approach taken in the present study.

# Chapter 3: Methodology

## 3.1 Introduction

This thesis sets out to interrogate discourses of dementia in the British news media. To undertake this objective, the study considers a collection of news articles published in British national newspapers between 2012 and 2017. This dataset comprises 3022 news articles and totals two million words, necessitating a methodological approach capable of surveying vast amounts of linguistic data whilst paying detailed attention to particular features in context. Accordingly, this study combines the methods of corpus linguistics, a computational quantitative methodology, with the perspectives of Critical Discourse Analysis, a traditionally qualitative approach to language.

This chapter explicates the methodological considerations encountered in the present study. Firstly, the chapter addresses the tools and techniques of corpus linguistics, alongside how such methods have been applied to investigate various health and media contexts. The theoretical framework of Critical Discourse Analysis is then presented as a way of interpreting the data. The applications of this combined methodological approach in other areas of linguistic research are detailed, with an overview of how this combination of methods is utilised in the present study. The data used for the study are then described, including the processes of data collection and readying the data for analysis. Finally, the research questions posed in Chapter 1 will be re-stated.

## 3.2 Corpus linguistics

Corpus linguistics is a computational methodology for quantitatively examining large amounts of linguistic data. There is general consensus among corpus linguists that a corpus comprises 'a collection of (1) *machine-readable* (2) *authentic* texts (including transcripts of spoken data) which is (3) *sampled* to be (4) *representative* of a particular language or language variety' (McEnery *et al.*, 2006, p. 5). This definition emphasises that a corpus has been compiled intentionally and with a purpose, and is more than a random collection of texts. Moreover, McEnery *et al*'s definition notes that modern corpora tend to be made up of electronic texts. Forms of corpora have been in use from as early as the thirteenth century, when scholars manually created a corpus of all of the words in the Bible (McCarthy & O'Keeffe, 2010). Fortunately for those interested in corpus methodologies, the field of corpus linguistics developed alongside the advancement of technologies and availability of computers.

Modern corpora are made up of electronic texts and analysed automatically using computer software (Cheng, 2011).

The electronic nature of a corpus means that large amounts of data can be quantified, organised and compared with other corpora in a way that is fast, accurate and impartial (Baker, 2010). In order to do this, a computer program is required. There are many different options for analysing corpora (see Baker (2010)). Most corpus analysis programs are able to calculate word frequencies, identify recurrent associations between words, and display particular words in their original context, and many programs also allow the researcher to compare more than one corpus, too (see Sections 3.2.1-3.2.5). For the purposes of this thesis, the software WordSmith Tools 5.0 (Scott, 2008) was used. WordSmith Tools is highly versatile, containing all of the staple corpus tools along with various options in the calculation of statistical measures, display options, and other settings that affect the quantitative results generated from the corpus. Furthermore, the user-friendly interface makes the program easy to use, with a detailed manual for troubleshooting (Scott, 2015).

Corpus linguists distinguish between reference corpora, which are designed to be a representative repository of all, or most of, the features of a language (Tognini-Bonelli, 2010), and specialised corpora, which are designed to be representative of language in a very particular setting (Koester, 2010). The Corpus of Contemporary American English (COCA), for instance, is a reference corpus containing 560 million words of spoken and written data collected from 1990 to 2017 (Davies, 2018). A specialised corpus might entail, as an example, a collection of holiday brochures for a single company or a set of parliamentary debates on a specific topic (Baker, 2006). The corpus compiled for this research (described later in Section 3.5) is an example of a specialised corpus.

The size of a corpus depends entirely on the research purpose (Nelson, 2010). Studies investigating rare words or grammatical constructions would require substantially large corpora in order to provide sufficient examples of those uncommon linguistic features (Biber, 1990). Meanwhile, specialised corpora comprising of texts from very particular settings may feasibly be much smaller (Koester, 2010). For instance, if a study aimed to analyse language use in the works of William Shakespeare, then a corpus comprising his complete works would be sufficient. Reppen (2010) explains that the size of a corpus is dependent on two factors: representativeness and practicality. A corpus needs to contain enough texts or words to be a reasonable representation of the language variety under consideration, while conceding to the

time constraints of the research and issues of availability of data. As Nelson (2010, p. 60) observes, 'Any attempt at corpus creation is therefore a compromise between the hoped for and the achievable'.

Early electronic corpora were compiled and used to describe grammatical patterns and linguistic features in natural language, as well as to create language learner dictionaries such as the Collins *COBUILD English Language Dictionary* (1987) (Biber & Reppen, 2015). Nowadays, corpora are used to explore language patterns across a huge variety of genres and registers. In the context of health communication research, with which this thesis aligns, corpus methodologies began to be utilised from the early 1990s to supplement more traditional qualitative analysis (Adolphs *et al.*, 2004). Skelton and Hobbs (1999) were among the first researchers to employ corpus tools within the field of healthcare. Using a corpus of 373 transcribed consultations between general practitioners and their patients, Skelton and Hobbs illuminated how a frequency analysis of certain words and phrases can be complemented by a consideration of the language context in order to generate a fuller understanding of the communication. Adolphs and colleagues (2004) extended the scope of corpus linguistics in healthcare settings by comparing their corpus of phone calls made to NHS Direct with a much larger reference corpus, to identify the words and phrases that were distinctive to the NHS Direct calls. From this list of unique words, the authors isolated a number of linguistic features that functioned as politeness strategies between the call handler and patient, and analysed these in their original context. It is important to note the combination of quantitative and qualitative methods in both these studies; corpus tools are not ends in themselves but rather point the way for an explanation of how certain linguistic features function in contexts (Atkins & Harvey, 2010).

Corpus tools offer insights into quantitative language patterns, measuring the data using a variety of statistical techniques. The measures relevant to the present thesis will be explicated in detail below, with reference to how other researchers have used these methods in studies of health communication.

### 3.2.1 Frequency

One of the most basic and staple corpus tools is a calculation of the frequency of all the words in the corpus. The computer searches every word in the corpus to establish each unique word and how many times it occurs (Evison, 2010). Figure 3.1 is a screenshot of the output when calculating word frequencies using Wordsmith Tools in the Dementia News Corpus. Words

are listed in order of frequency, with figures also given for the percentage each word features in the total corpus and the number of texts the word occurs in. Frequency is an important measure because language is not random; words are related to other words in ways that are remarkably predictable (Baker, 2006). Typically, the most frequent words in a corpus will be function words (*the, and, is* and so on), with lexical words appearing further down the frequency list (Cheng, 2011). A frequency analysis of both function and lexical words can reveal interesting discourse patterns within a corpus. This is evidenced, for instance, in Harvey's (2013) study of word frequencies in a corpus of emails to an adolescent health website. Function words, such as personal pronouns, reflect the interactive style of email communication, as well as indexing a hypothetical second party. For example, 'Can you get an abortion without seeing a doctor'. Harvey argues that such a use of personal pronouns allows the adolescent writers to distance themselves from their concerns by transferring them onto another, unnamed party. Meanwhile, in the top 50 highest frequency words, the lexical items 'sex' and 'penis' signal a central concern in the corpus for issues of sexual health. As Harvey points out, however, raw frequency information is an impractical way of measuring thematic concerns since the entire word frequency list would have to be analysed for context-specific lexical items, and moreover a word frequency list gives no indication of how the frequency of words relates to general language. Accordingly, many researchers calculate word frequencies as a starting point for more complex statistical measures, which will be explicated below.

*Figure 3.1: Screenshot of Dementia News Corpus word frequency list, using Wordsmith Tools*

| N | Word | Freq. | % | Texts | % |
|---|---|---|---|---|---|
| 1 | THE | 126,562 | 4.96 | 3,020 | 99.93 |
| 2 | TO | 73,334 | 2.88 | 3,020 | 99.93 |
| 3 | OF | 69,440 | 2.72 | 3,020 | 99.93 |
| 4 | AND | 64,176 | 2.52 | 3,020 | 99.93 |
| 5 | A | 59,728 | 2.34 | 3,020 | 99.93 |
| 6 | IN | 50,509 | 1.98 | 3,020 | 99.93 |
| 7 | THAT | 29,019 | 1.14 | 2,996 | 99.14 |
| 8 | IS | 27,725 | 1.09 | 2,967 | 98.18 |
| 9 | FOR | 24,472 | 0.96 | 2,991 | 98.97 |
| 10 | WITH | 23,578 | 0.92 | 2,982 | 98.68 |

### 3.2.2 Keywords

Keywords are words which appear significantly more frequently in a corpus than would be expected, given their comparative frequency in a reference corpus (Stubbs, 2010). They are considered the 'aboutness' of a text or collection of texts (Scott & Tribble, 2006). Keywords

can point to elements in the corpus which could be fruitful for further investigation (Bondi, 2010), making the procedure a useful starting point for the exploration of a corpus (Evison, 2010). The keyness procedure involves three stages (Rayson, 2013). First, the frequencies of all the words in one corpus are generated, followed by all the words in another (usually much larger) reference corpus. Then the two frequency lists are compared using a formula to judge the statistical difference between the two – normally either chi-squared or log-likelihood. Lastly, the words in the original corpus are sorted in order of their keyness. A screenshot of the output of the keyword procedure is given in Figure 3.2, where it can be seen that a frequency and percentage is given for each word in both the Dementia News Corpus and the reference corpus, in this case the British National Corpus, a reference corpus of general British English. A keyness score indicates the statistical difference between the frequencies, along with a significance value demonstrating the possibility that this difference is due to more than simply chance.

*Figure 3.2: Screenshot of Dementia News Corpus keyword list, using Wordsmith Tools*

| N | Key word | Freq. | % | Texts | RC. Freq. | RC. % | Keyness | P |
|---|---|---|---|---|---|---|---|---|
| 1 | DEMENTIA | 21,884 | 0.86 | 0 | 660 | | 149,460.55 | 0.0000000000 |
| 2 | ALZHEIMER'S | 13,739 | 0.54 | 0 | 0 | | 97,508.63 | 0.0000000000 |
| 3 | DISEASE | 9,367 | 0.37 | 0 | 8,642 | 0.01 | 42,031.38 | 0.0000000000 |
| 4 | BRAIN | 7,704 | 0.30 | 0 | 4,540 | | 38,777.30 | 0.0000000000 |
| 5 | IT'S | 3,749 | 0.15 | 0 | 0 | | 26,593.16 | 0.0000000000 |
| 6 | CARE | 6,589 | 0.26 | 0 | 22,907 | 0.03 | 16,748.81 | 0.0000000000 |
| 7 | MEMORY | 4,258 | 0.17 | 0 | 7,036 | | 15,649.24 | 0.0000000000 |
| 8 | PEOPLE | 12,015 | 0.47 | 0 | 98,589 | 0.11 | 14,995.24 | 0.0000000000 |
| 9 | RESEARCH | 6,159 | 0.24 | 0 | 25,766 | 0.03 | 13,884.59 | 0.0000000000 |
| 10 | DON'T | 1,869 | 0.07 | 0 | 0 | | 13,256.23 | 0.0000000000 |

In a relatively early application of corpus tools to the field of health communication, Adolphs and colleagues (2004) analysed the keywords generated when comparing a corpus of calls to NHS Direct with the CANCODE reference corpus. The resulting list of keywords isolated language patterns that were specific to the NHS Direct corpus, and thus prompted the researchers to consider some of these specific items in close contextual detail. The authors demonstrate that utilising the keyword procedure in this way offers a more systematic point of entry into the data, since the analysis is driven by the most salient features rather than the researcher's intuition. In the context of the news media, the keyword procedure has been found to be a vital tool in honing in on statistically significant language items which may represent recurrent attitudes or beliefs (O'Halloran, 2010). For instance, O'Halloran generated the keywords in a corpus of articles published in *The Sun* about the expansion of the European

Union (EU) in 2004 compared with a four-million-word reference corpus of general British English. Words with high keyness scores referred to UK politicians and to immigration, suggesting that the EU's expansion was linked repeatedly with the idea of imminent immigration from the new, predominantly Eastern European countries. Through a qualitative exploration of a select number of keywords in their original context, O'Halloran found that *The Sun* repeatedly framed Eastern European migration to the UK as an overwhelmingly negative future outcome. As with Adolphs *et al.*'s (2004) work, the quantitative keyword procedure guided O'Halloran's qualitative analysis.

There are several elements of the keyword procedure that the researcher must consider in order to generate a list of keywords that are relevant to the research aims. To identify words which occur significantly more frequently in one's specialised corpus compared with 'normal' language, the reference corpus needs to be considered representative of general language use (Baker, 2006). Scott (2017), the creator of the corpus software WordSmith Tools, emphasises the importance of choosing a reference corpus in a principled way, so that the keyword procedure will identify the differences in the two corpora that are of interest to the researcher. He writes, 'compare apples with pears, or, better still, Coxes with Granny Smiths', rather than comparing apples with a mixture of other objects such as cars or phone boxes. In this way, the researcher will be able to see the individual characteristics of their specialised corpus rather than the more general qualities that mark it as different from the reference corpus.

Having said that, evidence has been put forward which shows that the keyword procedure is reliable even when implausible reference corpora are selected. Scott (2006) and Scott and Tribble (2006) both compared their specialised corpora with deliberately strange reference corpora (e.g. a book profile on leaders of commerce compared with Shakespeare's plays), as well as with the British National Corpus. Both studies found a core list of plausible keywords which indicated the 'aboutness' of the target corpus, despite the seeming incongruity of the reference corpora. Likewise, McEnery (2009) generated a list of keywords by comparing his specialised corpus with both the LOB corpus of British English (with data collected in 1961) and the FLOB corpus of British English (with data collected in 1991). The keyword lists were largely the same, so he concluded that the difference in time periods did not have an impact on the results. Regarding the size of the reference corpus, Scott (2006) tested reference corpora of different sizes and found no clear or obvious threshold for the reference corpus. In all cases, the procedure for identifying keywords in a corpus seems robust, even if the reference corpus is not a perfect match.

Bearing these investigations in mind, the present thesis uses the British National Corpus (BNC) as its reference corpus. The BNC is a collection of 100 million words of written (90%) and spoken (10%) British English from the 1990s, with data from a variety of sources such as regional and national newspapers, journals, fiction and essays, as well as transcriptions of informal conversations, government meetings, phone-ins, and other types of spoken conversation. There is, of course, a discrepancy in the time period within which the BNC was collected in comparison with the corpus in the present thesis. However, as the discussion above regarding the use of implausible reference corpora shows, the keyword procedure produces reliable results regardless of discrepancies in corpora. The size and representativeness of the BNC, in addition to its accessibility as a freely available online tool, has yet to be replicated or matched in more up-to-date corpora of British English (at the time of writing, the BNC was in the process of being updated). So, although there are other types of reference corpora that are representative of language use in the 2010s, or language use online, the BNC remained the most appropriate choice given its availability and scope. In order to limit the discrepancies between the Dementia News Corpus and the reference corpus, the Dementia News Corpus, which consisted only of written data, was compared with only the written section of the BNC (90 million words).

With regards to the statistical measure used to determine keyness, this study uses log-likelihood. Log-likelihood is a measure of statistical significance – that is, it compares what is expected to happen versus what actually happens, and computes a *p*-value (which represents significance) to determine how likely it is that what actually happened was down to chance (Dunning, 1993). The lower the *p*-value, the more likely it is that the occurrence is more than pure chance. In calculating keywords, the log-likelihood procedure evaluates the expected frequency of a word in two corpora, and compares this with the actual frequency observed in the corpora (Rayson, 2002). Log-likelihood is one of the more widely available measures in corpus software to calculate keywords, and as such as been extensively used in applied linguistics research (Rayson *et al.*, 2004; Pojanapunya & Watson Todd, 2018). Given its availability in WordSmith Tools 5.0, this metric was used in the present thesis to identify keywords.

However, it must be acknowledged that recent approaches call for the incorporation of an effect size measure into keyword analysis (Gabrielatos, 2018; Pojanapunya & Watson Todd, 2018). Where log-likelihood focuses on whether there is a difference in the relative frequency of a word, effect size establishes how large that difference is, and as such the measure of

keyness could be enhanced by utilising both a metric of statistical significance (like log-likelihood) and effect size (Gabrielatos, 2018). As effect size metrics have only recently been incorporated into corpus software, and were not available in WordSmith Tools 5.0, keyness has been calculated in the present study using only the statistical significance metric of log-likelihood. Using only this measure has still been shown to produce plausible keywords that indicate the 'aboutness' of a corpus (Pojanapunya & Watson Todd, 2018), but with the limitation that the measure of log-likelihood does not indicate the magnitude of the frequency difference.

The keywords generated using the procedure outlined above illuminated numerous options for exploring the corpora in more detail, revealing the most salient themes and concerns (see Chapter 4). The strongest keywords tended to have very high frequencies throughout the corpus, meaning there were hundreds of occurrences of those keywords. To assist in refining the analysis, another staple corpus technique, that of collocation, was utilised to further pinpoint the most prominent language patterns surrounding some of the keywords.

### 3.2.3 Collocates

A collocate is a word that frequently co-occurs with another word, in a way that is statistically significant (Baker, 2006). In corpus linguistics, the measure of collocation assesses the strength of the relationship between two words and assigns a significance value to this relationship (Rayson, 2015). This makes it possible for the researcher to see the grammatical and semantic patterns that frequently surround the search word, highlighting language usage that would be hard to pinpoint via intuition alone (Xiao, 2015). Collocation can be a useful tool for the researcher when a particular search word has multiple occurrences throughout the corpus; the collocation measure focuses the analysis on the most salient linguistic patterns, which can then be explored in more detail to identify meanings and discourses (Baker, 2006).

An example of collocation at work in a healthcare setting elucidates how this approach helps to refine corpus analysis. In a corpus-based analysis of the language used on an online anorexia forum, Hunt (2013) began with a keyword analysis which established that the most frequently used label for anorexia was *ED* (eating disorder). A subsequent examination of the collocates surrounding the term *ED* indicated a preferential use of the form *the ED*, with *the* being the strongest collocate of *ED*. Hunt argues that the phrase *the ED* indicates a separation between the individual and the illness, such that anorexia is objectified as a discrete entity that neither belongs to nor defines the individual's identity. This observation is in comparison to

the collocate *my* (as in, *my ED*), which is much less frequent and occurs when forum users express distance from anorexia, for instance because they are in recovery. Establishing a collocational profile, as demonstrated by Hunt, sheds light on recurrent uses of particular keywords or phrases.

Collocation can be measured in a variety of ways, and each different measurement and statistic impacts the resulting list of collocates. The simplest option would be to determine collocation purely by frequency: which words appear most frequently alongside or in the vicinity of the search word. The problem with this measure is that these high frequency words are usually function words such as *the*, which may not always be of particular interest to the researcher (Baker, 2006). In this thesis, the measure of log-likelihood is used. When calculating collocation, log-likelihood gives significance to both common and rare linguistic items, thus generating a mix of both function and lexical collocates (Xiao, 2015). This is in comparison with other statistical measures such as Mutual Information or the *z*-score, which tend to prioritise low frequency lexical words over function words (Baker, 2006). The log-likelihood measure, then, offers the possibility to examine the grammatical components of the node word as well as lexical words which might point to patterns of meaning and potential discourses.

Corpus software allows the researcher to alter the span within which collocates are searched, such that one can look at words within, say, a three-word span to both the left and right of the search word, or a ten-word span. Obviously varying the span affects both the collocates generated and their significance levels (Rayson, 2015). Baker (2006) cautions that there is a danger of adjusting the word span and the statistic when calculating collocation in order to find the most interesting results, or the results that prove a preconceived theory. In the present research, a span of five words to both the left and right of the search word was fixed, with the rationale that this allowed for the identification of both immediately close collocates (such as 'dementia sufferer') and collocates slightly further apart (such as 'patient living with dementia'), without the risk of identifying words as collocations that were semantically unrelated or irrelevant. The resulting list of collocates were sorted in order of collocational strength (that is, in order of log-likelihood). An example of the collocation output from Wordsmith Tools is provided in Figure 3.3, below, where collocates of the word 'hospital' in the Dementia News Corpus are listed in order of log-likelihood, along with a breakdown of frequencies in different positions within the search span. For instance, the collocate 'admitted' occurs most frequently (n=95) two places to the left of 'hospital', and does not occur at all one place to the left or right of the search word.

*Figure 3.3: Screenshot of collocation of 'hospital' in Dementia News Corpus, using Wordsmith Tools*

| N | Word | With | Relation | Set | Texts | Total | Total Left | Total Right | L5 | L4 | L3 | L2 | L1 | Centre | R1 | R2 | R3 | R4 | R5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HOSPITAL | hospital | 33,298.477 | | 703 | 1,959 | 9 | 9 | 3 | 4 | 1 | 1 | | 1,941 | | 1 | 1 | 4 | 3 |
| 2 | IN | hospital | 6,971.301 | | 422 | 798 | 508 | 290 | 32 | 41 | 35 | 78 | 322 | | 186 | 30 | 18 | 26 | 30 |
| 3 | TO | hospital | 5,406.107 | | 351 | 772 | 579 | 193 | 45 | 67 | 111 | 87 | 269 | | 45 | 30 | 32 | 39 | 47 |
| 4 | THE | hospital | 5,022.753 | | 346 | 728 | 481 | 247 | 57 | 46 | 76 | 55 | 247 | | 12 | 66 | 50 | 53 | 66 |
| 5 | A | hospital | 3,827.817 | | 297 | 508 | 278 | 230 | 49 | 40 | 50 | 51 | 88 | | 15 | 79 | 54 | 37 | 45 |
| 6 | AT | hospital | 3,194.780 | | 220 | 348 | 298 | 50 | 17 | 48 | 126 | 99 | 8 | | 16 | 8 | 12 | 7 | 7 |
| 7 | AND | hospital | 2,653.560 | | 286 | 438 | 164 | 274 | 44 | 41 | 48 | 22 | 9 | | 98 | 40 | 46 | 47 | 43 |
| 8 | WAS | hospital | 2,580.954 | | 194 | 323 | 220 | 103 | 54 | 48 | 96 | 22 | | | 17 | 21 | 30 | 13 | 22 |
| 9 | ADMITTED | hospital | 2,272.657 | | 102 | 127 | 122 | 5 | 4 | 13 | 10 | 95 | | | | 1 | 2 | | 2 |
| 10 | OF | hospital | 2,034.645 | | 229 | 334 | 230 | 104 | 28 | 47 | 49 | 46 | 60 | | 9 | 14 | 9 | 41 | 31 |
| 11 | DEMENTIA | hospital | 1,181.287 | | 97 | 156 | 91 | 65 | 42 | 19 | 15 | 14 | 1 | | 3 | 10 | 14 | 16 | 22 |
| 12 | FROM | hospital | 1,161.185 | | 121 | 156 | 118 | 38 | 6 | 7 | 25 | 21 | 59 | | 4 | 15 | 4 | 8 | 7 |
| 13 | HE | hospital | 1,130.315 | | 109 | 153 | 72 | 81 | 22 | 30 | 20 | | | | 13 | 38 | 11 | 15 | 4 |
| 14 | LONDON | hospital | 1,029.240 | | 50 | 58 | 10 | 48 | 1 | 5 | | | 4 | | 6 | 21 | 13 | 3 | 5 |

### 3.2.4 Clusters

Another corpus technique which can be useful in homing in on multiple occurrences of a particular word is to look at the most frequent clusters surrounding that word. Clusters, also known as n-grams, lexical bundles and chunks, are sequences of three or more words that tend to co-occur (Biber & Conrad, 1999). In other words, they are extended collocations, although they tend to be more fixed in language, and are contiguous (as in, a set phrase rather than two words that appear in the vicinity of one another, as some collocates can be) (Greaves & Warren, 2010). Both spoken and written language is made up of these phrases, such as ‘you know’ or ‘a lot of’. Analysing clusters can reveal interesting patterns in terms of language structure, register and genre-specificity (Cheng, 2011).

Corpus software finds clusters based on frequency. In Wordsmith Tools, clusters are computed automatically when the user searches for a specific word using the concordancing tool (see below) (Scott, 2015). The user can vary the particular settings including the length of the clusters, minimum frequency, and the word span to the left and right of the search word. In this thesis, clusters are identified that have a minimum frequency of 5, and occur within 5 words to the left and 5 words to the right of the search word. Setting a minimum frequency means that only clusters that occurred multiple times would be generated, and the 10 word span adds a level of assurance that the clusters generated will be in some way related to the search word. An example is provided in Figure 3.4, showing three-word clusters associated with the search word ‘care’ in the Dementia News Corpus and their respective frequencies.

*Figure 3.4: Screenshot of 3-word clusters associated with 'care' in Dementia News Corpus, using WordSmith Tools*

| N | Cluster | Freq. | Set | Length |
|---|---|---|---|---|
| 1 | A CARE HOME | 386 | | 3 |
| 2 | THE CARE HOME | 280 | | 3 |
| 3 | AND SOCIAL CARE | 201 | | 3 |
| 4 | CARE HOME IN | 186 | | 3 |
| 5 | TO CARE FOR | 177 | | 3 |
| 6 | IN A CARE | 177 | | 3 |
| 7 | IN A CARE HOME | 174 | | 4 |
| 8 | HEALTH AND SOCIAL CARE | 161 | | 4 |
| 9 | HEALTH AND SOCIAL | 161 | | 3 |
| 10 | CARE QUALITY COMMISSION | 125 | | 3 |
| 11 | THE CARE QUALITY | 116 | | 3 |
| 12 | IN CARE HOMES | 110 | | 3 |
| 13 | THE CARE QUALITY COMMISSION | 107 | | 4 |
| 14 | CARE HOMES AND | 94 | | 3 |
| 15 | CARE AND SUPPORT | 89 | | 3 |

### 3.2.5 Concordances

The final corpus technique under consideration is that of concordancing. The concordance tool is central to all corpus linguistic analysis, displaying all examples of the search word or phrase with some context either side (Rayson, 2015). The value of concordancing is that a large number of examples are brought together in one place, allowing the researcher to see the linguistic feature in its original context (Evison, 2010). Concordances in WordSmith Tools are presented in the format known as Key Word In Context (KWIC), whereby the search word is highlighted in the centre, and a set amount of context is shown either side (Tribble, 2010). Figure 3.5 gives an example of the KWIC display for the search word *research* in the Dementia News Corpus. Concordance lines can be sorted by the context on the left or the right of the search word, in ascending or descending order, and sorting the concordance lines using different criteria assists the researcher in spotting patterns within the data (Hunston, 2010). Using different and multiple sorts can offer fresh insights, making subtle patterns and repetitions more visible (Baker, 2006).

*Figure 3.5: Screenshot of an example KWIC display, for the search word* ‘research*’ in the Dementia News Corpus*

| N | Concordance | Set | Tag | Word # | Sent. Sent | Sent. Pos. | Para. Para | Para. Pos. | Sect. Pos. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | in the Cardiovascular Epidemiology Research Unit at Beth Israel | | | 273 | 9 | 28% | 0 | 47% | 47% |
| 2 | , of the Cardiovascular Epidemiology Research Unit at Beth Israel | | | 381 | 15 | 25% | 0 | 77% | 77% |
| 3 | extent." Dr Koss added: "The entire research community is in agreement | | | 456 | 15 | 13% | 0 | 67% | 67% |
| 4 | . Scottish scientists have led EU research into dementia Experts from | | | 29 | 1 | 19% | 0 | 5% | 5% |
| 5 | Scots scientists lead EU research into dementia SCOTTISH | | | 6 | 0 | 23% | 0 | 1% | 1% |
| 6 | , of the Cardiovascular Epidemiology Research Unit at Beth Israel | | | 445 | 15 | 25% | 0 | 80% | 80% |
| 7 | and so far there hasn't been enough research to say whether living in cities | | | 423 | 15 | 52% | 0 | 81% | 81% |
| 8 | and so far there hasn't been enough research to say whether living in cities | | | 851 | 32 | 52% | 0 | 92% | 92% |
| 9 | Initiative, which aims to encourage research into male-female differences | | | 690 | 30 | 89% | 0 | 54% | 54% |
| 10 | not just your heart." There's not enough research yet to know exactly the right | | | 385 | 14 | 15% | 0 | 18% | 18% |

Concordance analysis is the most qualitative part of corpus linguistics, relying on the analyst to recognise linguistic patterns and explain their meanings and functions. Baker (2006) explains that concordance analysis illuminates semantic preference, the idea that a word-form may appear with semantically related other words. In Baker's analysis, for example, the word *refugee* in the UK press appears alongside words relating to criminal behaviour: *arrested, jailed, petty crime*. Where collocation considers individual words, concordance analysis can highlight semantically related words that, taken together, contribute to a discourse, such as that of refugees as criminals. There is no objectively correct way to organise and analyse concordance lines, so the researcher must decide which features to focus on based on their own research interests (Hunston, 2010). Sinclair (1989) proposes selecting 30 concordance lines at random and searching for patterns, then moving on to another random 30 lines and so on, until no new patterns are identified. Alternatively, considering the collocates of the search term will also refine the number of concordance lines generated (Baker, 2006). Combining these two approaches, in the present study the measure of collocation was used to identify statistically significant language patterns within concordance lines. Then all concordance lines containing this collocation were searched to identify patterns, until no new patterns emerged. Recurrent linguistic patterns, as identified through concordance analysis, were then scrutinised using the analytical perspectives of Critical Discourse Analysis, which will be explicated in Section 3.3.

### 3.2.6 Metaphor and corpus linguistics

One aspect of the analysis which requires further elaboration is the identification of metaphor, since this is not a straightforward process in corpus-assisted research (Stefanowitsch, 2007) yet is one that can offer a more representative picture of the use of metaphor than studying individual texts in isolation (Koller, 2007). Although the thesis is not explicitly concerned with metaphor, figurative discourse is a common feature of newspaper and popular discourse about dementia (see Section 2.6.1). Hence, it is important to consider the possible ways in which metaphor manifests itself in large quantities of text.

As introduced in the previous chapter, a metaphor involves talking about one concept or thing in terms of another (Demjen & Semino, 2016). For instance, the metaphor ARGUMENT IS WAR, realised through expressions such as 'He *shot down* all of my arguments' or 'Your claims are *indefensible*', helps us to understand the concept of argument in terms of an entirely different concept, war, such that an argument entails opponents, attacking and defending, winning and losing (Lakoff & Johnson, 1980). In corpus linguistics research, the researcher faces the difficult task of detecting metaphor without reading the entire corpus and noting every instance of metaphorical expression (Stefanowitsch, 2007).

One solution is to read a sample of the corpus, extract metaphoric expressions manually from the sample, and then search the entire corpus for those expressions (Charteris-Black, 2004). Alternatively, the researcher could utilise the measure of collocation, assuming that collocates with semantic distance or incongruence are likely to signal metaphoric usage (Sardinha, 2006). Sardinha (2007), for instance, identified metaphors in a corpus of academic dissertations using collocation analysis. Taking the most frequent lexical keywords in the corpus, he then identified frequent collocations of each keyword and used a computer program to measure the degree of semantic similarity or distance between the collocates, hypothesising that collocations involving semantic distance would indicate the presence of metaphors. Although this procedure did identify non-metaphorical expressions too, it was on the whole a useful way of locating metaphors in large corpora.

In the present study, metaphor identification followed a similar approach to Sardinha (2007). In addition to manually identifying metaphors in concordance lines, on several occasions, collocation lists featured words with a high degree of semantic incongruence to the search word. For example, the keyword *memories* collocated with the word 'robbing', which intuitively seems to originate from a different semantic field. All instances of this collocation were studied in their original context to determine if this usage was indeed metaphorical. Having thus identified a potential metaphor, all concordance lines for the original keyword (in this case *memories*) were scanned for words semantically related to the collocate to identify variations of the metaphor. This resulted in the identification of phrases such as 'dementia steals memories', part of a broader metaphor which could then be intuitively labelled as 'LOST MEMORIES ARE STOLEN OBJECTS'. This process provided a somewhat systematic and replicable way of identifying pervasive metaphors in the corpus, although with limitations that will be acknowledged later in Chapter 9.

Metaphors were judged as such broadly following the Metaphor Identification Procedure described by the Pragglejaz Group (2007). This procedure consists of determining the contextual meaning of a lexical unit, then identifying if the lexical unit has a more basic, physical or concrete meaning than the one given. If the contextual meaning contrasts with the basic meaning, but can be understood in comparison with it, then the lexical unit is identified as metaphorical. As an example, the word 'battle' in the phrase 'dying after a battle with cancer' (Demmen *et al*., 2015) has a contextual meaning of a struggle for the patient to survive the effects of cancer, but a literal meaning of a physical fight between two opponents. The discrepancy in meaning here points to the word 'battle' being used metaphorically to describe the experience of dying with cancer. This approach to identifying metaphor has been widely applied in studies of the news media (see, for example, Caillaud *et al.*, 2012; Abid *et al.*, 2017; Atanasova & Koteyko, 2017; Taylor 2018) and is thus utilised in the present study.

## 3.3 Critical Discourse Analysis

As the previous section has explored, whilst the tools of corpus linguistics provide the researcher with a description of text, and of those language items which are significant in some way, this does not amount to an understanding of how those items are used in context to produce meaning (Widdowson, 2000). Therefore a qualitative analytical approach is required to interrogate how these linguistic features are being used in the texts. Critical Discourse Analysis (CDA) describes a collection of approaches that strive to understand the relationships between meaning and social practices (Fairclough, 2001), with a particular focus on language and power (Wodak, 2001). In the present study, the methods of corpus linguistics were combined with the analytical perspectives of CDA to investigate news media representations of dementia.

### 3.3.1 Discourse and ideology

Before considering CDA in any further detail, it is important to establish a definition of 'discourse'. The term 'discourse' has no singular definition, and is used in a number of contexts to mean a variety of things. Stubbs (1983, p. 1) claims that discourse is 'language above the sentence or above the clause'. Based on this definition, we could talk of the discourse of certain texts, such as a recipe, which begins with a list of ingredients followed by instructions (Baker, 2006). We may also talk of discourse as types of language, such as political discourses or media discourses (Fairclough, 2003). But language is a means of representing reality, and language in use reflects ways of describing and making sense of social practices and structures (Angermuller *et al.*, 2014). Thus we can also define discourse according to Foucault (1969, p.

54): ‘not… as groups of signs (signifying elements referring to contents or representations) but as practices that systematically form the objects of which they speak’. In other words, discourse is ‘a set of meanings, metaphors, representations, images, stories, statements and so on that in some way together produce a particular version of events’ (Burr, 2015, pp. 74-5). The study of discourse according to this perspective, which is adopted in the present study, incorporates an analysis of instances of language in context – words, phrases, parts of texts – into the broader picture of the ways that aspects of the world are construed and shaped through language (Gee, 2014).

Discourses can be plural because any object, concept or event can be constructed in multiple ways depending on a range of factors (Baker, 2006). As Fairclough (2003, p. 124) writes, discourses ‘constitute part of the resources which people deploy in relating to one another – keeping separate from one another, cooperating, competing, dominating – and in seeking to change the ways in which they relate to one another’. An example from Burr’s (2015) work illuminates how discourses can be drawn upon by speakers and writers to create different meanings and interpretations. Examining the discourse of fox-hunting in the UK, Burr notes that a powerful discourse used by people who are pro fox-hunting is ‘fox-hunting as pest control’, whereby fox-hunting is presented as a natural way of keeping the fox population at a manageable level. A radically different discourse is that of ‘fox-hunting as the contravention of basic morality’, which focuses on the rights of animals and the cruelty of the hunt. Both discourses represent the same idea or concept, but emphasise certain aspects of fox-hunting while concealing or downplaying others. As Burr highlights, the words or sentences themselves do not convey any particular discourse, until they are seen in their discursive context, considering who produced and received the discourse, and what the intended outcome was.

The act of identifying and naming discourses is an interpretive one, requiring the discourse analyst to pay close attention to linguistic details in a text and, from there, determine how those details might constitute a discourse (Sunderland, 2004). Fairclough (2003) outlines that discourses can be signalled through lexical choices such as vocabulary, metaphor, and semantic relations between words, as well as grammatical choices that represent social actors and actions with different levels of agency and power. When a linguistic feature or a collection of linguistic features represent the world in a particular way, and are repeated, shared by groups of people, and are relatively stable over time, then this would indicate the presence of a discourse (Fairclough, 2003). Yet Baker (2006) points out that discourses can be difficult to describe or identify because they are constantly evolving. Where one person identifies a

discourse, someone else might see a different discourse, or no discourse at all. As Sunderland (2004, p. 46) observes, there is no 'dictionary of discourses'. The individual researcher must determine for themselves what labels to give a particular discourse, as in the examples of the fox-hunting discourses described above by Burr (2015). Sunderland (2004) describes how discourses might be given fairly generic names, such as 'promotional discourse' or 'consumerist discourse', or might be more specific and descriptive, such as 'battle of the sexes discourse' or 'the wedding is the best day of a woman's life discourse'.

Discourses are underpinned by ideologies (Flowerdew & Richardson, 2018). Like discourse, 'ideology' is conceptually elusive, variously used synonymously or in opposition to 'discourse' (Purvis & Hunt, 1993). Within discourse studies, ideologies can be understood as 'shared beliefs about [a social group's] fundamental conditions and ways of existence and reproduction' (van Dijk, 2006, p. 116), or more simply 'the sets of beliefs and values belonging to particular social groups' (Flowerdew & Richardson, 2018, p. 23). Ideologies control and organise socially shared beliefs; for example, a racist ideology within a social group influences and controls attitudes towards immigration within that group. Ideologies are acquired, expressed and reproduced through discourse (Wodak, 2001; van Dijk, 2006; Flowerdew & Richardson, 2018). So where ideology is the overarching set of social beliefs about the world, discourse is the realisation of those beliefs in communicative practices (Purvis & Hunt, 1993).

### 3.3.2 Critically analysing discourse

One way of approaching the analysis of discourse is to undertake what has come to be known as Critical Discourse Analysis (CDA). CDA 'aims to investigate critically social inequality as it is expressed, constituted, legitimized [*sic*], and so on, by language use' (Weiss & Wodak, 2003, p. 15). To put it another way, CDA sets out to 'uncover hidden features of language use and debunk their claims to authority. It aims to make the implicit explicit in language use' (Flowerdew & Richardson, 2018, p. 21). Since the approaches that make up CDA were formalised in the early 1990s, the perspectives of CDA have been applied to a range of texts that cover institutional, political, gender and media discourses (Wodak, 2001). In more recent years, some researchers have adopted the phrase 'Critical Discourse Studies' (CDS) to reflect the fact that CDA is not exclusively a matter of analysis, but also covers developments in philosophy, theory, methodology and practice (Flowerdew & Richardson, 2018). Among the numerous approaches that make up the discipline of CDA, this thesis understands CDA primarily as articulated by Fairclough: 'CDA combines a critique of discourse and explanation

of how it figures within and contributes to the existing social reality, as a basis for action to change that existing reality in particular respects' (Fairclough, 2015, p. 6).

If discourse is a form and reflection of social practice, then at the heart of all CDA research is the social context within which the texts are operating (Wodak, 2001). CDA researchers consider the social, historical, political and cultural context of the texts to understand how the text functions in relation to wider society. This could be through an analysis of the processes through which the discourse was produced and received (who made it; what purpose did they have; who received it; in what circumstances did they receive it) (Baker, 2010). Additionally, researchers could consider the intertextuality and interdiscursivity of the text; does it refer to other texts or discourses, and if so, what is the impact? Knowledge of pre-existing theories and relevant literature can inform the researcher further of the context of the discourse's production (Baker *et al.*, 2008). In this way, a CDA approach is grounded in a broad contextual understanding.

The approaches that make up CDA are underpinned by core ideas of ideology, power and identity (Flowerdew & Richardson, 2018). Ideologies, as defined above, are understood in CDA as normalised patterns of beliefs and values (Kress & Hodge, 1979). They prompt and guide social action, and thus can create inequalities and injustices because they are shaped and promoted by those with power (Hart, 2014). Power, from the perspective of CDA, is a commodity that entails wealth and status, but also access to channels for disseminating information, typically granted to the news media, politicians, and corporations (Hart, 2014). Discourses, and their overarching ideologies, are not powerful on their own; they become powerful when they are used by those with power (Wodak, 2001). For instance, discourses contained within political speeches are powerful because they are disseminated to a wide audience and, within social hierarchical structures, are given by those perceived to have authority and expertise. Burr (2015) argues that discourses can create and sustain social inequalities because they can be used to meet the needs of the most dominant groups in society, but they can also be a site for resistance and social action against dominant systems of belief. The concept of identity is also important to CDA. Identity can be fluid and multiple, succinctly defined by Bucholtz and Hall (2005, p. 585) as 'a relational and sociocultural phenomenon that emerges and circulates in local discourse contexts of interaction'. CDA perspectives consider that identity can be self-created and can also be projected onto others, whether or not they accept it themselves (Flowerdew & Richardson, 2018).

Fairclough (2015) cautions that the word 'critical' in 'Critical Discourse Analysis' is potentially misleading and its meaning needs clarifying in CDA. Being critical means explaining how a particular discourse relates to other elements of the social world, that is how ideologies and social practices are sustained through discourse (Fairclough, 2015). Some scholars have attempted to distinguish between Critical Discourse Analysis and so-called Positive Discourse Analysis, which seeks to highlight discourses that have achieved social change and addressed inequalities (Bartlett, 2018). However, as argued by the likes of Wodak and Chilton (2005), the notion of 'positive' discourse analysis misunderstands the 'critical' element of CDA. Rather than being a negative judgement on a particular discourse, the 'critical' part of CDA entails a specific focus on raising awareness of the status quo and ideologies at work, and potentially advocating for social change where inequalities exist (Flowerdew & Richardson, 2018).

CDA is a particularly useful lens through which to consider discourses in the news media because of the pervasiveness of the language of the news media in our everyday lives (Caldas-Coulthard, 2003). Among Western societies, the news media holds a privileged position, being constructed by a relatively small number of people and disseminated to a vast audience. Caldas-Coulthard (2003) emphasises that news is always recontextualised. In other words, it is sculpted based on who is reporting, whose opinions are sought, and cultural criteria for what makes a story newsworthy. Meanwhile, the receivers of the news are exposed to this recontextualization without the opportunity to input, or indeed, without access to knowledge regarding the processes through which the news was constructed. This asymmetrical relationship between the producers of the news and the receivers means that the news media is an inherently powerful voice (Hart, 2014). CDA researchers have frequently turned to the news media to explore various instances of social inequality, often focusing on marginalised groups within society. For instance, a number of studies have adopted a CDA approach to consider the representation of migrants and asylum seekers in various news media outlets across the world (Gabrielatos & Baker, 2008; Hart, 2010; Khosravinik, 2010; Lueck *et al.*, 2015). The application of CDA here facilitates the identification of discourses which oppress and stigmatise migrants and asylum seekers, and counter discourses which promote nationalist and racist agendas. In sum, the perspectives of CDA provide a useful viewpoint from which to explore, critique and explain the ways that language shapes cultural practices and norms.

### 3.3.3 Systemic Functional Linguistics

Linguistic analysis is at the heart of CDA, and most CDA studies are informed by the work of M. A. K. Halliday (1985) and his approach to grammar and linguistics (Wodak, 2001). Halliday's functional grammar is concerned with how linguistic forms create and express meaning (Halliday & Matthiessen, 2013). Halliday broke down language into three core functions, detailing how within each function the language user chooses (usually subconsciously) from a set of finite options in order to create infinite meanings. The functions can be summarised as the following (adapted from Thompson (2013)):

- *Experiential*: language is used to talk about experiences of the world, including state of mind, describing events and states and the entities involved in them
- *Interpersonal*: language is used to interact with one another, to establish and maintain relations, to influence others, to express our own viewpoints, and to elicit or change others' viewpoints
- *Textual*: language is used to organise messages in ways that indicate how they fit in with the other messages around them, and the wider context in which the message is being communicated.

The experiential function of language use is concerned with the content of messages, specifically 'what/who did what to what/whom' (Thompson, 2013, p. 91). The grammatical system that encapsulates the experiential function is transitivity. Transitivity centres around the processes within which actions, participants and circumstances exist (Halliday & Matthiessen, 2013). There are three main types of transitivity processes: material processes (e.g. 'tripped', 'smashed'), mental processes (e.g. 'could hear', 'I want') and relational processes (e.g. 'is', 'was'). The distinction between each type of process is fairly transparent. Material processes refer to those in which an action is undertaken by a participant, either in isolation or the action is 'done to' another participant – 'I washed my hair'; 'she ran'. A mental process involves an action that takes place in the internal world of the mind – thinking, imagining, seeing, and so on. A relational process depicts two concepts and a relationship between them, without a specific action taking place, such as 'This bread is stale' (Thompson, 2013, p. 101). Transitivity processes can be used to manipulate agency in language, and thus can signal power relations in text (Benwell & Stokoe, 2006). For instance, material processes can be either transitive or intransitive, referring to whether or not the clause indicates an object. Actors in intransitive processes (e.g. 'The teacher taught for ten years') are represented as having less of an effect on their environment (Benwell & Stokoe, 2006). Furthermore, processes may be construed in the

passive (omitting the agent) or nominalised (transforming a verb to a noun), both of which obscure agency. Thus the transitivity processes used in language illuminate not only how actions are depicted but how they are construed in relation to the participants involved and the circumstances in which they take place (Thompson, 2013).

In Halliday's functional grammar, the interpersonal function of language entails the ways that language is used as an exchange of meaning. How are messages communicated in such a way that the receiver of the message understands why it is being communicated to them? Halliday and Matthiessen (2013) identify four basic speech roles that capture the types of messages that can be communicated: offers, statements, commands and questions. These speech roles are referred to as 'Mood', and can illuminate discourse roles within texts (Benwell & Stokoe, 2006). For instance, commands and questions may indicate the speaker's or writer's familiarity with their perceived audience. The grammatical system of modality expresses the level of certainty or uncertainty of the clause. Halliday and Matthiessen (2013) break down modality into degrees of probability and usuality if the clause is a statement (e.g. 'she might'; 'he often went'), degrees of obligation if the clause is a command ('you should'), and degrees of willingness if the clause is an offer ('I will help'). Modality can also be expressed through adverbs ('possibly'), participal adjectives ('it is required'), verbs of cognition ('I feel') and copular verbs ('seems', 'appears') (Benwell & Stokoe, 2006). In this way, modality denotes the speaker's attitude towards the utterance (Thompson, 2013).

The textual function of language refers to how messages are organised to fit in with the rest of the text, either spoken or written (Thompson, 2013). Halliday's functional grammar describes the Theme as the first grammatical element of the clause, the information that is foregrounded over the rest of the clause (Halliday & Matthiessen, 2013). We can understand the Theme as that which 'locates and orients the clause within its context' (Halliday & Matthiessen, 2013, p. 89). The Theme might be the Subject in a simple declarative clause (e.g. '*The Queen* yesterday opened her heart to the nation'), or in more complex clauses, an Adjunct might be positioned as the Theme (e.g. '*Last night* a man was helping police inquiries') (Thompson, 2013). Benwell and Stokoe (2006) explain that the choice of Theme serves an ideological function, since by foregrounding certain information at the start of the clause, other information, such as the agent, is backgrounded.

A further point to consider in the construction of messages, and one which is of particular interest to the critical analyst, is the concept of register. A register is variation in

linguistic choices according to the context of production and reception (Halliday & Matthiessen, 2013; Thompson, 2013). Speakers and users of a language have intuitive knowledge of register (Fowler, 1996a). Register is denoted through linguistic features such as vocabulary and the consistent collocation of certain terms. Lexical choices can often highlight ideologies in texts, for instance if a newspaper refers to a 'terrorist' versus a 'freedom fighter' (Benwell & Stokoe, 2006). Similarly, the use of pronouns, which signal relationships between social actors, form a key part of the register of a text. Fairclough demonstrates the ideological function of pronouns in newspaper editorials, noting that the use of an inclusive 'we', referring to the reader and the writer, and the direct 'you' create simulated personal address with the reader. These linguistic features act as a 'package of sociolinguistic knowledge' which allow the text to fulfil its specific communicative function (Fowler, 1996a, p. 191). There are, of course, other features that the CDA researcher may wish to attend to that are not part of the systemic functional linguistic model, including metaphors, presupposition and intertextuality (Benwell & Stokoe, 2006). It is not possible to provide a definitive list of the linguistic features that will be relevant for a CDA approach because different research questions will necessitate a different analytical focus (Meyer, 2001). Nonetheless, Halliday's theories of functional grammar provide a versatile platform from which to begin a critical analysis of language in use.

### 3.3.4 Criticisms of CDA

CDA has received its fair share of criticism since its inception in the 1990s. We have seen that CDA itself is not a specific methodology, and can utilise any suitable method to realise its objectives. This has called into question the unity of the approach, with some researchers arguing that there has been a lack of coherence across CDA studies and an unsystematic application of methods (Breeze, 2011). Moreover, the uniting factor behind CDA approaches, that of the investigation of power and ideology in language, has been challenged. As one of the most outspoken critics of CDA, Widdowson (1996) points out that one does not necessarily have to subscribe to the tenets of CDA in order to be opposed to, or indeed investigate, abuses of power in language. Toolan (1997, p. 100) astutely observes, 'who is *not* politically opposed to sexism, racism and discrimination?'. Toolan and Widdowson suggest that sometimes CDA researchers seem to imply that unless one labels oneself a 'critical' researcher, one is implicitly supporting the hegemony.

Traditionally, qualitative techniques have been used in CDA research (Baker *et al.*, 2008), meaning that only a small number of texts are sampled, due to the inevitable restraints

of time and resource in qualitative research. A small sample begs the question as to how representative the dataset can be considered to be (Stubbs, 1997), leaving it open to the possibility that the researcher selects the most 'extreme' examples of a particular text-type in order to prove a preconceived theory (Toolan, 1997). Additionally, a major pitfall in qualitative-based CDA research centres around which linguistic features are identified for analysis. Widdowson (1996) argues that CDA researchers cherry-pick textual items that give evidence of conflict or hegemonic struggle, while ignoring or dismissing others that contradict or discredit their interpretation. Reviewing analysis conducted by Fairclough (1992), Widdowson reaches an entirely different interpretation of the same text, pointing out that different motivations, assumptions and beliefs can bias the researcher. Fowler (1996b, p. 8) observes that critical linguists 'get a very high mileage out of a small selection of linguistic concepts such as transitivity and nominalisation', by which he means to assert that Systemic Functional Linguistics is much more detailed than strictly necessary for CDA research. However, Widdowson (1998, p. 137) repurposes Fowler's point to argue that the limited number of linguistic features which CDA research analyses leads to 'a kind of *ad hoc* bricolage which takes from theory whatever concept comes usefully to hand'. In other words, linguistic features are selected to suit the researcher's own ideological position, regardless of other features or interpretations.

These criticisms raise concerns over issues of the representativeness of the texts selected and the validity of the linguistic analysis which may or may not be driven by the researcher rather than the data itself. Calls for a more systematic approach have pointed to the benefits of combining the quantitative methods of corpus linguistics with the analytical perspectives of CDA to conduct a more objective and replicable analysis of the data (Hardt-Mautner, 1995; Widdowson, 1996; Widdowson, 2000; Baker *et al.*, 2008; Baker & Levon, 2015). Such a methodological combination makes it possible to survey a large amount of data to identify salient linguistic patterns, and then pursue these patterns to interrogate how they function in their original context.

## 3.4 Corpus linguistics and Critical Discourse Analysis

The first scholar to explicitly link CDA with corpus linguistics was Hardt-Mautner (1995), who investigated a specialised corpora of news articles that, at 168,000 words, was too large to tackle using conventional CDA methods alone. She utilised the corpus tools of concordances and word frequencies to illuminate how quantitative methods could enhance the validity and breadth of a critical qualitative analysis. Looking at a corpus of newspaper editorials, Hardt-

Mautner combined word frequency analysis with concordance analysis to explore how the newspapers labelled social actors. The concordance lines illuminated how negative judgements were imposed upon certain social actors and established an 'in-group' consisting of the newspaper and its readers, and an 'out-group'. Hardt-Mautner also investigated the role of personal pronouns in the newspaper editorials, with a frequency count illuminating the differences in pronoun use across newspapers and a more in-depth consideration of how these pronouns appealed to a commonality of experience among readers.

With the development of accessible corpus analysis tools, the practice of using corpora to inform and shape CDA continued to evolve, with an awareness of how the combination of approaches can benefit the analysis. The corpus tools give precise estimates of the prevalence of particular textual features based on defined and systematic statistical analyses, combating the limitations of a purely CDA-based approach (Close Subtirelu & Baker, 2018). Offering a statistically valid starting point for the analysis, corpus tools can provide accountability such that, while the interpretations of the discourses are not replicable, the processes that have led to those interpretations are reproducible (Marchi & Taylor, 2018). Moreover, the corpus tools uncover 'non-obvious meaning' in the data that would be difficult to spot manually or via intuition (Partington *et al.*, 2013, p. 11).

In the context of the news media, this approach has been shown to be especially useful in allowing the researcher to engage with large corpora of news articles where it might otherwise be difficult to identify a starting point for analysis. For instance, work by Baker and colleagues (Baker *et al.*, 2008; Gabrielatos & Baker, 2008) has explored the methodological implications of using corpus-based CDA to analyse representations of refugees and asylum seekers in a 140-million-word corpus of British newspaper articles. The quantitative measure of keywords and collocates allowed the researchers to hone in on statistically significant representations of refugees and asylum seekers, such as the frequent collocations that associate refugees and asylum seekers with illegal behaviour ('bogus asylum seekers', 'illegal immigrants', 'refugees trying to sneak into Britain'). From there, the authors were able to relate these linguistic features to the discourses prevalent across the corpus, thus generating an insightful picture of the portrayal of refugees in the British press. The methodological combination of corpus linguistics and CDA has, indeed, been proved fruitful in the examination of the news media's portrayal of minority groups, such as migrants and refugees (Khosravinik, 2009; Taylor, 2014), marginalised nationalities in the mainstream Western media (Kim, 2014), feminists (Jaworska & Krishnamurthy, 2012), and people with mental health conditions (Tobin

& Lyddy, 2014). This method was also adopted by Siiner (2017) in her analysis of Norwegian newspaper accounts of dementia. Using the statistical measure of keywords, Siiner considered how keywords changed over a ten-year period of news reporting of dementia. Complementing the quantitative analysis, an approach informed by CDA noted changes in the discourses from deficit and loss to the recognition of personhood among people with dementia.

Researchers combining corpus linguistic tools with qualitative analytical approaches tend to make a distinction between 'corpus-based' and 'corpus-driven' analysis (Tognini-Bonelli, 2001). 'Corpus-based' methodologies draw on corpus techniques to corroborate or test pre-determined theories about language. 'Corpus-driven' approaches use the data and findings from the corpus to generate and shape theories and descriptions of language in use (McEnery & Gabrielatos, 2006). In this way, a 'corpus-driven' approach is bottom-up and is not based on preconceived assumptions about the data. In practice, the distinction between these two approaches may not be so black and white; McEnery and colleagues (2006) propose viewing 'corpus-based' and 'corpus-driven' as two extremes along a continuum. Meanwhile, the term 'corpus-assisted' is also used to refer to types of discourse analysis involving corpora (Partington, Duguid, & Taylor, 2013). 'Corpus-assisted' analysis reflects the fact that corpus techniques are one sort among many others, and in this thesis the term 'corpus-assisted' is adopted to emphasise that the corpus methodologies are supplemented by a qualitative CDA analytical approach.

### 3.4.1 Application of corpus-assisted CDA

There is no clearly defined methodology for analysing a corpus from a CDA perspective, since neither CDA nor corpus linguistics have singular theories or approaches. Nonetheless, Baker and colleagues (2008) have proposed some possible stages of corpus-assisted CDA, based on their wider research project considering discourses of refugees and asylum seekers in the UK press. Table 3.1 summarises this research framework, adapted from the original (see Baker *et al.*, 2008, p. 295). The framework highlights the simultaneous bottom-up and top-down nature of corpus-assisted CDA, and this approach informs the present thesis.

*Table 3.1: Possible stages in corpus-driven CDA, adapted from Baker et al. (2008, p. 295)*

1. Context-based analysis of the topic via history, politics etc., including identifying existing discourses via wider reading
2. Establish research questions and corpus building procedures
3. Corpus analysis, using measures such as frequencies and keywords, identifying possible discourses and relating them to the literature
4. CDA analysis of particular lexical items, using concordance lines, identifying discourses within
5. Formulate new hypotheses or research questions
6. Further corpus analysis based on new hypotheses, identifying further discourses
7. Analysis of intertextuality or interdiscursivity based on findings from corpus analysis
8. New hypotheses
9. Further corpus analysis, identifying additional discourses.

To summarise the application of this approach in the present thesis, the contextual analysis of the topic of dementia, denoted by Stage 1 in Baker and colleagues' framework, is undertaken in the review of the pre-existing literature on the history and development of cultural understandings of dementia (Chapter 2). Based on this literature, the research questions were formulated and the corpus compiled accordingly (see below for further information about the corpus construction). The analysis commences in the following chapter, Chapter 4, with a quantitative measure of keywords, which signal potential emerging discourses worthy of further investigation. The following four analysis chapters, Chapters 5 to 8, then interrogate individual linguistic items in close detail using the perspectives of CDA to consider the discourses drawn upon and the potential implications of these. This section of the analysis is informed particularly by Halliday's systemic functional linguistics (1985), as well as other linguistic theories such as metaphor analysis and the labelling of social actors; that is to say that salient linguistic items are interrogated and relevant theories or approaches to language are referenced where appropriate. Finally, the discussion in Chapter 9 considers issues of interdiscursivity in relation to the wider context of discourses of dementia, thus drawing the various strands of the thesis together.

## 3.5 The Dementia News Corpus

In order to investigate the discourses of dementia in the British news media, the present study required a data set consisting of news articles that featured dementia in some way. Since none was pre-existing that might have been used to answer the research questions laid out in Chapter 1, a specialised corpus was compiled, the Dementia News Corpus. Utilising the online searchable news database *Nexis UK*, news articles were selected for inclusion in the Dementia News Corpus that met all of the following criteria:

- Contained the terms 'dementia' OR 'alzheimer' in the headline, AND 'dementia' OR 'alzheimer' as a major mention in the text;
- Published in British national newspapers;
- Published between 1 March 2012 and 1 March 2017;
- Were not fewer than 500 words in length.

So that a large but focused corpus might be compiled, it was decided to include news articles that featured either 'dementia' or 'alzheimer' in the headline and 'dementia' or 'alzheimer' as a major mention (occurring in the headline, lead paragraph or index terms) in the text. This ensured that dementia was the main or a major topic in the news article. The terms 'dementia' and 'Alzheimer's' are often used synonymously in the news media (Zeilig, 2015), so it was prudent to search for both terms when constructing the corpus.

It was decided to focus only on news articles published in Britain, since among the studies of dementia in the news media, the British press has been understudied, with only Peel (2014) and Brookes *et al.* (2018) considering small samples of the British news media. National rather than regional, metropolitan or local newspapers were selected to identify articles disseminated to the widest potential readership.

The thesis aimed to focus specifically on contemporary discourses of dementia, so it was decided to include news articles published in a contemporary five-year time period, from 1 March 2012 to 1 March 2017 (with data collection taking place in April 2017). A five-year period was selected to generate a rich dataset that remained focused on contemporary discourses surrounding dementia. The selected dates reflect a period of development and change within the UK in dementia research and care. In March 2012, the Prime Minister, David Cameron, announced plans to make major improvements to dementia care and research by 2015 (Department of Health, 2012). The strategy, known as the 'Prime Minister's challenge on dementia', aimed to make the UK the best country in the world for dementia care and support,

as well as the best place in the world to undertake dementia research. This national strategy was reinstated in 2015, remaining committed to transforming dementia care, support and research by 2020 (Department of Health, 2015). By collecting data from the announcement of this strategy, the Dementia News Corpus covers the period of political, scientific and social developments during this time.

Items fewer than 500 words were excluded from the corpus. This word limit is an arbitrary measure, but it was selected to ensure that only items with a sustained and extensive focus on dementia were included. Items fewer than 500 words were often brief snapshots or summaries of the news headlines and therefore did not focus exclusively or in any detail on dementia. Furthermore, it was found that an item fewer than 500 words was typically the first version of a news article which was later revised and extended. In cases where the same headline by the same author on the same date occurred more than once, this was taken to be a revision of an earlier version, and only the most recent item was included in the corpus.

All told, the method outlined above resulted in the collection of 3,022 news items, with a total word count of 2,565,195. This can be considered a fairly representative collection of national newspaper texts in the sample period, given the expansiveness of the inclusion criteria, though it is acknowledged that discourses of dementia may have been present in articles not included in the corpus, such as news articles that did not mention ‘dementia’ or ‘alzheimer’ in the headline or lead paragraph, but nonetheless made reference to the syndrome.

Each news item was manually copied and saved in a format that the corpus software WordSmith Tools could read. Dates, author names and affiliations were deleted from the data, since they were not of interest in the study and would have potentially skewed statistical analysis. Table 3.2 breaks down the Dementia News Corpus by individual newspapers, number of items and the total number of words for each newspaper.

*Table 3.2: Newspapers in Dementia News Corpus with number of items and total word count*

| **Newspaper** | **Number of items** | **Word count** |
|---|---|---|
| *Daily Mail/Mail on Sunday* | 1131 | 991,582 |
| *The Express/Sunday Express* | 500 | 352,121 |
| *The Telegraph/The Sunday Telegraph* | 429 | 359,606 |
| *The Mirror* | 254 | 220,304 |
| *The Guardian* | 219 | 194,644 |
| *The Independent* | 211 | 166,427 |
| *The Times/The Sunday Times* | 208 | 197,879 |
| *The Sun* | 38 | 43,978 |
| *The Observer* | 31 | 37,867 |
| *The Star* | 1 | 787 |
| | Total | **2,565,195** |

Table 3.2 highlights the internal composition of the corpus. It can be seen that almost 40% of the articles in the corpus originate from either the *Daily Mail* or *Mail on Sunday*, while there are comparatively far fewer articles from *The Sun*, *The Observer* and *The Star*. Given that all news articles were collected that met the inclusion criteria listed above, it is evident that the topic of dementia was much more prominent in certain newspapers over others. The reasons for this can only be speculated, but looking at readership figures for the newspapers in 2017 shows that the *Daily Mail* was the most widely read newspaper among people over the age of 35 (National Readership Survey, 2017), which perhaps goes some way towards explaining the much more prolific focus on a syndrome commonly associated with ageing. The difference in the number of articles from each newspaper results in an imbalanced corpus, meaning that the analysis will inevitably be skewed towards the discourses in those newspapers with more articles about dementia. Nonetheless, as Nelson (2010: 60) observes, corpus creation is 'a compromise between the hoped for and the achievable', and the imbalance in the Dementia News Corpus reflects the actual distribution of news articles about dementia during the period of study.

In the construction of the corpus, there was an inevitable decontextualisation of the data. That is to say that images, font sizes, page layouts and other multimodal features are not captured in the corpus (Widdowson, 2000; Mishan, 2004). The importance of these features

cannot be understated, since they contribute to the ideologies and discourses perpetuated in the news media (Caple & Bednarek, 2016). In the present thesis only the written language used in the news articles will be considered, although, where relevant, comments will be made about the location of a particular linguistic feature in the text (e.g. in the headline, lead paragraph, or the main body of the article). Nonetheless, there are undoubtedly many features of the news articles that the analysis will miss, and a multimodal approach to CDA would make for an insightful future study of the Dementia News Corpus, a point which will be returned to in Chapter 9.

## 3.6 Conclusion

This chapter has elucidated the methodological approaches and procedures involved in collecting and analysing the data in the present study. After introducing the tools and techniques of a corpus linguistic approach to data analysis, the chapter reviewed the theoretical contributions of Critical Discourse Analysis. With reference to the use of this methodological approach by other researchers, the chapter emphasised the need for the integration of quantitative and qualitative methods in the identification of hegemonic discourses in the news media, and the benefits of this approach in terms of conducting representative, data-driven analysis. The chapter then described the data used in the present study, the Dementia News Corpus, and the processes of corpus compilation.

The ensuing five analysis chapters apply the methods of corpus-assisted Critical Discourse Analysis to interrogate discourses of dementia in the British news media and answer the research questions posed in Chapter 1:

1. How is dementia discursively constructed in the British news media?
2. How are people with dementia, and the experiences of living with dementia, represented?
3. What are the implications of these representations for cultural attitudes and beliefs about dementia and the experience of living with it?

# Chapter 4: Surveying the Dementia News Corpus

## 4.1 Introduction

This introductory analysis chapter sets out to survey the Dementia News Corpus, identifying and categorising the most salient themes emerging in news reports of dementia. As the previous chapter detailed, the Dementia News Corpus is comprised of 3,022 news articles, totalling over 2 million words. The entry point into this large dataset comes from the quantitative measure of keywords (Scott, 2010), a corpus linguistic tool which calculates words which are overly represented in the corpus and thus indicative of the topics under discussion. Since keywords are determined based on frequency and statistical significance, the measure of keywords offers a means of commencing the analysis based on statistical saliency rather than researcher intuition (Charteris-Black & Seale, 2010). These keywords can then be grouped into categories of semantic meaning, offering a lens through which to view the major themes in the corpus.

Beginning with an outline of how the keywords were generated and categorised according to semantic themes, this chapter offers an overview of the themes and concerns articulated in the Dementia News Corpus. These concerns are described with reference to existing work on dementia in the news media, highlighting commonalities and differences between the thematic findings of previous work and the present study. The chapter points to pertinent avenues for further investigation and lays the foundation for the subsequent four analysis chapters.

## 4.2 Keywords and key semantic categories

According to the approach explicated in Section 3.2.2, the Dementia News Corpus was compared statistically with the written section of the British National Corpus (BNC), a reference corpus of British English. This comparison yielded a list of 3,295 keywords (log-likelihood, $p < 0.000001$) – words which appeared significantly more frequently in the Dementia News Corpus than would be expected, based on their frequencies in the BNC (Stubbs, 2010). On its own, the keyword list (see OneDrive, 2019, for full list of keywords) reveals little of interest because the procedure is purely a statistical measure and requires human interpretation in order to identify meaning and possible discourses (Charteris-Black & Seale, 2010). So the keyword list functions more as a signposting tool, from which the researcher can begin to identify discourses (Scott, 2010).

One possibility to assist in the identification of discourses is to group keywords into categories, in a similar way to the conventional thematic coding in qualitative research (Seale & Charteris-Black, 2010). This involves focusing specifically on the lexical keywords, rather than the function keywords such as *it's* and *that's*, which appear as keywords in the Dementia News Corpus but carry no semantic meaning out of their immediate context. Lexical keywords, on the other hand, including labels, adjectives and verbs, can reveal various discursive strategies, such as the construction of in-groups and out-groups, argumentation and mitigation (Baker, 2010). Mahlberg and McIntyre (2011) undertook a keyword categorisation task when considering the keywords in Ian Fleming's *Casino Royale*. The authors examined concordance lines for each of the top 150 keywords. Keywords with similar meanings in the text were categorised into one semantic group, and for each new keyword there was an evaluation of whether a group already existed or a new group needed to be defined. This bottom-up process led to the identification of two broad categories, 'fictional world signals' and 'thematic signals', within which there were a variety of semantic sub-groups such as 'casino and gambling', and 'spies and spying'. Although each keyword was considered individually in its context, Mahlberg and McIntyre acknowledge that the categories are somewhat subjective, that the cut-off of 150 words is arbitrary, and keywords with a range of meanings are difficult to categorise neatly.

The categorisation of keywords can be guided by contextual factors. In considering discourses of moral panic, McEnery (2009) generated semantic groups for keywords based on a pre-defined model of moral panic theory. His model outlines the different factors that contribute to a discourse of moral panic, including a 'scapegoat', 'object of offence' and 'desired outcome'. Keywords were then categorised into these different groups, with additional sub-groups where appropriate. The keywords which did not fit these categories were simply left as 'unclassified'. Similarly, Harvey's (2013) study of adolescent health communication drew upon pre-existing categories to group keywords. Exploring posts made to the Teenage Health Freak website, Harvey found that the keywords corresponded with health categories signalled on the website, such as 'Relationships' and 'Sex'. Accordingly, these pre-existing categories informed his classification of keywords into semantic groups.

Adapting the procedures utilised in this past research, the top 500 lexical keywords generated when comparing the Dementia News Corpus with the written section of the BNC were grouped into categories of semantic meaning, in an effort to shed light on the salient topics and concerns within the corpus. The categorisation of these keywords was informed by: 1) an

analysis of each keyword in context to determine its overall meaning and usage in the corpus, and 2) the themes identified in the literature regarding representations of dementia in the news media.

For each keyword, an examination of its concordance lines established how the keyword was used in context. As an example, the keyword *amyloid* was found to be used exclusively in discussions of the pathology of dementia; thus, it was categorised under the broad field of 'Biomedicine'. As similar keywords emerged relating to the physiology of the brain and how dementia affects the brain, a sub-category was created of 'Physiology' to more readily see the prevalence of this sub-theme. Examining concordance lines was necessary since keywords were used in ways that were not immediately obvious. For instance, the keyword *footage* at first glance appears to relate to film or television recording. Upon closer inspection, it is apparent that *footage* is used solely in the context of criminal activity, specifically as evidence in court cases establishing abuse perpetrated against people with dementia. Therefore a category of 'Abuse' was established as further keywords that fit this theme were identified.

The labelling of semantic categories was guided by the themes identified in previous research. For example, according to past studies, the representation of dementia in the news media often draws upon themes of biomedicine and clinical research (Clarke, 2006; Kirkman, 2006; Kang *et al.*, 2010) and prevention and blame (Peel, 2014; Lawless & Augoustinos, 2017). Pre-existing knowledge of these common themes informed the derivation of semantic categories, although the development of categories was not restricted only to those themes which had already been identified in the literature. Rather, the themes already identified offered a foundation from which the present study could build upon as semantic categories emerged from the keywords.

Some keywords fit into more than one category. The keywords *researchers* and *scientists*, for example, have been categorised under 'People: Professionals', but would fit equally well in the 'Research' category. Other keywords have a range of meanings, complicating the categorisation process. The verb *found* occurs 4,332 times throughout the corpus and is a high-ranking keyword, appearing in a variety of ways including to describe the process of literally finding someone or something ('Police found him confused and bewildered') and to describe the act of experiencing something ('She found herself easily confused, forgetful and struggled with her speech'). By far, though, the majority of instances of *found* use the verb to articulate the discovery or learning of new information, as in 'Scientists

found in mice experiments that tau protein disables nerve cells'. Accordingly, the keyword *found* was placed in the category of 'Research' to reflect the fact that the majority of its uses in the corpus relate to clinical research discoveries or developments.

Categorising only the top 500 lexical keywords is an arbitrary cut-off point, and it is possible that examining more keywords would generate further semantic categories. Focusing only on the strongest 500 keywords made it manageable to consider each word contextually in sufficient detail so as to categorise it effectively, a task which would not be feasible with the full list of lexical keywords. Moreover, given that the top 500 are the lexical words in the corpus that are statistically most significant, it seems probable that the keyword categorisation has captured the most dominant themes, and that considering more keywords would simply bolster the existing categories rather than establish new ones. For the sake of space, keywords belonging to semantic categories not pertinent to the research questions, such as those relating to electronic communication (*twitter, org, www* and so on), are not reproduced in Table 4.1.

*Table 4.1: Semantic categories of lexical keywords from the Dementia News Corpus, listed in decreasing order of keyness within each category*

| Semantic categories | Keywords |
|---|---|
| **Diseases** | |
| **Dementias** | *dementia, alzheimer's, disease, condition, vascular, lewy, alzheimers, cte, frontotemporal, dementias, alzheimer, pick's, pca* |
| **Other** | *diabetes, cancer, parkinson's, diseases, illness, parkinson, stroke, depression, strokes, cardiovascular* |
| **Biomedicine** | |
| **Physiology** | *brain, amyloid, brains, plaques, blood, cells, protein, beta, proteins, tau, gene, neurons, heart, hippocampus, statins, tangles, apoe4, statin, hormone, nerve* |
| **Treatment** | *drug, drugs, treatments, cure, treatment, solanezumab, medication, treat, therapy, caring, medicine, pills, aducanumab, therapies, aricept, medications* |
| **General medicine** | *care, health, mental, medical, clinical, mild, neurology, neurodegenerative, died, degenerative, healthcare, death, inflammation, nursing, neurological, genetic, immune, neuroscience, die, clumps, trigger, disorders, biomarkers, shrinkage, deaths, toxic* |
| **Diagnosis** | *diagnosed, cognitive, diagnosis, scans, diagnose, stages, cognition, scan, mri, diagnosing, psychiatry* |
| **Research** | *research, study, found, findings, mice, trials, tests, journal, trial, linked, cause, breakthrough, test, funding, published, results, participants, studies, causes, evidence, factors, damage, tested* |
| **Prevention** | *risk, healthy, diet, lifestyle, vitamin, cholesterol, prevent, obesity, concussion, exercise, sleep, eating, smoking, stave, moderate, omega, drinking, supplements, protect, stress, b12, bmi, alcohol* |
| **Symptoms** | *memory, symptoms, impairment, signs, memories, confused, forgetting, forgetfulness, hallucinations, forgetful* |

| | |
|---|---|
| **Abuse** | *footage, jailed, abuse, cctv, cqc, hearing, cps* |
| **Advocacy** | *awareness, stigma* |
| **Negative evaluation** | *suffering, loss, devastating, heartbreaking, suffer, suffered, frail, distressing, incurable, decline* |
| **Institutions** | *nhs, uk, home, hospital, university, society, homes, charity, healthcare, charities, hospitals, Lilly, clinic* |
| **People** | |
| **People with dementia** | *people, patients, sufferers, elderly, sufferer, vulnerable, residents, patient, pensioner, person, victims* |
| **Family** | *family, mum, dad, wife, mother, husband, families, father, daughter, relatives, grandmother* |
| **Professionals** | *researchers, scientists, dr, carers, professor, experts, doctors, gps, carer, gp, prof, attorney, neurologist* |
| **Other** | *footballers, britons, author, actor* |
| **Names** | *janner, pratchett, cameron, terry, jeremy, wilder, karran, astle, stiles, discworld, kostova, doug, summit, prunella* |
| **Time and temporality** | *onset, age, years, ageing, early, older, aged, life, year, after, today's, currently, decades, daily* |
| **Figures** | *65, 850,000, 2025, 800,000, 2050, 60s, 500,000, 50s, 70s, 2020* |

## 4.3 Key themes in the Dementia News Corpus

At this initial level of analysis, the grouping of keywords into semantic categories begins to build a picture of the dominant themes that are drawn upon in the news media's reporting of dementia. Some of these themes will be briefly considered here in an attempt to describe the overall landscape of the corpus; the ensuing chapters will then elaborate on this preliminary analysis.

The word with the highest keyness value in the Dementia News Corpus is *dementia* (frequency=21,884; keyness=149,460.55), reflecting the prominence of the word in the corpus compared with the BNC. This is followed by *alzheimer's* (frequency=13,739; keyness=97,508.63), which is often used as a synonym for dementia in the news media (Zeilig, 2015). These high keyness values are unsurprising, given that the news articles were collected on the basis of featuring the word 'dementia' or 'alzheimer' in the headline or lead paragraph.

The keyword list also includes other types of dementia including *vascular*, *lewy*, *frontotemporal* and *pick's*, and the initialisms of *cte* [Chronic Traumatic Encephalopathy] and *pca* [Posterior Cortical Atrophy]. The saliency of other diseases in the corpus, such as *diabetes* and *cancer*, potentially reflects the fact that dementia is often comorbid with other age-related conditions (American Psychiatric Association, 2013), and may also indicate that dementia is discussed in relation to or in comparison with other chronic illnesses.

The number of keywords originating from a medical lexis indicates that dementia is framed first and foremost in biomedical terms. This supports previous thematic analysis of dementia in the news media (Clarke, 2006; Kirkman, 2006; Kang *et al.*, 2010). The clinical terminology found in the broad category of 'Biomedicine' highlights a preoccupation with the pathology of dementia (*amyloid, plaques, proteins* and so on) and the disease processes within the brain (*clumps, trigger, shrinkage*), as well as the procedures for diagnosis (*diagnosed, scans, stages, mri*) and the fatality of the syndrome (*death, die, toxic*). Moreover, the semantic category of 'Treatment' is largely filled with pharmaceutical treatment options including several specific drug names (*solanezumab*, *aducanumab* and *aricept*). These examples point to a highly specialised and technical register that primarily centres around clinical procedures and pharmaceutical interventions.

It is noteworthy that discussion of non-pharmaceutical treatments appears to be limited, with just the keywords *therapy* and *therapies* alluding to psychosocial interventions. Pharmaceutical agents are just one approach to treating dementia, only available for people with dementia of the Alzheimer's type, and evidence suggests that they may not work for everyone (James & Fossey, 2013). On the other hand, there are a wide range of non-pharmaceutical treatments which can enhance the wellbeing and quality of life of the individual with dementia, such as arts-based therapies or reminiscence therapy. It appears that articles in the Dementia News Corpus prioritise pharmaceutical treatment options over alternative therapies, a finding which concurs with Kline's (2011) observation that the media generally depict illness through a biomedical paradigm which deflects attention away from non-medical treatments. The absence of non-pharmaceutical treatments for dementia in the keyword list suggests that dementia is framed primarily in clinical, scientific terms, and factors relating to the social environment of the individual with dementia, and the ways these might enable or disable the person (Shakespeare *et al.*, 2017), are given less consideration.

A second theme identified in the keyword list is that of scientific research, with a variety of keywords relating to clinical trials and the publication of research findings (such as *study, mice, journal* and *results*). These keywords situate dementia in relation to scientific developments and the possibility of a cure. Indeed, the keyword *cure* (frequency=1009; keyness=3918) is ranked as the 60th strongest keyword, thus a highly salient word in the corpus. Along with the broad theme of biomedicine, the theme of research evident in the corpus suggests that the news media frequently draws on a clinical or scientific discourse to depict dementia.

Another key theme is that of dementia prevention. Keywords relating to risk (*risk*), lifestyle choices (*diet, obesity, concussion, eating, smoking* and so on), specific dietary requirements (*vitamin, cholesterol, omega, supplements, b12, alcohol),* and prevention (*prevent, stave* and *protect*) are categorised under this theme of 'Prevention'. Taken together, these keywords signal potential discussions around day-to-day living and how a lay-person can alter their chances of developing dementia without professional assistance. This supports work by Peel (2014) and Lawless and Augoustinos (2017), both of whom found a preoccupation in the news media with dementia preventative strategies and articles aimed at giving 'advice' to readers about how to prevent the syndrome. Clarke (2006) suggests that the focus on lifestyle and diet in relation to dementia may stem from cultural anxieties about the unknown factors that cause the syndrome. A sense of uncertainty and potential chaos is evoked in the strongest keyword in this category, *risk,* a word which implies that developing dementia is a matter of chance (Fowler, 1991). This semantic category of 'Prevention' thus points to a potential discourse of personal responsibility and signals anxiety about the chances of developing dementia.

The category of 'Symptoms' raises a number of keywords that relate to memory loss – *memory, memories, forgetting, forgetfulness, forgetful* – and the keywords *confused* and *hallucinations.* The extended focus on memory loss is potentially problematic because difficulties with memory are just one of many symptoms of dementia (American Psychiatric Association, 2013). Other cognitive symptoms such as problems with language and communication, perception or concentration do not feature as keywords at all. In a study of the portrayal of dementia in film, Gerritsen, Kuin and Nijboer (2014) noted that memory loss is the predominant characteristic attributed to a person with dementia, followed by disorientation. They argue that a more realistic depiction would include symptoms such as agitation or combative behaviour, and that this might contribute to a more understanding and supportive

public. At this preliminary stage of analysis, it seems that the news media also foregrounds memory loss as the predominant symptom of dementia, possibly at the expense of descriptions of other symptoms and behaviours.

If there is a lack of nuance in the portrayal of symptoms of dementia, so too is there in the keywords associated with people living with the syndrome. People with dementia are labelled in a variety of ways that signal vulnerability, frailty and old age – *patient(s), sufferer(s), elderly, vulnerable, residents, pensioner, victims*. These terms frame dementia in a highly pejorative way, establishing a sense of victimhood and passivity and conferring a dependency on healthy others, be it family members or professionals. Linking to the number of keywords categorised under 'Negative evaluation' (*loss, devastating, heartbreaking* and so on), it is apparent that the most prominent depictions of dementia focus on suffering and loss. The notion of 'living well' with dementia (Swaffer, 2015) is, at this preliminary analytical stage, absent.

Literature on the news media's portrayal of dementia has found that the voices of people with dementia are typically excluded (Van Gorp & Vercruysse, 2012; Siiner, 2017), and that people with dementia are normally spoken for by members of their family or by professionals (Clarke, 2006). The keyword list certainly includes frequent mentions of various family relations (*dad, wife, relatives* etc.), medical practitioners (*dr, gp, neurologist*) and researchers (*researchers, prof, experts*). Likewise we see the names of some politicians and individuals involved in policy-making and research (*cameron* [David Cameron, then Prime Minister], *jeremy* [Jeremy Hunt, then Health Secretary; Jeremy Hughes, CEO of Alzheimer's Society], *karran* [Eric Karran, Director of Research at Alzheimer's Research UK] and *doug* [Doug Brown, Chief Research and Policy Officer at Alzheimer's Society]). That these individuals feature as 'key' in the corpus is likely to be because they are frequently quoted and thus take on the roles of spokespeople. On the other hand, at this stage of analysis it is difficult to see if people with dementia have access to the same channels for disseminating information about the experience of living with the syndrome.

Celebrity stories do appear to be salient in the corpus, supporting previous research (Kang *et al.*, 2010) – the category of proper nouns features Greville Janner (politician), Terry Pratchett (writer), Gene Wilder (actor), Jeff Astle (footballer), Nobby Stiles (footballer) and Prunella Scales (actress). These keywords would indicate an interest in the ways that dementia has affected famous individuals. Basting (2009) observes that celebrity stories of dementia

provide a vehicle through which the media can highlight the tragedy of dementia, with the implication that dementia is more tragic when it affects a talented or creative individual. In the absence of the voices of ordinary people with dementia, the saliency of references to certain celebrities in the Dementia News Corpus offers the possibility to interrogate how people living with the syndrome are depicted.

Although there were many figures that appeared as key in the Dementia News Corpus, only those related to dementia have been included in Table 4.1. Examination of the contexts in which these figures occur indicates that they relate to the age of a person who has or is at risk of developing dementia (*65, 60s, 50s, 70s*), and quantifying people with dementia (*850,000, 800,000, 500,000*). The corpus also includes future dates – *2025, 2050, 2020* – by which point there is expected to be some change or advancement in the field of dementia research. Figures are an important part of news reporting, enhancing the empirical claims of a news story while also emphasising its newsworthiness (Bell, 1991). The fact that these figures appear significantly more frequently in the corpus compared with general language points to their importance in the news articles, suggesting concerns across the corpus with the prevalence of dementia and its potential impact in the future.

## 4.4 Avenues for further exploration in the Dementia News Corpus

The semantic categories presented in Table 4.1 showcase a number of significantly salient themes within the Dementia News Corpus that are ripe for further, detailed investigation using the framework of CDA outlined in Chapter 3. Choosing which keywords to pursue in contextual detail is a qualitative judgement, requiring the researcher to direct the analysis according to their own aims and objectives (Charteris-Black & Seale, 2010). In the present study, the selection of keywords for analysis is grounded in the research questions laid out in Chapter 1: how is dementia discursively constructed, and how are people with dementia represented? These questions guide the analytical focus towards semantic categories relating to dementia and people with the syndrome, while measures of saliency in the keyword analysis above identify the most dominant of these keywords.

The keyword *dementia* offers a sensible point of departure to examine constructions of the syndrome itself. The quantitative analysis above indicates that dementia is frequently framed in terms of biomedicine, corresponding with findings from previous analyses of dementia in the news media (Clarke, 2006; Kirkman, 2006; Kang *et al.*, 2010). As such, keywords emerging from the semantic category of biomedicine, particularly keywords which

relate to dementia pathology, may offer further insights into how the syndrome itself is depicted. Table 4.1 highlights a selection of keywords relating to the treatment of dementia, including the elusive *cure*; the high saliency of these keywords denoting dementia treatment warrants further exploration as to how dementia, a syndrome with no known cure or effective treatment, is represented in terms of the treatment options.

The semantic category of 'Symptoms', above, suggests that dementia is depicted primarily as a condition that affects memory, given that the majority of keywords in this category relate to this one cognitive symptom. With the goal of examining the discursive construction of the syndrome, an exploration of the depictions of dementia symptoms is justified. As the initial analysis above indicates, there are many other cognitive symptoms of dementia which do not appear as keywords, suggesting that memory loss is a chief source of concern in the news media above all other symptoms. Basting (2009) suggests that memory is the symptom culturally associated with dementia, so consideration of how this symptom is presented both in isolation and in reference to other symptoms may shed light on the portrayal of dementia in the corpus.

With regards to the representation of people with dementia, the keywords categorised in Table 4.1 offer a number of options for investigating this issue. The labels attributed to people with dementia (such as the keywords *patients* and *sufferers*) may illuminate how the news media ideologically position people with dementia (Matheson, 2005). Thus the semantic category of 'People with dementia' provides a useful entry point into the analysis of how people with dementia are depicted. Although no keywords in Table 4.1 point to the inclusion of the voices of ordinary people with dementia, several keywords denote celebrities with dementia. As the analysis above suggested, these keywords may provide a window into how the experiences of life with dementia are articulated in the news media, in the absence of first-hand experiences from ordinary people with dementia.

## 4.5 Conclusion

This introductory analysis chapter has mapped out the overall landscape of the Dementia News Corpus using the quantitative measure of keywords. The keyword procedure provides an entry point into the data, allowing the researcher to determine the direction of the analytical approach based on saliency rather than pre-existing knowledge (Scott, 2010). Keywords in the Dementia News Corpus were grouped into categories of semantic meaning in order to illuminate recurring themes across the data, which may be indicative of potential discourses (Mahlberg &

McIntyre, 2011), and these were discussed in relation to previous studies of dementia in the news media.

In the forthcoming four analysis chapters, the avenues for investigation raised in this chapter are examined using the qualitative perspectives of Critical Discourse Analysis. For each chapter, the most salient keywords are interrogated in their discursive contexts to describe and interpret the discourses used to represent dementia in the British news media.

# Chapter 5: Dementia and biomedicine

## 5.1 Introduction

In seeking to uncover the major themes drawn upon in news media representations of dementia, the quantitative analysis of Chapter 4 revealed a number of keywords relating to biomedicine. These included not only the various medical labels for dementia (*dementia, alzheimer's, pca* and so on) but also a collection of keywords originating from the semantic fields of physiology, clinical practice, pharmaceutical treatments and research. These were grouped under the broad heading of 'Biomedicine'. Of all the semantic categories identified among the keywords, more keywords originated from the category of biomedicine than any other. These keywords included highly specialised vocabulary (*amyloid, statins, neurodegenerative*) as well as more generic terminology (*brain, health, care*). Collectively, these keywords indicate that a biomedical discourse is present and pervasive across the Dementia News Corpus. In this first of four detailed analysis chapters, the discourse of biomedicine is interrogated to critically analyse how it is constructed, and the implications for this discourse on representations of dementia.

As societal knowledge of dementia has shifted from the understanding that dementia is a natural part of ageing to a distinct disease process with the possibility of treatments and potentially a cure, a biomedical frame has dominated cultural stories of the syndrome (Fox, 1989; Ballenger, 2006; Basting, 2009; Lock, 2013). In the news media, researchers have identified a pervasive biomedical discourse which focuses on scientific discoveries, possible drug treatments and the development of a dementia cure (Clarke, 2006; Kirkman, 2006; Basting, 2009; Kang *et al.*, 2010; Doyle *et al.*, 2012). This body of work has recurrently highlighted how the biomedical frame relies on quotations from medical professionals, scientists, and occasionally governmental figures, while backgrounding the experiences of individuals with dementia who rarely have the opportunity to contribute their perspectives (Clarke, 2006).

The discourse of biomedicine is common in news reports of other health conditions, as discussed in Chapter 2 (Kline, 2011; Lupton, 2012). In addition to excluding the experiences of patients (Lyons, 2000), the biomedical frame poses a number of problems in news reports of illness. News reporting of medicine and medical science has often been criticised for being sensational (Shuchman & Wilkes, 1997), misleading (Moynihan *et al.*, 2000) and lacking adequate discussion of the costs, benefits and harms of treatment and research (Schwitzer,

2008). For instance, Wilson and colleagues (2009) observed in medical news stories that treatments and interventions were typically portrayed as 'breakthroughs' or 'cures', which no doubt raised false hopes among readers. Frequently, medical news stories only acknowledge two extremes of the story, rather than including caveats or information that better contextualises the research (Shuchman & Wilkes, 1997). However, while it is easy to criticise the news media for misleading reporting of medical science, Seale (2003) cautions that one must bear in mind that some degree of simplification is necessary in order to convey complex ideas to a lay audience, and furthermore, that the news media exists to provide entertainment, rather than accurate health information.

Drawing on the staple corpus techniques of collocation and concordance analysis, this chapter investigates how the discourse of biomedicine is constructed in the Dementia News Corpus. The analysis begins by exploring the medical labels used to denote dementia in the corpus, focusing on the ways that dementia is defined as a disease process. Since the keyword *dementia* appears in various guises throughout the corpus, and by extension the analysis in this thesis, this initial analysis serves primarily to illustrate the biomedical framing of the concept of dementia. The chapter then turns to the depiction of dementia pathology, focalising through the keyword *brain*, the strongest keyword in the semantic category of 'Biomedicine'. This is followed by consideration of the various treatment options for dementia, and finally the elusive concept of a dementia cure is interrogated. The strands of analysis in this chapter address the first research question posed in Chapter 1: how is the syndrome of dementia discursively constructed in the British news media?

## 5.2 Lexicalising dementia as a disease process

The keyword categorisation of Chapter 4 pointed to a select number of keywords that denote dementia and its related diseases. Reproduced below in Table 5.1, these keywords and their associated frequency and keyness values offer an indication of how dementia is lexicalised in the corpus. As Chapter 4 observed, the frequency and saliency of the keywords *dementia* and *alzheimer's* is unsurprising because the presence of either of these terms in the headline, lead paragraph or as a major mention in the text was part of the inclusion criteria in the corpus (see Section 3.5). Alzheimer's disease is the most common cause of dementia, accounting for up to 70% of all cases of dementia (NICE, 2017), and moreover is often erroneously used as a synonym for dementia (Zeilig, 2013); this explains its significantly higher saliency than other keywords denoting specific types of dementia. The keyword procedure captures three variations of Alzheimer's disease (*alzheimer's, alzheimers* and *alzheimer*), and a manual check

of the corpus reveals ten occurrences of the incorrect spelling 'Alzhiemer's' too. This indicates some minor orthographical inconsistency in the labelling of this diagnostic category, but on the whole the label *alzheimer's* is fairly stable.

*Table 5.1: Keywords denoting dementia, listed in order of keyness*

| **Keyword** | **Frequency** | **Keyness** |
|---|---|---|
| *dementia* | 21,884 | 149,460.55 |
| *alzheimer's* | 13,739 | 97,508.63 |
| *disease* | 9,367 | 42,031.38 |
| *condition* | 2,765 | 7,851.15 |
| *vascular* | 456 | 2,293.48 |
| *lewy* | 199 | 1,357.47 |
| *alzheimers* | 150 | 933.55 |
| *cte* | 116 | 811.22 |
| *frontotemporal* | 115 | 804.14 |
| *dementias* | 104 | 726.33 |
| *alzheimer* | 168 | 706.44 |
| *pick's* | 82 | 581.54 |
| *pca* | 92 | 541.91 |

The other diseases that cause dementia (such as vascular disease or Pick's disease) are signalled much less frequently, which suggests that the news media tends to categorise dementias under the umbrella term more often than singling out individual types of dementia. Yet the presence of these disease labels shows that the news media does associate the umbrella category of 'dementia' with the diseases that cause it. The historic view that dementia is a natural part of ageing, a belief refuted by modern science (Ballenger, 2006), persists in public understandings of dementia; recent survey research suggests that 20% of the lay public surveyed thought that dementia was part of the ageing process rather than a result of brain disease (Stevens *et al.*, 2018). The presence of keywords in the Dementia News Corpus denoting specific types of dementia, such as Alzheimer's disease (*alzheimer's*) and Chronic Traumatic Encephalopathy (*cte*), signals recognition in the news media that dementia is associated with disease, not ageing, thus challenging the public misconception that dementia is normal in later life.

To pursue further how dementia as a syndrome is articulated and defined in the corpus, it is necessary at this stage to move beyond the decontextualized quantitative measures of frequency and saliency to consider the dementia-related keywords in contextual detail. The corpus technique of concordancing, described in Section 3.2.5 as a means of displaying all instances of a search word in context (Rayson, 2015), affords the opportunity to examine keywords more closely. The keyword *dementia*, which is both by far the most salient and also the topic of investigation in this study, offers a reliable and statistically valid entry point into the data to understand how the news articles define the syndrome. Examining concordance lines for the keyword *dementia* illuminates that the syndrome is described in a number of ways that emphasise its biomedical nature first and foremost, as in the extracts reproduced below. These extracts, and those hereafter unless otherwise stated, have been selected because they represent the discursive trend under examination. The length of each extract reproduced is intended to most clearly illustrate the trend in question. The search word is highlighted in bold.

1. **Dementia** is an umbrella term for a set of symptoms that include impaired thinking and memory. (*Daily Telegraph,* 2016)
2. **Dementia** is a set of behaviours or "symptoms" which suggest difficulties with cognitive function. The most common symptoms include memory loss, confusion, mood and personality changes, problems with planning, and doing tasks in the right order. (*The Guardian*, 2014)
3. **Dementia** is a syndrome associated with a continuing decline of the brain in people usually aged over 65, often characterised by memory loss, and a decline in cognitive ability and mental agility. (*The Times,* 2015)
4. **Dementia** is a progressive neurological disease which affects multiple brain functions - affecting memory, difficulty making decisions, confusion and can cause disorientation. (*Express Online,* 2016)
5. **Dementia** is a devastating condition that slowly destroys all that makes you. Along with this it throws up hallucinations, night-terrors, severe agitation, sleeplessness, depression, incontinence and eventually the inability to talk, walk or swallow. (*Daily Mirror,* 2013)

Brookes and colleagues (2018) highlighted the terminological inconsistency when the news media lexicalises dementia, with labels such as ‘a terminal disease’, ‘a neurological disorder’ and ‘a brain condition’ resulting in confusion regarding what dementia actually is. This is similarly evidenced in the Dementia News Corpus through the variety of descriptions of

dementia, from ‘an umbrella term for a set of symptoms’ (ex.1) to ‘a progressive neurological disease’ (ex.4) to ‘a devastating condition that slowly destroys all that makes you’ (ex.5). The variation exhibited here is indicative of a range of expressions used to define dementia in the corpus, reflecting a general uncertainty about the exact nature of dementia: is it a group of symptoms, or a disease, or a collection of diseases? With no stable definition of the syndrome, the very concept of dementia remains something of a mystery to the reader.

The confusion evinced here is heightened when the news media attempts to distinguish between dementia and Alzheimer’s disease. While the news articles do describe Alzheimer’s disease correctly as a type or cause of dementia (as shown in Extract 6 below), there is also evidence of the news media confusing the two terms. On 106 occasions in the corpus, news articles refer to ‘dementia and Alzheimer’s’, and describe ‘dementia or Alzheimer’s’ 24 times, in a manner that suggests erroneously that the two labels are synonymous. Extracts 7 and 8 offer an illustration of this linguistic trend:

6. The most common kind of **dementia** is Alzheimer's disease, but scientists have been unable to reach consensus about the cause of the condition, and despite more than 400 drug trials, nothing has been shown to combat the disease. (*Daily Telegraph*, 2016)
7. **Dementia** and Alzheimer's disease are now the biggest cause of death among women and ranked third after heart disease and cancer for men. (*Daily Telegraph*, 2014)
8. A typical sign of **dementia** or Alzheimer's disease is a build-up of plaque and tangles on the brain, but the researchers found that the effect of these were reduced for those who had a high amount of protein in the BDNF gene. (*Express Online*, 2016)

While the coordinating conjunctions ‘and’ and ‘or’ separate the concepts of dementia and Alzheimer’s disease to suggest that they are two distinct entities, examining them in context indicates that they are actually used as synonyms. In Extract 7, for instance, the singular version of the noun ‘cause’ suggests that ‘Dementia and Alzheimer’s disease’ have been conflated to represent one concept. Similarly in Extract 8, the conjunction ‘or’ suggests that the labels are synonymous with one another. This muddies the more complex reality that Alzheimer’s disease is a type of dementia, but not all dementias are of the Alzheimer’s type. The prevalence of this terminological confusion in the Dementia News Corpus may reflect wider societal uncertainty

about these concepts. Whitehouse and George (2013) intimate that the frequency with which the lay public ask the difference between dementia and Alzheimer's suggests the terms are more confused and confusing than doctors and scientists will admit.

Emerging clearly from concordance analysis of the keyword *dementia* is that it is recurrently lexicalised as a biomedical problem, a specific disease process rather than a natural part of human ageing. Looking back over the extracts presented above, a biomedical register is evoked through the description of symptoms, pathology, clinical presentation and research, in addition to the presence of disease labels and categories. In other words, despite the terminological inconsistency surrounding the concept of dementia in the corpus, a discourse of disease foregrounds the syndrome as a biomedical process.

Thus far, the analysis has been selective in examining how the concept of dementia is defined in the corpus. Collocation analysis, outlined in Section 3.2.3, allows us to widen the scope of the investigation to consider other salient linguistic patterns surrounding the keyword *dementia* beyond conceptual descriptions. Collocates are words which co-occur with the search word in a way that is statistically significant, thus offering insights into the dominant contexts and uses of the word (Xiao, 2015). Table 5.2, below, presents the 30 strongest lexical collocates of *dementia.* The collocates are measured by log-likelihood (see Section 3.2.3), and generated based on the words five places either side of the search word. The analysis focuses on the lexical collocates because these give a clearer indication than grammatical collocates of the content and contexts in which the word *dementia* is used and the discourses with which it is associated. The frequencies of the collocation are given in brackets.

*Table 5.2: Top 30 lexical collocates of* dementia*, listed in order of log-likelihood with collocation frequency in brackets*

| **Lexical collocates of *dementia* (+/- 5 words)** |
|---|
| people (2,793), risk (1,532), patients (956), vascular (419), living (614), sufferers (535), diagnosed (561), uk (648), care (808), form (438), early (572), research (736), suffering (426), developing (429), common (380), sufferer (308), onset (374), develop (392), alzheimer's (907), friendly (253), help (514), diagnosis (365), 850,000 (237), signs (272), disease (609), reduce (270), lewy (167), year (427), cause (284), symptoms (304) |

Table 5.2 offers an overview of the dominant lexical patterns surrounding the search word *dementia*. Here and throughout the rest of the thesis, only the strongest 30 collocates are presented for the sake of space, with the acknowledgement that examining less salient collocates might generate different insights. Nonetheless, the 30 strongest collocates provide a clear indication of how the keyword *dementia* is recurrently used in the corpus. It can be seen that *dementia* regularly occurs with various labels for people ('people', 'patients', 'sufferers', 'sufferer'), which will be explored in further detail in Chapter 7. There are a notable number of collocates that stem from a biomedical register. These can be thematically grouped into specific diseases ('vascular', 'alzheimer's', 'disease', 'lewy'), disease progression ('developing', 'onset', 'develop'), clinical observation ('diagnosed', 'diagnosis', 'signs', 'symptoms'), causation and prevention ('risk', 'cause', 'reduce') and research ('research'). The saliency of these words suggests that dementia is recurrently and predominantly situated within a discourse of biomedicine. This is attested even beyond the top 30 collocates; words like 'nhs', 'hospital', 'brain', 'study' and 'cure' also feature as collocates.

While there is undoubtedly much more that could be said about the word *dementia* in the corpus, this initial analysis of the description and definition of dementia has emphasised the clear presence of a broad biomedical discourse emerging in the news media's articulation of the syndrome. The biomedical discourse was further evidenced in Chapter 4 in the number of keywords pertaining to a biomedical register. Having ascertained the dominant discursive representation of dementia as a neurobiological process of disease, the chapter now turns to consider the representation of dementia pathology in the corpus.

## 5.3 Articulating dementia pathology

The keyword *brain* (frequency=7,704; keyness=38,777.30) is both the most 'key' keyword in the semantic category of 'Biomedicine' and the fourth strongest keyword in the whole corpus, after *dementia, alzheimer's* and *disease*. The saliency of the word *brain* is fairly intuitive given that dementia is a disease of the brain. Categorised under the sub-heading 'Physiology' within the broader category of 'Biomedicine', the keyword *brain* is followed in keyness strength by many keywords relating to physical and biological aspects of the human brain (see Table 5.3 below). Some of these keywords are technical and highly specialised, such as *amyloid*, *tau* and *statins*, while others are perhaps more familiar to a lay audience (*cells, gene, hormone, nerve*). The high keyness value of the word *brain*, and the saliency of other keywords denoting various aspects of the brain, indicates a concern in the Dementia News Corpus with the processes of dementia pathology.

*Table 5.3: Keywords denoting physiology, listed in order of keyness strength*

| | |
|---|---|
| **Physiology** | *brain, amyloid, brains, plaques, blood, cells, protein, beta, proteins, tau, gene, neurons, heart, hippocampus, statins, tangles, apoe4, statin, hormone, nerve* |

To interrogate representations of dementia pathology in the corpus, the analysis takes the keyword *brain* as the entry point into the data. In the keywords listed under the category of 'Physiology' in Table 5.3, the word *brain* is a holonym (a semantic relationship denoting the whole of something, in relation to other words) (Cruse, 1986) and the other keywords listed such as *plaques* and *neurons* are meronyms (a semantic relationship denoting being parts of a whole). As such, the analysis can encompass a number of keywords categorised under the sub-heading 'Physiology' by focalising through the holonymous keyword *brain*.

The starting point for analysis of the keyword *brain* is to examine recurrent collocations, which offer a picture of the predominant contexts in which the word occurs. Table 5.4, below, presents the top 30 strongest lexical collocates of *brain.* It can be seen that many of these collocates are also keywords in the category of 'Physiology' (*cells, blood, plaques, amyloid, protein, proteins, nerve, neurons*), supporting the supposition that analysis of the keyword *brain* will entail a focus on other keywords denoting dementia pathology.

*Table 5.4: Top 30 lexical collocates of* brain*, listed in order of log-likelihood, with collocation frequency in brackets*

| **Lexical collocates of *brain* (+/- 5 words)** |
|---|
| cells (697), damage (333), function (264), blood (312), disease (360), plaques (230), scans (190), changes (225), amyloid (229), tissue (157), alzheimer's (459), memory (281), protein (175), areas (140), regions (109), proteins (142), shrinkage (99), parts (122), flow (103), healthy (164), part (155), protect (117), diseases (134), loss (156), degenerative (96), inflammation (99), age (171), injury (84), nerve (85), neurons (88) |

The collocates listed in Table 5.4 relate to the brain on a cellular level ('cells', 'plaques', 'amyloid', 'protein', 'proteins', 'nerve', 'neurons'), specific body parts ('blood', 'tissue', 'areas', 'regions', 'parts', 'part'), and processes of disease ('damage', 'function', 'changes', 'shrinkage', 'flow', 'protect', 'loss', 'inflammation'). Collectively, collocates denoting cellular

entities within the brain ('cells', 'plaques' and so on) occur by far the most frequently compared with other collocations, indicative of a central focus on the biological markers of dementia. Thus the analysis centres on these collocations to interrogate representations of dementia pathology.

The neurobiological development of dementia is a vastly complex phenomenon that is not fully understood by medical science (Lock, 2013). It is immediately apparent upon examining concordance lines for the cellular collocates of *brain* that the news media responds to this complexity by articulating dementia pathology in metaphorical terms. As Section 2.5.2 outlined, metaphor, the linguistic strategy of talking about one thing in terms of another (Demjen & Semino, 2016), is often relied upon to describe abstract, complex or sensitive ideas (Lupton, 2012; Demmen *et al.*, 2015). When describing the functioning of 'cells' and 'neurons' within the brain, the news media tends to rely on a machinery metaphor, likening the inside of the brain to some form of machine and the dementia brain as a failing piece of technology. The extracts reproduced below demonstrate extended uses of this machinery metaphor. The collocating words ('cells' and 'neurons') are underlined.

9. The new drugs are designed to stop inflammation disrupting wiring in the **brain** and killing <u>neurons</u>. Pro-inflammatory cytokines cause the synapses, the connections between **brain** <u>cells</u>, to misfire. Eventually the whole organisation of the brain falls into disarray, like a failing computer, and neurons die. (*Daily Mail*, 2012)
10. The process of brain cleaning - which gets rid of the dead material - is called phagocytosis, and is carried out by highly specialised <u>cells</u> in the **brain** called microglia. (*Express Online*, 2016)
11. The researchers said that in a healthy **brain**, brain <u>cells</u> fire in a synchronised way, between 25 to 80 times a second. This pattern - called 'gamma oscillation' - is less likely to be seen in Alzheimer's patients. (*Daily Mail*, 2016)
12. But US scientists have found that in Alzheimer's disease the immune <u>cells</u> in the **brain** seem to go haywire, producing a molecule which actually reduces the immune response and consumes an important brain nutrient. (*Daily Telegraph*, 2015)
13. The brain is made up of 100 billion **brain** <u>cells</u>, called <u>neurons</u>, which communicate with each other by sending electrical signals over the tiny gaps

between each other, known as synapses. But in people with Alzheimer's, clumps of protein block the cell-to-cell signalling. (*Express Online,* 2016)

14. When the culprit protein malfunctions it prevents cells clearing out a build-up of "rubbish" in the brain. Researchers at Georgetown University Medical Centre in Washington found nilotinib can help force the **brain** -connections – called neurons - to clear the build-up. (*Express Online,* 2014)

In these illustrative examples, a machinery metaphor emerges as a way of construing the processes involved in brain functioning, both in a healthy brain and in a brain affected by dementia. The brain is likened to an engine (‘misfire’ (ex.9); ‘fire in a synchronised way’ (ex.11)), a circuit board (‘wiring’ (ex.9); ‘haywire’ (ex.12)), a machine (‘highly specialised cells’ (ex.10); ‘malfunctions’ (ex.14)) and some form of computer technology (‘a failing computer’ (ex.9); ‘sending electrical signals’ (ex.13)). The different types of machines used to conceptualise the brain are shown to be highly technical, with a plethora of specialised vocabulary (such as ‘phagocytosis’ (ex.10); ‘gamma oscillation’ (ex.11)) asserting the complexity of the processes involved. Through this machinery metaphor, dementia is understood as the result of malfunctioning machinery or technology.

The machinery metaphor is prevalent across the corpus in the representation of the keyword *brain*, and can be quantified by looking at the collocates of *brain*. As outlined in Section 3.2.6, metaphor can be identified in corpora by examining collocates which are semantically incongruent with the search word. To that end, the collocates provided in Table 5.5, with the frequencies of collocation in brackets, were investigated in contextual detail to determine their metaphorical use in the corpus, because they seemingly originate from a different semantic domain to the keyword *brain*. These collocates offer some measure of quantification of the machinery metaphor in the portrayal of the brain.

*Table 5.5: Machinery metaphor and related collocates of* brain*, with collocation frequency in brackets*

| **Metaphor** | **Collocates** |
|---|---|
| THE BRAIN/BODY IS A MACHINE | connections (60), boost (57), supply (51), power (51), trigger (41), boosting (29), communicating (15), boosts (13), firing (12), wiring (10) |

The metaphor of the human body as a machine is not unique to the Dementia News Corpus. Hodgkin (1985) notes that the 'body is a machine' metaphor is prevalent in the language of pathology and physiology. Consider such phrases as 'the heart pumps blood around the body'; although the heart is not literally a pump, viewing it as such has offered insights into how the heart works, driving scientific theories and developments (Boyd, 1993). However, Hodgkin cautions that the metaphor of the body as machine attributes machine-like characteristics to patients that could potentially be damaging, such as by suggesting that they are all identical and passive, and ultimately can be fixed. With the evolution of technology, metaphors of technology have come to dominate conceptualisations of the brain; we may talk of the brain receiving 'input' and 'encoding' and 'processing' information, the vocabulary of which is drawn from the language of computers (Lytton, 2002). The dominance of this conceptual understanding of the brain is evident in the Dementia News Corpus, not only through the illustrative examples given in Extracts 9-14 but more broadly in the collocates listed in Table 5.5, wherein the keyword *brain* is recurrently articulated using the vocabulary of machinery and technology.

The metaphor of the brain as a machine implies that dementia is the result of malfunctioning machinery. Since we typically attempt to fix broken machinery, the metaphor implies that a person with dementia is similarly fixable (Hauser *et al.*, 2017). Yet this interpretation is at odds with the current scientific reality. Scientists currently do not understand the exact causes of the processes that result in dementia, meaning that a cure for the syndrome is highly unlikely (Lock, 2013). By depicting the dementia brain as a mechanical problem that could be repaired, the news articles place responsibility for responding to dementia on the scientific and medical community, and remove the person with dementia from the relevance of their social environment. In other words, dementia is imagined as a mechanical fault that can only be treated by experts to return the person back to their previous functioning.

The cellular processes that cause dementia are also depicted through a variant of the machinery metaphor that sees dementia as a build-up of waste. Within this metaphor, the brain is conceptualised as a system of pipes that can become blocked or damaged. To illustrate this metaphor in context, two extracts have been selected.

15. Solanezumab is the first drug to target the disease itself rather than the symptoms. In Alzheimer's disease, sticky beta-amyloid plaques build up between **brain** cells, like a blockage in a pipe. Solanezumab is an antibody

which seeks out the early form of beta-amyloid before it becomes sticky and latches on. The body's own cleaning process then removes it from the brain before it can clump together. (*Daily Telegraph,* 2015)

16. The new drug, known only as LMTX, works in a different way to current treatments and to many of the Alzheimer's tablets and jabs in development, which target the brain's chemistry or the build-up of a **brain**-clogging protein called beta-amyloid. LMTX, in contrast, dissolves the tangles of protein that are a hallmark of the disease and spread through the brain like an infection, stopping them working from within. (*Daily Mail,* 2012)

These two examples capture the breadth of this metaphor of waste disposal. Amyloid plaques are explicitly likened to 'a blockage in a pipe' (ex.15) that 'build up', 'clump' and 'latch…on' (ex.15). In the *Daily Mail* example, the plaques are described as 'brain-clogging' (ex.16). The suggestion is that the plaques are unpleasant, unsanitary waste materials that need to be flushed out in order for the brain to function correctly. Extract 15 personifies the drug treatment, Solanezumab, as heroic, bringing in elements of a potential military metaphor ('target', 'seeks out') to depict the drug's ability to remove plaques from the brain. Intriguingly, the *Daily Mail* article dismisses the military metaphor ('target'), in favour of a depiction that likens the tangles of dementia to an infectious disease: 'spread through the brain like an infection' (ex.16). In order to address the presence of these tangles, the pharmaceutical intervention 'dissolves' them, perhaps alluding to the dangerously potent chemicals that clear blocked drains.

As with the machinery metaphor, it is possible to quantify this metaphor to some extent by considering semantically incongruent collocates of the keyword *brain*. The following collocates listed in Table 5.6 are those collocates which were judged after concordance analysis to be used in a metaphorical way to describe dementia pathology as a build-up of waste. Although the metaphor is realised through other linguistic means than only the collocates in Table 5.6, the frequencies of these collocations offer an indication of the prevalence of the most dominant realisations of the metaphor.

*Table 5.6: Waste disposal metaphor and related collocates of* brain*, with collocation frequency in brackets*

| **Metaphor** | **Collocates** |
|---|---|
| DEMENTIA IS THE BUILD-UP OF WASTE IN THE BRAIN | build (81), toxic (56), sticky (35), clumps (33), building (18), waste (16), builds (14), blocking (12) |

Understanding the brain as a drainage system, and the plaques and tangles of dementia as harmful waste materials that block the pipes, removes a sense of human agency from the process of dementia pathology. The various social actors involved in the process of waste build-up and disposal are inanimate, namely the amyloid plaques and the pharmaceutical treatments that are used to dispose of them. People with dementia are entirely left out of this equation. Like the broader machinery metaphor discussed above, the metaphor of DEMENTIA IS THE BUILD-UP OF WASTE IN THE BRAIN simplifies the possibility of treatment into a readily understandable model. The metaphor implies that treatments or cures for dementia would work by 'flushing the system', an experience likely to be unilaterally understood by the general public as a way of disposing of waste. This suggests that a treatment for dementia will be simple, fast and effective to implement, a point which will be returned to later in the chapter.

Thus far, the analysis has focused on metaphors that render the brain and the development of dementia as inanimate objects. But one readily identifiable metaphor in descriptions of the pathology of dementia depicts dementia as an agentive invader that physically attacks the brain. The conceptualisation of dementia as an invader is prolific in news media reporting (Van Gorp & Vercruysse, 2012; Johnstone, 2013; Brookes *et al.*, 2018), arguably because such military language catches the reader's attention and fosters a sense of camaraderie in the 'fight' against the syndrome (George *et al.*, 2016). In the Dementia News Corpus, the cellular changes and abnormalities that cause dementia are recurrently imagined as enemy invaders harming the brain. The most salient realisations of this metaphor are presented in Table 5.7 with the collocates of *brain*, and Extracts 17-20, below, provide a selection of examples of this metaphor in context.

*Table 5.7: Dementia as an invader metaphor and related collocates of* brain*, with collocation frequency in brackets*

| **Metaphor** | **Collocates** |
|---|---|
| DEMENTIA IS AN INVADER | death (85), destroy (27), kill (21), destroys (17), destruction (16), kills (14), destroying (14), combat (13), rogue (13), killing (12), attack (11), attacks (10) |

17. While existing therapies ease dementia symptoms, aducanumab is the first to tackle the underlying damage in the brain. It contains an antibody that homes in on amyloid, the protein that gums up the **brain**, poisoning and killing the cells. (*Daily Mail,* 2016)
18. Studies on Alzheimer's patients have revealed the build-up of protein "plaques" in the **brain**, which are thought to kill off brain cells. *(The Guardian,* 2012)
19. They have found that the extra insulin produced by those with T2 diabetes also gets into the brain, disrupting its chemistry. Eventually it leads to the formation of toxic clumps of amyloid proteins that poison **brain** cells. *(Sunday Times,* 2013)
20. A key problem in the battle against dementia is that existing drugs only attack the disease's symptoms. Experts are focusing on therapies that have shown signs of slowing the disease itself by fighting the build-up of amyloid beta protein in the **brain**. *(Daily Mail,* 2016)
21. Results from two trials show the drug, called solanezumab, slowed the pace of cognitive decline by more than a third over 18 months. It works by targeting a toxic protein in the **brain** called beta amyloid. *(Express Online,* 2012)

Supporting the findings of Brookes and colleagues (2018), these examples attest to the presence of an invader metaphor in British news media reporting of dementia. The amyloid plaques that cause dementia are articulated as an enemy destroying brain functioning ('poisoning and killing the cells' (ex.17); 'kill off brain cells' (ex.18); 'poison brain cells' (ex.19); toxic protein' (ex.21)). Treatment for dementia is accordingly depicted in militaristic terms: 'tackle' (ex.17), 'battle' (ex.20), 'attack' (ex.20), 'fighting' (ex.20), 'targeting' (ex.21). Because the metaphor only encompasses neurobiological markers and drug options, the battle is disconnected from human intervention. The references to fighting attribute agency to pharmaceutical methods, as opposed to doctors or individuals. The brain cells are personified in the sense that they can be 'poisoned' and 'killed' in unspecified numbers; this obscures the wider context of this invasion taking place within a person. In this way, the invader metaphor de-personalises the descriptions of the pathology of dementia.

Military metaphors are widely employed in discussions of disease pathology to cast disease as a 'killer' and 'invader' and patients as 'victims' (Sontag, 1978). In the invasion of the body, the individual with the disease is represented purely as a battleground with no agency

or humanity (Slobod, 2012). In the Dementia News Corpus, the use of the invader metaphor to describe dementia pathology promotes a military response, casting science and pharmaceutical drugs as soldiers in the battle against disease. The counterpoint to this, which is interrogated in detail below, is that non-pharmaceutical interventions for dementia are ignored.

The articles in the Dementia News Corpus utilise a variety of metaphors to depict dementia pathology. Through the language of machinery, waste disposal and warfare, the biology behind dementia is described and explored. In each of these three salient metaphors, human agency is obscured, be it through rendering the brain as an inanimate object (such as a circuit board or a drainage system), ascribing machine-like qualities to the brain cells and processes ('wiring', 'the body's own cleaning process'), or attributing human-like characteristics to the plaques and tangles as 'killers' and 'attackers'. The use of metaphor occurs alongside specialised scientific vocabulary, helping to break down and explain the processes of dementia into concrete, familiar concepts in a way that a lay audience can understand (Semino, 2008). Resultantly, though, the biomedical side of dementia is simplified, and potential treatments or a cure for dementia are implied to be far more achievable than in reality, presenting science as the solution to dementia. This could be labelled as science-as-hero discourse within the broad biomedical discourse prevalent in the corpus. The remaining part of the chapter expands upon the examination of the concept of dementia treatment and cure, interrogating how the news media depicts the possibility of treating the syndrome.

## 5.4 Treating dementia

Treatment options for dementia were a key concern within the Dementia News Corpus, as seen in the number of keywords relating to treatments in Chapter 4 (and reproduced in Table 5.8 below). Treatments for dementia aim to enhance physical health as far as possible and promote emotional wellbeing and confidence (Dening & Babu Sandilyan, 2015b), since there is as yet no treatment that will reverse or cure the condition. There are several drug options available to treat Alzheimer's disease, with evidence suggesting that these drugs delay deterioration rather than halt the disease process itself, but no new drugs have been licensed to treat dementia since 2002 (Jones, 2013). Aside from these limited pharmaceutical options, treatment for dementia may encompass interventions that seek to help the individual manage their symptoms. This could be through therapies such as reminiscence therapy, cognitive stimulation therapy, and arts based therapies (James & Fossey, 2013). These non-pharmaceutical treatments can be tailored to the individual's specific needs and take into account their physical and emotional health and the social environment within which they live (Cullum, 2013).

*Table 5.8: Keywords denoting treatments for dementia, listed in order of log-likelihood*

| | |
|---|---|
| **Treatments** | *drug, drugs, treatments, cure, treatment, solanezumab, medication, treat, therapy, caring, medicine, pills, aducanumab, therapies, aricept, medications* |

The keywords reproduced in Table 5.8 can be broadly divided into three categories: general terms (*treatments, cure, treatment, therapy, therapies*), and pharmaceutical interventions (*drug, drugs, solanezumab, medication, pills, aducanumab, aricept, medications*) and other treatments (*therapy, therapies*). Beginning with the first of these categories, the general term *treatments* (frequency=1,140; keyness=5,460.26), and its singular form *treatment* (frequency=1,941; keyness=3,279.99), it is possible to build a picture of how the news media conceptualises the treatment of dementia.

As with the keywords *dementia* and *brain* above, the measure of collocation reveals those words which frequently appear with *treatments* and *treatment* in a way that is statistically significant. The 30 strongest lexical collocates are presented in Table 5.9 and 5.10. Many of the collocates relate to the development, either presently or in the future, of treatments for dementia. That is to say that treatments are temporally positioned ('new', 'available', 'currently', 'existing', 'future') and connected with the idea of future advancements ('find', 'develop', 'search', 'developing', 'development'). Several collocates also feature as adjectives, evaluating the effectiveness of the treatment options ('effective', 'potential', 'better').

The plural form *treatments* tends to occur in the context of describing the landscape of dementia treatment options. That is to say that the keyword *treatments* generally refers to all types of (predominantly pharmaceutical) treatments for dementia. On the other hand, the singular form *treatment* typically describes a research discovery related to a specific drug or intervention. Although both keywords present intriguing avenues to explore, this chapter will focus on the plural form *treatments* to centre the analysis on how the syndrome is depicted in relation to treatment options, rather than on singular drugs.

*Table 5.9: Top 30 lexical collocates of* treatments*, listed in order of log-likelihood, with collocation frequency in brackets*

| **Lexical collocates of *treatments* (+/- 5 words)** |
|---|
| new (328), effective (90), alzheimer's (120), disease (106), potential (53), develop (54), find (56), search (38), better (53), dementia (113), available (42), currently (39), trials (40), slow (38), developing (42), preventions (19), drug (46), existing (27), current (30), stop (32), help (46), preventative (19), other (44), research (52), access (25), lead (30), cures (17), development (26), symptoms (33), future (26) |

*Table 5.10: Top 30 lexical collocates of* treatment*, listed in order of log-likelihood, with collocation frequency in brackets*

| **Lexical collocates of *treatment* (+/- 5 words)** |
|---|
| effective (139), alzheimer's (209), new (138), disease (168), dementia (167), prevention (50), drug (76), neglect (40), potential (53), patients (75), counts (33), cure (45), cancer (45), options (26), modifying (23), diagnosis (46), prostate (23), slow (35), care (66), first (50), medical (39), future (31), better (36), licensed (18), hopes (22), hospital (37), early (41), lead (30), successful (21), breakthrough (23) |

The keyword *treatments* is recurrently framed by temporal adverbs or adjectives. The collocates 'new', 'available', 'currently' and 'existing' tie the concept of dementia treatments to time in some way, either by alluding to a time when more treatment options might be possible, or by emphasising the present unsatisfactory situation in relation to an alternative, brighter future. The message that is thus perpetuated is that current (and predominantly pharmaceutical) options are limited, but with further clinical research there may be more possibilities in the future. Extracts 22-25 give an example of each of these collocates to offer a snapshot of some of the uses of the keywords *treatments* in relation to time.

22. Blood vessels in the brains of dementia patients have been found to be deformed - a breakthrough that offers hope of <u>new</u> **treatments**, scientists claim. *(Daily Mail,* 2015)

23. There are currently a few **treatments** available which can ease the ravaging effects but only for a limited time. *(Express Online,* 2014)
24. There are currently no **treatments** that can stop or slow the condition effectively. Research is focusing on drugs that target the unwanted protein that can lead to Alzheimer's. *(The Times,* 2015)
25. Existing **treatments** such as aricept, the best-known medicine for Alzheimer's, are symptomatic only, ameliorating the effects of the amyloid build-up, and aricept loses its effect over time. *(Independent,* 2016)

The noun phrase 'new treatments' (n=266) accounts for over 20% of all instances of *treatments* within the Dementia News Corpus. The adjective 'new' is used almost exclusively to allude to possible future treatments that do not currently exist; just 7 instances of the phrase 'new treatments' refer to dementia treatments that have already been developed. More commonly, news articles describe scientific research in various states of development: 'developing new treatments' (n=27), 'finding new treatments' (n=24), 'lead to new treatments' (n=18), 'the hunt for new treatments' (n=6), 'opening the doors to new treatments' (n=6) and so on. This indicates a focus on the future of scientific discovery, with the clear acknowledgement that current treatment options are limited. For example, in Extract 22 the 'new treatments' do not currently exist; they are only a 'hope' for the future. The use of reported speech – 'scientists claim' – highlights that it could be disputed by others, with the reporting verb 'claim' introducing an element of doubt. The *Daily Mail* article thus stresses that these 'new treatments' do not yet exist, although they might do in the near future.

The other temporal collocates listed above also emphasise the limitations of treatments for dementia, and in doing so, point to avenues for future research to explore. In Extracts 23 and 24, the adverb 'currently' orientates the reader to the present time to affirm the inadequacy of treatment options; the drug treatments 'only [work] for a limited time' (ex.23) and cannot 'stop or slow the condition effectively' (ex.24). Likewise, the deficiencies of 'existing treatments' are pointed out in Extract 25, with a focus on the deteriorating effectiveness of the drug treatments: 'loses its effect over time'. As with the adverb 'currently', the adjective 'existing' draws the reader's attention to the present time, while leaving scope for future developments.

Temporally situating treatment options for dementia is a means of enhancing the newsworthiness of the story. The news media utilises temporal references to underscore the

relevance of particular stories, since events that are closely connected in time with the time of publication – taking place in the very recent past, or ongoing, or about to happen in the immediate future – are particularly newsworthy (Bednarek & Caple, 2017). Moreover, the temporal referents to describe *treatments* recurrently highlight the absence of adequate options, thus establishing dementia as a highly negative and impactful topic of news (Bell, 1991) because it is a syndrome without treatment or cure.

Indeed, the deficiencies of treatments for dementia are repeatedly evaluated through the collocation with the adjective 'effective'. Most commonly appearing to the left of *treatments* (n=84), this adjective conveys a sense of frustration and dismay that there are no viable options for treatments. Upon closer examination, the Dementia News Corpus appears to describe treatments as not being 'effective' if they do not cure the condition; in other words, there is some conflation of the terms 'treatments' and 'cure'. This is notable because it means that those treatments that do work to alleviate symptoms are discredited and de-valued. Further, the relevance and benefits of non-pharmaceutical treatments are obscured, despite the important role they can have in enhancing day-to-day life (Alzheimer's Society, 2017b). If 'effective treatments' means curing the condition, then by implication anything less is 'ineffective'. An example from a *Daily Mail* article on the symptoms of Alzheimer's and how to spot it in a loved one aptly illustrates how the phrase 'effective treatments' confuses *treatments* and *cure*, while undermining the current options:

> 26. Currently there are no effective **treatments** or cure for Alzheimer's and the only medications available are palliative in nature. What is critically needed are disease-modifying drugs: those drugs that actually stop the beta-amyloid in its tracks. *(Daily Mail,* 2016)

In this extract, the conjunction 'or' distinguishes between 'effective treatments' and 'cure' as two separate nouns, but reviewing the rest of the extract suggests that these concepts are being used as synonyms. Both nouns are contrasted with 'the only medications available' (note the exclusive focus on pharmaceutical treatment options), which are described as 'palliative'. In this instance, the adjective 'palliative' is construed as a negative prospect in comparison with 'effective'; relieving the symptoms of the condition is suggested to be different to providing 'effective' treatment. The extract then goes on to introduce the noun phrase 'disease-modifying drugs' as the solution, again marked as different to the palliative options currently available. These drugs could 'stop' the formation of the plaques in the brain, thereby supposedly halting

the development of dementia. So although 'effective treatments' and a 'cure' are denoted as two separate options, this short extract exemplifies how 'effective treatments' are presented as those that cure dementia, and that any other treatment options, short of a cure, are implicitly ineffective.

It is noteworthy that almost all references to *treatments* in the Dementia News Corpus focus on pharmaceutical options. Treatments that are 'new' or 'available' or exist 'currently' are predominantly pharmaceutical, and likewise all treatments described as 'effective' refer to drugs. We saw above that the keywords that constitute the semantic category of 'Treatments' (see Table 5.8) largely include specific or general drug names. The keywords *drug* (frequency=2,352; keyness=7,666.02) and *drugs* (frequency=1,932; keyness=5,824.11) epitomise the science-as-hero discourse in the Dementia News Corpus, with discussions of drug discoveries, clinical trials, research on mice, and the prescription drugs available to treat dementia. The collocates of *drug* and *drugs* presented in Table 5.11 and 5.12 reflect a variety of these concerns. As with the keywords *treatments* and *treatment*, the Dementia News Corpus is concerned with drugs that are 'new', or in 'development', that might 'slow', 'stop' or 'halt' the progression of dementia (we can see from Tables 5.9 to 5.12 that *treatments, treatment, drug* and *drugs* share many of the same collocates).

*Table 5.11: Top 30 lexical collocates of* drug, *listed in order of log likelihood, with collocation frequency in brackets*

| **Lexical collocates of *drug* (+/- 5 words)** |
|---|
| alzheimer's (325), new (226), trials (93), disease (151), companies (59), discovery (58), solanezumab (56), trial (73), slow (66), treatment (76), given (70), development (55), treat (50), slows (29), breakthrough (40), called (55), shown (42), wonder (30), tested (37), prescribed (31), treatments (46), patients (68), licensed (25), company (36), stop (41), effective (38), targets (27), administration (21), experimental (23), halt (28) |

*Table 5.12: Top 30 lexical collocates of* drugs, *listed in order of log likelihood, with collocation frequency in brackets*

| **Lexical collocates of *drugs* (+/- 5 words)** |
|---|
| new (187), treat (81), other (113), existing (60), alzheimer's (155), anti (49), used (70), target (46), trials (56), available (51), dementia (44), anticholinergic (33), prescribed (39), given (59), halt (38), use (54), taking (50), help (68), effective (40), patients (66), development (40), symptoms (51), work (50), inhibitors (22), promising (30), clinical (35), currently (33), slow (33), delay (27), effects (35) |

The verbs denoting speed or movement are intriguing in that they give an indication of how the news media conceptualises both the disease process and the impact of treatment. In the extracts below (27-32), some of the different uses of the verbs 'slow', 'stop' and 'halt' are presented, in discussion of how drug treatments for dementia operate. In each instance, the news articles allude to the idea that dementia is a moving entity, which has echoes of the metaphor of DEMENTIA AS INVADER seen in Section 5.3, above. Within this metaphor, drug treatments are conceptualised as a barrier to the encroaching condition, and drugs might either slow down the advance, or terminate it altogether. Here and henceforth in the analysis, capital letters are reproduced from the original, usually denoting a headline or lead paragraph.

27. Alzheimer's **drug** that may slow condition hailed as 'glimmer of hope'; 'The headway being made through research is starting to give a real sense of the possibility that we could one day stop dementia in its tracks' (*Independent*, 2016)
28. Alzheimer's **drug** 'slows memory loss by a third'; A new Alzheimer's drug could dramatically slow the pace of memory loss in those with the disease, it was revealed on Monday. *(Daily Telegraph,* 2012)
29. SCIENTISTS have made a vital breakthrough in the fight against Alzheimer's disease by developing a **drug** that could stop it in its tracks. *(Express Online*, 2015; lead paragraph)
30. **DRUG** TO STOP ALZHEIMER'S: Experts hail crucial new breakthrough; DRUGS to reverse Alzheimer's could be just years away, scientists said last night. *(Express Online*, 2017; headline and lead paragraph)

31. Mental exercises have also shown promise in delaying memory loss, but the main aim of dementia research is a **drug** to halt the disease by preventing damage to neural tissue. *(The Times,* 2016)
32. Currently there is no **drug** that can halt this process. Solanezumab has generated excitement because it is the first drug to target the core pathological mechanism of the disease, rather than its symptomatic effects, and thus has the potential to halt its progression. *(Independent,* 2016)

The first two extracts utilise the verb 'slow' or 'slows' to depict how the drug in question might affect the progression of dementia. The 'Alzheimer's drug' that both extracts refer to is positioned in opposition to the movement of dementia. The first *Independent* article elaborates that the drug could 'stop dementia in its tracks' (ex.27), alluding to dementia as some form of object moving imminently closer, while the *Daily Telegraph* article talks of slowing 'the pace of memory loss' (ex.28), suggesting that memories are moving away from the individual and the drug keeps them in place. The movement is contained by the presence of the drug, such that the drug is a stable, resistant force protecting the individual from sudden harm. The low modality in both extracts is notable; 'may' (ex.27) and 'could' (ex.28) convey uncertainty about the outcome. In fact, across all 66 instances where 'drug' collocates with 'slow', modal verbs such as 'could', 'will', 'may' or 'might' are used 37 times to convey the likelihood of the action. From this we can determine that the Dementia News Corpus hedges its reporting of possible treatments, acknowledging the tentative nature of clinical research.

In the latter four extracts, the dementia drugs are likened to a blockade preventing dementia from spreading. The sense of movement is particularly explicit in Extracts 29 and 30: 'a drug that could stop it in its tracks' (ex.29) and 'drugs to reverse Alzheimer's' (ex.30). It is interesting to consider that neither the verb 'stop' nor 'halt' encompasses removing dementia from the brain. This might suggest that dementia itself is not being viewed as a discrete entity or presence, but more a movement or process that, once stopped, or sent in another direction, will be deactivated. Unlike the verb 'slow', which acknowledges that dementia drugs may not completely terminate the process, the verbs 'stop' and 'halt' suggest a definitive end point. In other words, the desire to 'stop' or 'halt' dementia seemingly alludes to a dementia cure – a time when dementia cannot progress any further. Although there is recognition that such a drug does not yet exist (ex.31 and ex.32), a drug to 'stop' or 'halt' dementia is set up as the expectation of what a cure would look like.

There are also some strong evaluations of the keywords *drug*, seen in the collocates 'breakthrough' and 'wonder'. To describe a drug as a 'breakthrough' or a 'wonder' is to suggest it is the miracle we have been waiting for, and hopes are raised about its effectiveness. As noted at the start of this chapter, news reporting of medical stories typically presents treatments as 'breakthroughs' or 'cures', thus generating interest and establishing newsworthiness, but these descriptions may be misleading and inaccurate (Wilson *et al.*, 2009). When 'breakthrough' and 'wonder' collocate with the keyword *drug*, this typically occurs in either the headline or lead paragraph, or both. In figures, this equates to 27 out of 40 instances (67.5%) of the collocation of 'breakthrough' and *drug*, and 17 out of 30 instances (56.7%) of the collocation of 'wonder' and *drug*. Some examples are given below.

33. **Drug** could be breakthrough for Alzheimer's; Dementia experts hail 'real hope' for disease victims *(Daily Telegraph,* 2016; headline)
34. A BREAKTHROUGH **drug** has been shown to halt or even reverse the devastating progression of Alzheimer's disease. British scientists said the twice-daily pill slowed mental decline by an average of 85 per cent. *(Daily Mail,* 2016; lead paragraph)
35. New 'wonder' **drug** can significantly slow the progress of Alzheimer; A NEW wonder drug developed in Britain has shown in experiments that it can significantly reduce the progression of Alzheimer's. *(Express Online,* 2016; headline and lead paragraph)
36. Millions could be offered wonder **drug** to prevent Alzheimer's before symptoms appear. *(Express Online,* 2016; headline)

The headline and lead paragraph are designed to catch the reader's attention and capture the story within one or two sentences (Bell, 1991). This is achieved using rhetorical devices such as alliteration, hyperbole, and pseudo-direct quotes. Clearly the words 'breakthrough' and 'wonder' constitute hyperbolic language, drawing the reader in with dramatic statements that suggest a cure for dementia. Even if the article goes on to hedge or refute the claim that a drug is a 'breakthrough' or a 'wonder', the impact of this language at the start of the article raises hopes of an effective and immediate treatment. We also see pseudo-direct quotes, establishing legitimacy within the story. The use of quotation marks around '"real hope"' (ex.33) and '"wonder" drug' (ex.35) imply that these descriptions are attributable to a professional source, presumably the scientists whose research is being reported. This suggests that it is the expert

scientists who have made the evaluation of these treatments as a 'breakthrough' or 'wonder', again lending credibility to the claims and establishing the news story as accurate and truthful.

This type of sensationalism of research findings gives the lay audience inaccurate representations of scientific developments, but it has been argued that researchers benefit from these news stories, because this type of reporting can generate research funding and increase awareness of the need for research (Shuchman & Wilkes, 1997). In the examples above, we can see the excitement generated around the drug discoveries, promoting support for the research. The 'breakthrough' drugs are framed as the antidote to the 'enemy' that is dementia: people with dementia are 'victims' (ex.33) and the impact is described as 'devastating' (ex.34). Consequently, the need for these drugs is emphasised in order to protect and save people with dementia. Figures are used to heighten the sense of need, too: 'millions' (ex.36) of people will benefit. The anonymity and vagueness implies an uncountable number, underscoring the importance of the discovery of this 'wonder drug'. The statistic given in the *Daily Mail* extract, 'slowed mental decline by an average of 85 per cent' (ex.35), seemingly suggests a very high success rate in the research trial. Reading further in the article reveals that only 82 participants took part in the trial. Nonetheless, the sensational and hyperbolic language used to report on 'breakthrough' and 'wonder' drugs amasses support for the research agenda, even if the actual information communicated is somewhat inaccurate.

With such a predominant focus on pharmaceutical treatments and drug discoveries, there is a relatively sparse depiction of alternative forms of treatment, namely psychosocial interventions that might help to enhance wellbeing and mood (Cullum, 2013). Within the top 500 strongest keywords, *therapy* (frequency=471; keyness=1,123.86) was the only keyword relating to the treatment of dementia whose meaning encompassed more than exclusively medicinal treatments (the keyword *therapies*, intriguingly, focused predominantly on drug options, as in 'new drug therapies for Alzheimer's' (*Daily Mail*, 2016)). The collocates of *therapy* are listed in Table 5.13, offering a glimpse into the types of non-drug options presented in the Dementia News Corpus. Alongside medicinal treatments (hormone replacement therapy; gene therapy; androgen deprivation therapy), there are mentions of alternatives: 'music', 'groove' (referring to a type of dance therapy), 'reminiscence', 'validation', 'stress', 'cognitive', 'mindfulness', 'exercise', 'recreational', 'behavioural', 'cbt'.

*Table 5.13: Top 30 lexical collocates of* therapy, *listed in order of log likelihood, with collocation frequency in brackets*

| **Lexical collocates of *therapy* (+/- 5 words)** |
|---|
| hormone (44), music (43), gene (40), replacement (20), groove (13), androgen (13), reminiscence (14), effective (21), patients (29), deprivation (12), validation (9), drug (21), treatment (20), doll (9), stress (13), cognitive (15), dementia (37), taking (13), classes (7), mindfulness (6), stop (11), dolls (6), prostate (7), testosterone (6), exercise (10), recreational (5), modifying (6), experimental (6), behavioural (6), cbt (4) |

What can we deduce from these collocates about the representation of non-pharmaceutical dementia treatments in the Dementia News Corpus? The low frequencies are telling; 'music therapy', for instance, is only mentioned 43 times throughout a corpus of over two million words. Compared with the much higher frequencies of collocates referring to pharmaceutical options (for example, 'Alzheimer's drug' (n=325)), there seems to be a preference in the Dementia News Corpus to talk about drug options for dementia at the expense of other forms of treatment. Of course, the variety of non-pharmaceutical treatments means that corpus methods may not readily identify where they are being discussed. This is a limitation of the methodology whereby low frequency words of similar meanings may contribute to the same discourse or theme, but may be overlooked. However, the obvious saliency of the keywords relating to pharmaceutical treatments for dementia, and their uses in the corpus as explored in this section, indicate a particular prominence given to drug interventions, contributing to the overwhelming discourse of biomedicine within the corpus.

## 5.5 A cure for dementia

At the present time, there is no cure for dementia, although this is the ultimate goal of clinical research (Alzheimer's Society, 2017b). Because dementia is caused by different diseases, a single "cure" is unlikely (NHS, 2018). Research continues to investigate cures for the diseases that cause dementia, such as Alzheimer's disease, but current scientific understandings of these diseases indicate that a cure is not close (Dening & Babu Sandilyan, 2015c). Plans to identify possible cures have been set out by various bodies: the Alzheimer's Society's current strategy plans to increase funding into dementia prevention, care and cure research by 2022 (Alzheimer's Society, 2017c); the G8 Dementia Summit committed to finding a cure or disease-modifying therapy by 2025 (Department of Health & Social Care, 2013); and the UK

Government reiterated this commitment in their recent Challenge on Dementia 2020 (Department of Health, 2015). This makes the keyword *cure* (frequency=1,009; keyness=3,918.64) an intriguing word to pursue, to understand how the news media frames this important and elusive concept.

The news media is a major source of information for the public on medical research and advances (Wilson *et al.,* 2009). Because of this influence on public understandings of health and illness, there is the potential for the media to create false hope regarding treatment and cures for chronic illnesses (Passalacqua *et al.,* 2004). For instance in the reporting of cancer, Lewison and colleagues (2008) observe that over-reporting of drug discoveries is often misleading, and creates expectations among members of the public that are likely to be unmet. If the news media focus on successful treatments at the expense of discussions of drug failures, end-of-life care or death, people with terminal illnesses may obtain inappropriately optimistic views of their prognosis (Fishman *et al.*, 2010).

*Table 5.14: Top 30 collocates of* cure*, listed in order of log-likelihood, with collocation frequency in brackets*

| **Lexical collocates of *cure* (+/- 5 words)** |
|---|
| find (133), dementia (196), alzheimer's (171), currently (64), disease (114), finding (59), search (49), known (46), treatment (45), 2025 (29), effective (32), found (42), hope (27), prevention (19), treatments (24), research (38), scientists (25), fund (14), drugs (22), way (23), condition (23), help (25), drug (21), said (36), reverse (10), hunt (11), treat (13), trying (12), fight (11), develop (14) |

There are 541 collocates of *cure* in the Dementia News Corpus, of which the top 30 lexical collocates are presented in Table 5.14. Deviating slightly from an analysis of the lexical collocates only, it is worth pointing out that the strongest overall collocate of *cure* is the determiner 'no' (frequency of collocation=296; log likelihood=2,598.45). Given that there is not yet a cure for dementia, this determiner has particular resonance in informing on the evaluation of a cure in the corpus. The Dementia News Corpus expresses different levels of modality in informing on the absence of a cure, giving rise to expectations for the future about the development of a dementia cure. Table 5.15 lists the frequent clusters (recurrent fixed expressions; see Section 3.2.4) seen in the collocation of *cure* and 'no' in relation to the existence of a cure.

*Table 5.15: Clusters relating to the existence of a cure in the collocation of* cure *and 'no'*

| Cluster | Frequency |
|---|---|
| there is no cure | 108 |
| there is currently no cure | 45 |
| no known cure | 41 |
| still no cure | 16 |
| has no cure | 11 |
| has no known cure | 4 |
| presently no cure | 1 |

Taking several examples from the corpus to illustrate these clusters in context, Extracts 37-42 shed light on the ways that the Dementia News Corpus evaluates the likelihood of a dementia cure. The most frequent cluster, 'there is no cure', expresses the situation as an indisputable fact. There is no mitigation or ambiguity. In many cases, the clause functions as a single sentence, as in Extract 37 below. The short, simple sentence is easily comprehensible (Van Dijk, 1983), and in the case of Extract 37 the single clause sentence contrasts syntactically with the more complex preceding sentence structure, foregrounding the information. Lacking a source or other background information, the single sentence 'There is no cure' renders the statement presumed to be generally known, and therefore incontestable (Cotter, 2010). The effect is that the statement is highlighted as being significant, and at the same time irrefutable. On the other hand, the conjunction in Extract 38 ('while') somewhat mitigates the statement, diverting attention away from the absence of a cure and re-orientating the reader to the ways in which treatment and care can alleviate the challenges of dementia.

37. More than 800,000 people in the UK have some form of the disease and 86 new cases are diagnosed daily. That is 31,390 worlds shattered every year. And there is no **cure**. *(The Sun,* 2014)
38. While there is no **cure** for many forms of dementia, it is possible to improve lives and save costs. Timely diagnosis and support could also help. *(The Guardian,* 2015)
39. There is currently no **cure** for Alzheimer's disease and even diagnosing the condition can take years of tests. *(Independent,* 2015)

40. There is presently no **cure** for dementia. But research has uncovered ways we can all decrease our risk. *(Daily Mirror,* 2012)
41. Currently, there is no known **cure** for Alzheimer's which causes nerve cell death and tissue loss throughout the brain leading to dementia. *(Express Online,* 2017)
42. Still no **cure**, but the discovery of a simple advance warning test for Alzheimer's holds great promise *(Independent,* 2014)

Temporal adverbs also mitigate the statement that there is not a cure for dementia by introducing an element of uncertainty. Within the traditions of systemic functional linguistics, these adverbs serve as adjuncts of temporality – that is to say that they relate to time, either relative to the present ('currently', 'presently'), or to an expectation of when an occurrence might take place ('still') (Halliday & Matthiessen, 2013). To demonstrate, the adverbs 'currently' (ex.39) and 'presently' (ex.40) orientate the reader to the present time, within which 'there is…no cure'. In doing so, the statements allude to a possible time in the future when a cure might exist. In Extract 41, this idea is reinforced through the adjective 'known' to imply that there could be a currently unknown cure in existence, awaiting discovery. Similarly, the adverb 'still' (ex.42) evaluates expectations regarding a cure, situating the absence of a cure in the present day relative to an expectation of when a cure should have been developed. In other words, the phrase 'still no cure' implies that the lack of a cure is contrary to previous predictions, and that there is a possibility that a cure could exist in the future. These temporal adverbs mitigate the lack of hope conveyed in the statement 'there is no cure'. By positioning the situation in relation to possible future outcomes or to past expectations, the news articles suggest that although a cure does not exist at the current time, there is reason to expect one in the future.

The likelihood of the scientific development of a cure for dementia is also evaluated through the use of metaphor. We can see from Table 5.14 that the collocates 'find', 'finding', 'search', 'found' and 'hunt' all originate from a similar semantic category, that of looking for or locating. It may initially seem unremarkable that the news media draw upon this language; the literal meaning of these verbs suggest discovering something, either deliberately or unexpectedly, which is currently hidden or lost. In that sense, these verbs are fairly accurate in describing the state of scientific discovery in relation to a cure. Nonetheless, the language of 'finding', 'searching' or 'hunting' implies that what is being looked for (a cure for dementia) is a tangible, physical, pre-existing entity that simply needs to be located. Our current scientific understanding is that there will be no single cure for dementia, since it is caused by many

different diseases or brain injuries, and regardless, that preventative action or treatment rather than a complete post-diagnosis cure is much more plausible (Lock, 2013). So the metaphors of finding and searching that are so prominent in the news media set up a misleading expectation that a single cure for dementia will be identified in the near future. Extracts 43-48 below give a flavour of the variety of ways these collocates are used:

43. Unprecedented breakthrough in the hunt for a dementia drug within 'five years'; Senior British researchers spearheading efforts to find a **cure** say that research has entered 'a new era' *(Independent,* 2013)
44. They believe the drug could be the first stepping stone to finding a **cure** for the, as yet, incurable condition. (*Express Online*, 2016)
45. Yet, while scientists edge towards finding a **cure**, the onus remains on improving the quality of life for those with the condition. *(The Guardian,* 2015)
46. A **cure** for dementia could be found within five years, the leader of the global council on the disease has said. (*Daily Telegraph,* 2016)
47. Scientists have broken new ground in the search for an Alzheimer's **cure** by discovering a new potential cause of the disease which could be targeted with drug treatments. (*Independent*, 2015)
48. Doctors today hailed the results as the biggest advance in the hunt for a **cure** for the disease in decades. *(Express Online,* 2015)

The implication in these extracts is that a dementia cure exists somewhere in the world, waiting to be revealed. This idea is established through repeated references to movement or a journey. For instance, 'edge towards' (ex.45), 'the biggest advance' (ex.48) point to a sense of movement from one destination to another. In some of these cases, the metaphor captures the idea that this is uncharted territory, with researchers taking 'the first stepping stone' (ex.44) and breaking 'new ground' (ex.47). The development of a cure is likened to a 'hunt' in Extracts 43 and 48, which positions the scientists and researchers as 'hunters', with connotations of power, expertise, and potentially weapons. There is an indication that locating a cure will be arduous, and may require patience. It is notable that the movements mentioned in these extracts are minimal: 'scientists edge towards finding a cure' (ex.45) indicates that, although they are moving in the right direction, they may not reach their destination for some time. By suggesting that a dementia cure exists somewhere on a journey or hunt, and that through hard work it will be discovered, the news media generate hope that at an unknown time in the future, a dementia cure will be available.

In the above extracts, there is also the occasional nod towards a military metaphor ('spearheading' (ex.43); 'targeted' (ex.47)). In fact, this trope is fairly common in discussions of 'finding' or 'searching' for a cure, and further concordance analysis reveals a variety of ways in which the search for a dementia cure is militarised:

49. EFFORTS to find a **cure** for dementia are lagging decades behind the fight against cancer, experts warned yesterday. *(Express Online*, 2013)
50. The search for a **cure** goes on, albeit with resources a quarter of those directed towards cancer. David Cameron has been advised to emulate the "war on cancer" that Richard Nixon advocated in 1971 (*The Times*, 2013)
51. Mr Hunt said: "Dementia can be a horrific and heartbreaking disease, but it is my mission as Health Secretary to make this country…a global leader in the fight to find a **cure**. *(Independent*, 2014)
52. With some drug companies reportedly downgrading the search for treatments for Alzheimer's disease, donated brains could help in the battle to find a **cure** for this and other degenerative diseases. *(Sunday Express*, 2012)

As already argued previously in this chapter, the language of warfare to describe disease is commonplace – consider the "war on cancer" or "war on AIDS" (Sontag, 1978). In the "fight" against cancer, society contributes vast amounts of money to find effective treatments, and these treatments are also grounded in military language: 'patients are "bombarded" with toxic rays. And chemotherapy is chemical warfare, using poisons' (Sontag, 1978, p. 65). The use of military metaphors in discussions of dementia have been identified throughout the media – consider the Alzheimer's Society slogan, 'Leading the fight against Alzheimer's disease' (Alzheimer's Society, 2018). Such military metaphors can be effective in generating political support and funding (Lane *et al.*, 2013), although there are downsides too; constructing dementia as a battle identifies a single enemy (the disease) and implies that a single cure will be possible (George *et al.*, 2016). Furthermore, since dementia predominantly affects older people who may have other illnesses, many people with dementia are not in a position to 'fight' (Lane *et al.*, 2013). In the Dementia News Corpus, however, it is the scientists who are presented as fighting to find a cure; people with dementia are excluded from the process. The metaphors of a dementia search and of a battle are conflated so that the discovery of a cure is both an arduous journey and a war between science and dementia. In both cases, the objectification of a dementia cure lends credence to the idea that a cure already exists in the world and will at some point in the future be revealed.

## 5.6 Conclusions

This chapter has interrogated the prevalence and construction of a biomedical discourse within the Dementia News Corpus. Signalled as pervasive in the survey of Chapter 4, the discourse of biomedicine was used in the corpus to conceptualise dementia as a clinical syndrome, to articulate dementia pathology and foreground science and medicine as the solution to dementia. A biomedical model dominates news media reporting of illness (Kline, 2011; Lupton, 2012) and has received much criticism for inaccurately representing clinical research (Schwitzer, 2008). Nonetheless, a biomedical model of disease in the news media highlights the need for research to the lay public, thus amassing support for the research agenda (Shuchman & Wilkes, 1997).

This chapter began by examining the labels attributed to dementia, arguing that labels for and definitions of the syndrome are grounded in a biomedical understanding. The chapter then turned to the description of dementia pathology, exploring dominant conceptualisations of the dementia brain. Emerging from this analysis was a concern with the treatment options for dementia, in particular pharmaceutical treatments to the exclusion of alternative psychosocial interventions. The news media's evaluation of treatments for dementia depicted a cure as a tangible reality which, the chapter argued, might create false hopes among readers. In summary, the chapter shed light on the dominant discursive construction of dementia as a biomedical phenomenon with tangible treatment outcomes.

The following chapter moves away from this examination of the clinical pathology and treatment of dementia to consider how the symptoms of the syndrome are articulated and depicted.

# Chapter 6: Memory and forgetting

## 6.1 Introduction

The initial survey of the Dementia News Corpus in Chapter 4 highlighted a number of keywords pertaining to the symptoms of dementia. Keywords relating to memory and its loss were particularly overly represented in the corpus, indicating an extended focus on memory loss at the expense of other potential symptoms of dementia. In terms of statistical saliency, the keyword *memory* ranked as the seventh strongest keyword across the whole corpus, occurring 4,258 times and featuring in 1,480 texts, out of the total 3,022 articles. This means that almost half of all the articles in the corpus mention memory at least once. This high saliency singles out *memory* and its related keywords (see Table 6.1) as a concept deserving of further investigation, evidencing a potential discourse of memory loss in the corpus.

*Table 6.1: Frequency and keyness of keywords relating to memory loss*

| Keyword | Frequency | Keyness |
|---|---|---|
| *memory* | 4,258 | 15,649.24 |
| *memories* | 643 | 1,594.88 |
| *forgetting* | 232 | 654.48 |
| *forgetfulness* | 113 | 569.60 |
| *forgetful* | 111 | 530.49 |

In Chapter 2, several of the symptoms of dementia were discussed, with reference to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM5) (American Psychiatric Association, 2013). DSM5 outlines that a neurocognitive disorder such as dementia would be indicated by a significant decline in one or more of the following cognitive domains: complex attention, executive ability, learning and memory, language, perceptual motor ability, and social cognition. This definition and guidance encompasses a variety of symptoms without favouring or biasing any particular impairment, reflecting the fact that the many diseases that cause dementia can affect many cognitive abilities. This marks a substantial shift away from the previous version of the manual, DSM-IV, which included memory impairment as a necessary criterion in the definition of dementia (American Psychiatric Association, 2000) . In other words, it is now understood that dementia entails more than just memory loss, as indeed

it may not even be present in the early stages of certain dementias such as frontotemporal or vascular dementia (Sachdev, 2013).

Nonetheless, Basting (2009) suggests that memory loss remains the key symptom culturally associated with dementia. The forthcoming chapter supports Basting's assessment, showing an overwhelming preoccupation in the news media with memory loss above other symptoms of dementia. Words denoting other cognitive abilities affected by dementia, such as thinking, language, judgement, behaviour or sequencing (American Psychiatric Association, 2013) did not appear as keywords at all in the corpus. This reflects the fact that they were not overly represented in comparison with general British English, while *memory* was the seventh strongest keyword, illustrating a prevalent concern with this aspect of dementia.

Memory is a highly abstract and complex phenomenon, and has been the focus of a wealth of psychological, neurological, sociological and philosophical interrogation (Nikulin, 2015). We talk of memory using a single word, which might lead us to assume that memory is a singular capacity or structure, but actually the act of remembering (and its counterpart, forgetting) is made up of multiple complex processes across different areas of the brain (Weisberg & Reeves, 2013).

There are three processes involved in human memory: encoding the information, storing the information, and retrieving it (Henderson, 1999). Memories are comprised of different types, namely short-term (or working) memories and long-term memories (Atkinson & Shiffrin, 1968; Baddeley & Logie, 1999). Within this taxonomy, there are sub-types of memory 'systems', namely episodic, semantic, procedural and working memory (Budson, 2011). Episodic memory is that which recalls specific episodes of one's life, such as seeing a friend last week. Semantic memory entails general and factual knowledge, such as that a banana is yellow, while procedural memory relates to the ability to recall how to do things, such as how to operate a car or use a knife and fork. Working memory, lastly, is the ability to temporarily maintain information for a very short time, such as the digits of a phone number. Each of these memory 'systems' is processed across different and multiple areas of the brain (Caygill, 2010), and thus will be affected in different ways by the various diseases that cause dementia. For instance, Alzheimer's disease poses challenges for episodic memory, such that it may be harder to recall whether one has taken their medication, while dementia with Lewy bodies disrupts procedural memory, meaning that an individual may lose a previously learned skill such as knitting (Budson, 2011).

Traditionally, memory has been viewed as a vital part of establishing identity (Rowlands, 2016). That is to say that a person's memories play a key role in making them who they are (Rutherford & Bruno, 2016). From this assumption, however, it follows that a loss of memory equates to a loss of self (Basting, 2009). This relates to what Post (2000) calls a 'hypercognitive culture', meaning the expectation that humans will have perfect rationality and clarity of mind, and anyone whose cognitive functioning does not meet this criteria may be cast aside. Some memory loss is normal in older adults (Schacter, 2001), but there are enormous cultural fears surrounding it. Basting (2009) reflects on the number of books and articles offering to improve one's memory, transforming a natural part of the human condition into something to be reviled. This anxiety surrounding memory loss feeds into fears of dementia, such that any type of memory loss is interpreted as pathological, a symptom of disease rather than natural ageing (Hughes & McCormick, 2014).

This chapter will utilise a similar analytical approach to that demonstrated in Chapter 5 to interrogate the representation of memory loss in the Dementia News Corpus; the corpus tools of collocation and concordancing are used to guide the analysis in the direction of the most salient linguistic patterns. The analysis begins with a consideration of the keywords *memory* and *memories,* before moving on to look at the related keywords stemming from the lemma *forget*, and finally drawing out emerging themes across all five keywords.

## 6.2 Memory and memories

As the seventh most 'key' word in the Dementia News Corpus, *memory* (and its less salient plural *memories*) is a sensible point of departure to evaluate discursive constructions of memory loss in the corpus. In a similar way to the methodological approach of the previous chapter, the high frequencies of *memory* and *memories* necessitated the use of collocation analysis to assist in the identification of repeated patterns of language. The lexical collocates of *memory* and *memories* are listed in Table 6.2 and 6.3

*Table 6.2: Top 30 lexical collocates of* memory*, listed in order of log-likelihood with frequency of collocation in brackets*

| **Top 30 lexical collocates of *memory* (+/- 5 words)** |
|---|
| loss (939), problems (538), thinking (311), term (247), short (169), tests (195), symptoms (199), brain (281), decline (169), skills (123), learning (119), confusion (109), include (112), people (235), lapses (60), cognitive (117), clinic (73), dementia (263), alzheimer's (215), long (113), test (94), changes (89), impairment (70), function (76), clinics (51), improve (76), mild (73), associated (73), ability (70), difficulties (50) |

*Table 6.3: Top 30 lexical collocates of* memories*, listed in order of log-likelihood with frequency of collocation in brackets*

| **Top 30 lexical collocates of *memories* (+/- 5 words)** |
|---|
| term (44), back (35), create (22), long (34), lost (26), make (30), new (35), go (25), bring (18), have (45), some (26), stored (10), happy (15), trigger (13), hippocampus (12), short (14), many (20), recent (13), brain (27), help (21), people's (10), alzheimer's (30), try (10), time (18), together (11), patients (17), dementia (32), people (23), old (13), more (19) |

The collocates listed above signal a number of intriguing and salient uses of the keywords *memory* and *memories*. For one thing, the clinical register evoked and explored in the previous chapter is visible here with references to 'tests', 'brain', 'cognitive', 'clinic' and so on. The collocates reveal a distinction between 'short term memory' and 'long term memory', suggesting that the structure of memory processing is potentially discussed in the corpus. Collocates relating to other abilities that might be affected by dementia ('thinking', 'learning', 'confusion') indicate that memory difficulties may be presented along with other symptoms of dementia. However, it must be recalled that other cognitive abilities such as thinking and learning which are affected by dementia do not appear as keywords in the Dementia News Corpus, emphasising that memory as a concept appears significantly more frequently than any other symptom of dementia. As the forthcoming analysis argues, the extended focus on memory above other possible symptoms reflects anxieties surrounding this specific aspect of the syndrome and points to what might be described as a memory-loss discourse that heightens fear of this specific symptom.

### 6.2.1 Anxieties of memory loss

Memory as a symptom of dementia is most often lexicalised through the construction 'memory loss' (n=863), followed by 'memory problems' (n=367). Other near-synonymous collocates include memory 'decline', 'impairment' and 'difficulties'. Focusing on the most frequent of these, the concept of 'memory loss' is constructed around a sense of fear and anxiety, which is realised through a variety of lexical and grammatical features. A selection of extracts showing the phrase 'memory loss' in context are reproduced below to illustrate some of the more common uses.

1. Dementia describes a set of cognative [*sic*] impairments that may include **memory loss** and difficulties with problem-solving or language. Dementia is caused when the brain is damaged by diseases, such as Alzheimer's or a series of strokes. *(The Times, 2016)*

2. Current research suggests that the disease sees protein fragment plaque build outside of nerve cells and another protein develop into tangles inside. The result are cells that become damaged and die, contributing to **memory loss**, confusion, behaviour *[sic]* changes and eventually death. *(Daily Mail, 2015)*

3. The plaques - built up of amyloid-beta peptide - are believed to trigger the death of neurons leading to **memory loss** and other devastating symptoms of dementia. *(Express Online, 2016*)

4. Alzheimer's symptoms such as **memory loss** could be prevented by targeting a chemical that dismantles brain connections, research suggests. *(Independent, 2012)*

5. The wonder drug is credited with saving tens of thousands of lives in recent years. Now research is proving the link between heart health and protecting the brain from the ravages of **memory loss** and associated miseries. *(Express Online, 2012*)

6. Alzheimer's disease, the most common form of dementia, is an incurable degenerative disease which can cause **memory loss**. *(Express Online, 2017)*

Having already established through statistical measures that 'memory' is discussed significantly more often than other symptoms of dementia, these examples demonstrate the overwhelming concern with memory loss in news reporting of dementia. 'Memory loss'

frequently appears as part of a list of symptoms, as Extracts 1-3 indicate: 'impairments that may include memory loss and difficulties with problem-solving or language' (ex.1). The positioning of 'memory loss' as the first item in this list is representative of its use across the corpus; when 'memory loss' appears alongside a list of other symptoms, it is most likely to be placed at the start. There are 68 instances of variations of the phrase 'symptoms include memory loss', followed by either a comma or the conjunction 'and' and a list of other symptoms. Additionally, there are various other constructions like 'such as memory loss…' (n=12) and 'leading to memory loss…' (n=9), in which memory loss is positioned first and is followed by other symptoms. In comparison, there are just 14 occurrences throughout the corpus in which 'memory loss' is listed after another symptom. For example, the *Sunday Times* (2012) writes, 'Early symptoms include confusion and memory loss leading to a gradual decline in cognitive ability'. The infrequency of this syntactical construction in favour of foregrounding 'memory loss' at the start suggests that memory loss is considered to be a defining feature of dementia.

Memory loss is consistently referenced in discussion of symptoms of dementia, while the symptoms that are presented in accompaniment may vary. In the extracts above, *The Times* lists 'memory loss and difficulties with problem-solving or language' (ex.1) as additional symptoms, while the *Daily Mail* cites 'memory loss, confusion, behavior [*sic*] changes and eventually death' (ex.2). Other variations include 'memory loss, mood changes and communication problems' (*Express Online*, 2016), 'memory loss, difficulty in performing simple tasks, disorientation, misplacing things, problems with language and mood changes' (*Daily Mirror,* 2014) and 'memory loss, problems with swallowing, change in personality and behaviour and difficulty with language and communication' (*Daily Mail,* 2016). This is indicative of the variation of dementia symptoms presented, but crucially the phrase 'memory loss' remains consistent. In other words, 'memory loss' is a constant and stable way of signalling the symptoms of dementia, even where other symptoms listed may vary.

Moreover, 'memory loss' often appears as the only given symptom, as illustrated in Extracts 4-6. The *Independent,* for instance, writes of 'Alzheimer's symptoms such as memory loss' (ex.4). The phrase 'such as' points to memory loss as the exemplifying feature of dementia, such that there is no need to provide other examples. In Extract 5, 'memory loss' is explicitly cited while the other symptoms are vaguely and indeterminately described as 'associated miseries'. The news media cannot write everything about every issue, not least because of word limits in newspaper articles, so certain aspects will be included and others left

out (Wallack *et al.*, 1993). News stories thus may invoke stereotypes, reporting in a way that fits with the expectations and assumptions readers might hold (Bednarek & Caple, 2017). By repeatedly associating dementia with memory loss in this exclusive way as shown in Extracts 4-6, the Dementia News Corpus reproduces and sustains this stereotypical portrayal that memory loss is the key symptom of dementia. The recurrent emphasis on memory loss indicates that it is perceived as the worst of all symptoms.

In the Dementia News Corpus, memory loss is presented as the direct result of dementia. While it is true that dementia does impair memory functioning (American Psychiatric Association, 2013), the articles in the news corpus reduce this process into a simple cause and effect relation, so that the possibility of memory loss as a result of normal ageing is obscured. This point can be illustrated by examining transitive processes (introduced in Section 3.3.3). Transitivity is concerned with how processes and entities are referred to and interact with one another (Hart, 2014). The extracts presented above contain a variety of verb phrases that indicate transitive material processes, which means an 'actor' (dementia) acts upon a 'goal' (memory loss) (Thompson, 2013). The verb phrases 'contributing to' (ex.2), 'leading to' (ex.3) and 'cause' (ex.6) are all examples of transitive material processes. Here, the diseases that cause dementia are the 'actors' and memory loss is the 'goal': 'Alzheimer's disease…is an incurable degenerative disease (*actor*) which can cause (*transitive material process*) memory loss (*goal*)' (ex.6, my notes in brackets and italics). This phenomenon is seen across the corpus, with related constructions including 'cause/s/ing memory loss' (n=44), 'lead/s/ing to memory loss' (n=20) and 'trigger/s/ing memory loss' (n=6). The transitive material processes presented here simplify the clinical progression of dementia into a cause and effect relation: dementia causes memory loss. This assertion ignores the reality that memory loss in older adulthood is normal (Schacter, 2001), and instead implies that memory loss is only a pathological sign of disease.

The articles in the Dementia News Corpus construct memory loss as a source of intense fear and anxiety, illustrated not only in the almost exclusive focus on this one symptom but also in the way it is sometimes presented as a separate health concern to dementia. There are 24 examples of 'memory loss' linked with the conjunction 'and/or' in connection with dementia, as the extracts below demonstrate (the conjunctions are underlined for clarity):

7. Poor sleep could allow the brain to become clogged with toxic proteins heavily implicated in **memory loss** and Alzheimer's disease, according to research. *(The Times,* 2015)

8. Four of the surviving team members from England's 1966 World Cup winners are now reported to be suffering from dementia or **memory loss**, including the former Manchester United midfielder Nobby Stiles. *(The Guardian,* 2017)

The conjunctions 'and' and 'or' as underscored in Extracts 7 and 8 serve to separate 'memory loss' from 'Alzheimer's disease' or 'dementia', depicting them as two distinct concepts. This is bizarre given that memory loss is directly attributable to dementia in both contexts; to differentiate is to suggest that a person might have one or the other, but that to have both together is immeasurably worse. Separating these two concepts intensifies the drama of the news story, since it is implied that the individuals in question are experiencing not one but two serious health conditions. This adds to the superlativeness (Bell, 1991) of the news story by extending the scale and impact of the situation. 'Memory loss' is promoted to a medical ailment in its own right rather than a symptom of disease. In fact, 'memory loss' is described as a disease on five occasions. For example:

9. David, who shot to worldwide fame as Keith in 1970s musical sitcom The Partridge Family, has first-hand experience of just how cruel the degenerative **memory-loss** disease can be. Dementia claimed his beloved mother Evelyn, a former actress and a great beauty of her day. *(The Sun*, 2017)

By describing memory loss as a 'disease', it is transformed into an isolated medical condition. In a similar way to the examples above which focus solely on memory loss as a symptom, the phrase 'memory-loss disease' obscures other aspects of dementia, implying that this is the most important, or even exclusive, feature of the syndrome. Moreover, such a conceptualisation imagines memory as a specific, discrete entity within the body, perhaps even an organ in its own right that can become diseased like the lung can be damaged by cancer (Brockmeier, 2014). As proposed by Brookes and colleagues (2018), the terminological inconsistency in the news media's labelling of dementia results in a confusion regarding what dementia actually is. Reference in the Dementia News Corpus to a 'degenerative memory-loss disease' creates uncertainty and inconsistency by conflating a symptom with the overall syndrome. The effect is that anxiety is heightened around this one specific symptom of dementia, indicating that the news media perceives memory loss to be the worst aspect of dementia. The discourse of

memory loss represents this symptom as the core or exclusive feature of dementia, thus assuming that memory loss is always indicative of pathological decline and supporting Post's (2000) argument that we live in a 'hypercognitive culture' whereby any sign of cognitive decline automatically relegates and excludes the individual from 'normal' society.

### 6.2.2 Metaphors of memories and memory loss

The analysis in Chapter 5 detailed that metaphor is a useful linguistic device readily drawn upon to articulate abstract or complex concepts and experiences (Demmen *et al.*, 2015). Chapter 5 explored various metaphors that were used to communicate the internal workings of the human brain, as well as the notion of a dementia cure. Metaphors made it possible for the news media to explicate these theoretical concepts in a way that a lay audience could relate to (Boyd, 1993). In a similar and unsurprising vein, the abstract concept of memory also necessitates the use of metaphor.

Memory is not a single discrete entity, nor does it take place within a single location in the brain (Rose, 2010). Its intangibility makes it elusive to study and tricky to define. The early Christian philosopher and theologian St Augustine (354-430 AD) wrote in his *Confessions* that memory is 'a spacious palace, a store-house for countless images', and this metaphor of memory as a storage system took root as a way of conceptualising the process of memory (Tell, 2006). We talk of memories being 'stored' and 'retrieved' (Weisberg & Reeves, 2013), drawing on this conceptual understanding that a memory is a physical object that enters into a storage system. This metaphor can be extended to the various parts of the brain involved in memory processing; Budson (2011, p. 322), for instance, imagines different regions of the brain as the 'file clerk', the 'recent memory file cabinet' and the 'remote memory file cabinet'. This analogy helps Budson to explain how damage to different parts of the brain would affect memory in different ways. For example, if the 'file clerk' area is impaired, memories will be encoded incorrectly in the first place, whereas if the problem is with the 'recent memory file cabinet', it will be difficult to access recent memories. The storage metaphor is also used by the Alzheimer's Society in their information resources to explain dementia to the lay public; the brain is likened to a bookcase, with books representing memories that can be stored, retrieved, or knocked off the bookcase by dementia (Alzheimer's Society, 2017e).

As technology has developed, so too have the metaphors used to conceptualise memory. In particular, computers have provided a useful analogy not just for memory processes but for the brain as a whole (Boyd, 1993; Lytton, 2002). The implication for memory is that memory

should always remain in the system, in precisely the same condition in which it was stored, until we retrieve it (Schacter, 2001). However, many scholars have come to recognise that the metaphor of the brain as a computer is actually a misleading way of conceptualising it (Randall, 2007; Brockmeier, 2014). The brain can programme itself whereas a computer requires manual programming before it can begin (Carello *et al.*, 1984). Computers work by using logic and arithmetic, but the brain does not operate by logical rules (Edelman, 2006). In the context of memory and forgetting, Basting (2009) argues that this metaphor of the brain as a computer sets up the expectation that humans should remember everything, because digital technology allows us to do so. As we shall see later in this chapter, memory loss is a normal part of the human condition. Thus the metaphor of the brain as computer restricts our understanding of the processes within the brain and places an undue significance on remembering (Brockmeier, 2014).

The collocates of both *memory* and its plural *memories* signalled the presence of several potential metaphors. Adopting the same approach as laid out in Section 3.2.6, the full collocate lists were scanned to identify any words whose literal meanings seemed unusual or unlikely in the context of the corpus. These words were then considered in contextual detail to determine if they were being used as part of a metaphorical construction. Four metaphors emerged from this analysis, listed in Table 6.4 along with their corresponding collocates. The frequencies of these collocates are provided in brackets to give an indication the frequency of each metaphor, although it should be noted that, as the section below explains, these metaphors were visible in other forms in the full list of concordances.

*Table 6.46.2: Metaphors and related collocates of* memory *and* memories*, with frequency of collocation in brackets*

| ***Metaphor*** | ***Collocates*** |
|---|---|
| MEMORIES ARE FILES | stored (10) |
| MEMORY IS A COMPUTER SYSTEM | boost (34), restore (13), boosted (12), restored (11), power (11) |
| MEMORY LOSS IS A MOVING OBJECT | slow (37), rate (18), reverse (16), faster (12), slowly (11), slower (10), reversed (10) |
| LOST MEMORIES ARE STOLEN OBJECTS | robbing (26) |

From this initial metaphor identification, all concordance lines for the keywords *memory* and *memories* were manually searched for further examples of the four metaphors. Examples of each of these metaphors, selected based on their illustrative and extended use of the metaphor in question, are provided below in Extracts 10 to 17. The metaphorical expressions are underlined.

10. During deep sleep, brain waves move **memories** from the hippocampus the area of the brain that is involved in short-term memory to the prefrontal cortex at the front of the brain, where long-term **memories** are stored. (*Daily Mail*, 2015)

11. The findings suggest that people suffering from Alzheimer's might still be able to form new **memories** but struggle to call them to mind. This raises the prospect that drugs or electronic devices could target this broken retrieval system. (*The Times*, 2016)

12. To restore a human's specific **memory**, scientists would need to know the precise pattern for that memory. Alternatively, they could restore the brain to work in a way it used to before the injury or damage was caused. (*Daily Mail*, 2014)

13. We expect our brains to behave with the efficiency of smartphones, but scientists now say that our **memory** generally begins to fail at the tender age of 45. *(The Times*, 2015)

14. **Memory** loss in Alzheimer's patients has been reversed with a tailor-made combination of diet, medication and lifestyle changes, scientists claim. (*Daily Mail*, 2016)

15. Drug freezes dementia in its tracks: 'Breakthrough' discovery can stop **memory** loss (*Express Online*, 2016, headline)

16. There are roughly 35 million people in the world with this devastating, **memory**-robbing disease, and with an increasingly ageing population, this number is expected to rise to 115 million by 2050. (*The Observer,* 2013)

17. Dementia is like a light-fingered but utterly implacable thief: it steals our **memories**, our future, our sense of time and place, the words we use, the loves we cherish. (*Daily Telegraph*, 2013)

The metaphor of MEMORIES ARE FILES, and the broader conceptual metaphor of the BRAIN IS A STORAGE SYSTEM, is evident across the corpus. The brain is imagined as a physical location within which memories are securely stored and retrieved. Memories are 'stored' (ex.10) and called up using the 'retrieval system' (ex.11). Other variations include 'a key site of information exchange and storage' (*Express Online*, 2016) and 'the brain's memory hub' (*Daily Mail*, 2014). Within this filing system, memories are files or items to be stored away; they can be 'move[d]' (ex.10), 'stored' (ex.10) and 'call[ed]…to mind' (ex.11). This metaphor constructs memories as tangible objects that exist somewhere in the mind. Notably, the metaphor implies that memories are still 'there' within the storage system but they cannot be accessed because of a system fault. The metaphor of the BRAIN IS A STORAGE SYSTEM can thus be adapted to the context of dementia, perhaps to elaborate that DEMENTIA IS A STORAGE SYSTEM FAULT THAT DISRUPTS THE RETRIEVAL OF MEMORY FILES. This metaphorical schema has positive consequences for the conceptualisation of the individual with dementia. If we understand memory to be a reflection of self (Rutherford & Bruno, 2016), then this metaphor underscores that memories remain with the person, regardless of whether or not they can be expressed.

Extending and modernising the metaphor of MEMORIES ARE FILES, we see evidence of MEMORY IS A COMPUTER SYSTEM, based around the conceptual metaphor of the BRAIN IS A COMPUTER. Here the language of technology permeates, with reference to the possibility to 'restore' the brain and memory to previous functioning (ex.12), and the likelihood that the memory system will 'fail' (ex.13) due to age. Memory remains an intangible entity, as does a computer system (the average lay-person, after all, does not understand the computational processes and coding that is required to make a computer system work). Implied within this metaphor is the concept that the body is a machine, discussed in Chapter 5. To compare the brain with a computer, and more specifically memory loss as a failing computer system, is to suppose that it might be fixable. Such an assumption no doubt fuels awareness of the need for research, an important part of sustaining funding for dementia research (Fox, 1989). On the other hand, memory loss is reduced to a mechanical problem, devoid of its psycho-social impact. This metaphor also relegates the person with dementia to failed and broken technology, which, if it cannot be repaired, is discarded and destroyed. Modern society tends to dispose of broken computers and replace them because technology is so accessible. This means that the metaphor of MEMORY IS A COMPUTER SYSTEM implies that it is acceptable to discard failing brains (or, at least, relegate the individuals with failing brains to the margins of society).

Chapter 5 considered the prevalence of verbs of speed ('slow', 'stop', 'halt') to describe how drug treatments might alleviate the symptoms of dementia. Similarly, the analysis of the keywords *memory* and *memories* finds verbs related to speed and movement are often used to explicate the impact that certain treatments could have on memory loss as a symptom of dementia. For instance, *Express Online* describes a drug that 'freezes dementia in its tracks' and 'can stop memory loss' (ex.15). Corroborating the findings presented earlier in this chapter that illuminated the extensive focus on 'memory loss' at the expense of other symptoms, here again Extracts 14 and 15 reflect the broad concern with memory problems exclusively. Of all the possible symptoms that could be 'reversed' or 'stopped', it is memory loss that is selected, indicating intense anxiety about this specific aspect of dementia. The use of a metaphor of movement, specifically the idea that memory loss can be halted or turned around, contradicts dominant scientific beliefs that dementia is irreversible. The metaphor of MEMORY LOSS IS A MOVING OBJECT instead posits that memory loss is an organic entity that could be prevented with a physical barrier, thus prohibiting dementia symptoms from damaging the brain. Rendering memory loss a physical object serves a pedagogical function here, articulating an inherently abstract concept in vocabulary that non-experts can relate to (Semino, 2008). Supporting the discussion in Section 5.4 regarding metaphors of movement in relation to the keyword *drug*, this metaphorical construction of memory loss works to simplify the reality of identifying a treatment for dementia, establishing expectations of a cure.

The final metaphor under consideration here is that of LOST MEMORIES ARE STOLEN OBJECTS, as represented in Extracts 16 and 17. This metaphor draws on the cultural understanding that memories are incredibly precious; they define our sense of self and make us who we are (Rowlands, 2016). Meanwhile, dementia is an enemy invader, echoing Sontag's (1978) early assertion that metaphors of disease commonly construct the disease as an external enemy attacking the body. In contradiction to the earlier assumption that memories remain within a faulty retrieval system (MEMORIES ARE FILES), the representation of dementia as a thief and memories as objects that can be stolen presumes that memories are in some way taken out of the individual. Continuing this theory to its logical conclusion, the individual with dementia 'loses' their memories and thus their self. The highly emotive tone of Extracts 16 and 17 above reiterates this sense of utter loss. For instance, Extract 17 utilises the inclusive pronouns 'our' and 'we' to implicate the reader in this act of theft, and describes the loss of the highly abstract concepts of 'our future' and 'the loves we cherish', dramatically relating memory loss to the destruction of the self. Positioning dementia as a predatory creature constructs people with

dementia as powerless to stop the invader, drawing on the ageist discourse of older people as victims of burglary and exploitation because of their supposed weakness and vulnerability (Lachs *et al.*, 2004). This stereotype of the vulnerable elderly at risk of crime is culturally dominant, despite research that shows that older adults are the age group least at risk of burglary (Chivite-Matthews & Maggs, 2002). The metaphor of LOST MEMORIES ARE STOLEN OBJECTS has implications not just for how we consider the process of memory and memory loss, but also the portrayal of people with dementia – namely, vulnerable, unable to protect themselves, and losing their sense of self.

## 6.3 Forgetfulness

Memory loss associated with dementia is also lexicalised through the lemma FORGET. The verb *forgetting* (frequency=232; keyness=654.48) is the most common realisation of this lemma, followed by its noun form *forgetfulness* (frequency=113; keyness=569.60) and the adjective *forgetful* (frequency=111; keyness=530.49). Each of these words appeared in the 500 strongest lexical keywords in the corpus overall (see Chapter 4), underscoring the usefulness of considering them alongside the significantly more frequent keyword *memory*. The ensuing analysis considers the act of *forgetting*, *forgetfulness* and what it means to be *forgetful* in relation to dementia.

The process of *forgetting* appears to be associated with a number of day-to-day activities. The strongest lexical collocates of *forgetting* are 'names' (n=38), 'things' (n=28) and 'events' (n=15). Upon closer inspection, these generic nouns tend to relate to mundane aspects of daily life, emphasising the abnormality of a person who cannot remember ordinary things. Three examples to illustrate this are provided below:

18. Signs of dementia include repeatedly **forgetting** names of family members and common objects, and confusion around the order of everyday tasks, such as how to make a cup of tea. (*Daily Mail*, 2016)
19. It is not just **forgetting** things, although that alone wipes out the ability to carry out normal, everyday life. Try accessing your bank account, the cashpoint, computer passwords when they've literally been wiped from your memory. (*Daily Mirror*, 2013)
20. Damage to the hippocampus affects short-term memory and leads to a person **forgetting** events like a recent conversation or what they ate for breakfast. (*Express Online,* 2016)

The normality of daily life is established through adjectives such as ‘common’ (ex.18), ‘normal, everyday’ (ex.19) and the banality of the examples: ‘names of family members’ (ex.18), ‘computer passwords’ (ex.19), ‘what they ate for breakfast’ (ex.20). Other noun phrases following the verb *forgetting* include ‘regularly used directions’ (*Independent*, 2016), ‘the season or day of the week’ (*The Times,* 2015) and ‘where they left their car keys’ (*The Guardian,* 2013). Situating the act of forgetting within this discourse of everyday life, these articles raise awareness of the challenges of living with memory problems. Extract 19, for instance, explicitly instructs the reader to ‘Try accessing’ passwords when they have been ‘wiped from your memory’, the implication being that this would be challenging, if not impossible. By orienting the reader to the struggles of daily life with memory problems, these articles highlight that dementia impacts the routine and function of day to day living, offering a perspective on how dementia might affect a person.

In the Dementia News Corpus, the keywords *forgetting*, *forgetfulness* and *forgetful* are often situated alongside words with a temporal meaning, namely verbs such as ‘started’ or ‘began’ and adverbs like ‘after’ and ‘then’. These constructions present the act of forgetfulness as the start of dementia, or the transition from everyday life to life with a disease (the difficulties associated with identifying this transition point will be further elaborated later in this chapter). An illustrative example of how the notion of *forgetting* or the quality of becoming *forgetful* marks a transition point comes from the following article from *The Guardian*:

> 21. In 2010 she was a vivacious local driving instructor. She would come for her blood pressure review and entertain us with hair-raising stories of learner drivers. Then she started **forgetting** things: first it was driving lesson appointments, then routes, addresses, her name. […] A CT brain scan showed evidence of Lewy Body Dementia (LBD). […] First, Jean became housebound, then bed-bound and incommunicative. She died this year aged 62. (*The Guardian,* 2014)

The example is representative of a common pattern in the description of individuals as *forgetting* or becoming *forgetful*. First, there is a description of a successful, busy individual, often with links to hobbies or a career: ‘a vivacious local driving instructor’, ‘[she would] entertain us with hair-raising stories’. These details point to happiness, prosperity and an independent lifestyle, typically attributed to someone who is active in the community. The turning point comes with the adverb ‘then’ and the verbal phrase ‘started forgetting’, which

marks the transition into dementia. After this point, the individual becomes tainted by disease, and descriptions of the individual focus on disability and incapacity ('housebound', 'bed-bound and incommunicative'). In this particular extract, the article emphasises the finality of the situation by stating that the individual died.

Memory loss is typically one of the first noticeable symptoms of dementia (Babu Sandilyan & Dening, 2015). Research interviews with people with dementia indicate that first noticing memory problems is often a defining moment or turning point in the individual's life (Clare, 2003; Phinney & Chesla, 2003; Beard, 2004). The growing awareness that they are experiencing memory loss may prompt an individual to visit their doctor (Keady & Gilliard, 2002) or to reach out to a family member or friend to discuss their concerns (Chrisp *et al.*, 2011). Thus the discovery of memory problems is perceived by people with dementia as a transition point, or a realisation that their difficulties are pathological rather than natural ageing. The use of temporal adverbs and verbs to frame the act of *forgetting* or being *forgetful* reflects this moment of transition, singling out the symptom of memory loss as the initiation of the disease process and the point at which the individual transforms from their past self to a person with a disease.

Yet it is worth reiterating, again, the extended focus on difficulties with memory rather than any other symptom. The framing of *forgetting* and *forgetful* as the point of the commencement of dementia marks this symptom out as a particular cause for concern among readers. In other words, it encourages readers to be vigilant against any instance of forgetting since this might be a symptom of disease. This is a potentially misleading message, given that dementia may be signalled by symptoms other than memory impairment. Recent research suggests that there is a greater likelihood that a person with dementia will remain undiagnosed if the symptoms they exhibit are not memory impairment, suggesting a need to raise awareness of other symptoms of the syndrome (Aldus *et al.*, 2018).

However, there is also evidence of the news media clarifying that dementia is more than just forgetfulness. Concordance analysis for the keywords stemming from the lemma FORGET shows that these keywords are often modified by hedges such as 'a bit' and 'just'. These hedges are not used to downplay the severity of memory loss, but rather to discredit stereotypes about dementia, specifically the belief that dementia is forgetfulness in old age. Some examples include:

22. It is not merely older people **forgetting** things and uttering amusing, off-the-wall thoughts. In fact, it is not solely an older person's disease. (*Daily Mirror*, 2013)
23. We still think of Alzheimer's as a bit of **forgetfulness** as we get older. The truth is far worse. (*Daily Mail*, 2015)
24. Carla's story is a perfect challenge to the misconception that dementia is just **forgetfulness** in old age. (*Express Online*, 2017)
25. This wasn't a man growing old and a bit **forgetful**, this was a man with a disease that would eventually render him unable to remember my sister and me. (*Express Online*, 2014)

In these descriptions of the act of *forgetting, forgetfulness* or being *forgetful*, a cultural stereotype is presented: dementia is nothing more than memory problems that occur as a result of ageing. The adverbs 'merely' (ex.22), 'just' (ex.24) and 'a bit' (ex.23 and 25) communicate that, for those who believe this stereotype, the phenomenon is unremarkable, not worthy of concern or further investigation. This attitude is then negated, as in, 'It is not merely older people forgetting' (ex.22). The negation directs the reader to revaluate their misconceptions about dementia, explicitly calling to attention the fact that dementia is a 'disease' (ex.22 and 25) or a 'truth' that is 'far worse' (ex.23). The severity of these latter descriptions contrasts starkly with the hedges used to depict forgetfulness, creating a disjunction between the misconception and the reality. Presenting and refuting a reductionist stereotype about dementia allows these news articles to embrace an educational discourse, explicating that dementia is a disease process rather than a natural part of ageing.

## 6.4 'Normal' versus 'abnormal' memory loss

Across the concordance lines for the keywords related to memory considered in this chapter, there is a prevalent concern regarding the distinction between 'normal' forgetfulness and memory impairment that is symptomatic of dementia. Knowing the difference between these two concepts is depicted as a source of anxiety and concern, exacerbating the fear already established around difficulties with memory. Among the general public, there are many misunderstandings about the differences between normal memory ageing and pathological memory problems as a result of disease, leading to intense anxiety around moments of forgetfulness in later life (Laditka *et al.*, 2011; Cahill *et al.*, 2015). The most prevalent linguistic features used to communicate the differences between 'normal' and 'abnormal' memory loss in the Dementia News Corpus are examined below, exploring how they construct a discourse

of personal responsibility that incites fear about moments of forgetfulness and contributes to the stigma surrounding dementia.

Concordance analysis reveals that age-related memory loss is depicted as being an acceptable and normal part of life. Increasing difficulty with memory is a natural part of human ageing (Schacter, 2001). Evidence suggests that our speed of thinking and ability to divide attention diminishes with age (Rutherford & Bruno, 2016). As a result, working and long-term memory stores experience reduced capacities. This is evidenced in the Dementia News Corpus through vocabulary choices that emphasise normality or ordinariness. Statistically, 'normal' is actually a collocate of the keyword *memory* (frequency=39; log-likelihood=216.34), but there are various alternative lexical choices which convey the same meaning, namely that some memory loss is a natural part of life. A selection of examples are given below. Not only is memory loss explicitly labelled as 'normal' (ex.26 and 29), 'common' (ex.27) and 'typical' (ex.28), this typicality is directly associated with ageing: 'normal as we get older' (ex.26).

26. A degree of **memory** loss is normal as we get older. (*Daily Mail,* 2013)
27. Past the age of 40**, forgetfulness** is so common as to be unremarkable. (*Daily Telegraph,* 2015)
28. Typical age-related **memory** loss can be reduced by keeping your brain active. (*Daily Mail*, 2013)
29. **Memory** lapses are a normal part of ageing, not necessarily a sign of serious mental deterioration. (*Daily Mirror*, 2016)

The description of memory problems as 'memory lapses' (ex.29) is especially intriguing, as this appears as a way of reducing anxiety about memory problems. Difficulties with memory are described as a 'lapse' or 'lapses' a total of 68 times throughout the corpus, most often in relation to people not diagnosed with dementia, as in Extract 29 above. This is perhaps in accordance with the meaning of the word 'lapse', implying a brief or temporary failure and emphasising that normal functioning will resume shortly. Thus a person with 'normal' memory problems might be described as having a 'memory lapse', while a person with pathological memory problems is more likely to be presented with 'memory loss', 'memory problems' or 'memory decline', each of which carries a sense of severity and permanence. Labelling memory impairment as a 'memory lapse' mitigates worries or concerns by orienting to its temporary nature and reinforcing its naturalness and normality.

Articles in the Dementia News Corpus often attempt to explain the difference between normal and pathological memory loss by comparing the two concepts side by side. Distinguishing between these two causes of memory problems is tricky; research suggests that even professionals working in health and social care fields are uncertain about the distinction between the two (Cherry *et al.*, 2010). Some articles in the corpus take an instructive approach, offering examples of 'normal' memory loss versus dementia in an effort to educate readers. Extract 30 below is an illustrative example of this format, whereby age-related memory problems are directly contrasted with signs of dementia-related memory impairment:

> 30. Researchers said that misplacing keys, forgetting telephone numbers or forgetting the names of casual acquaintances are all examples of normal **forgetfulness**. But getting lost in familiar places, regularly struggling to recall words, being no longer able to cook a meal, set the table, drive your car, use money correctly or dress yourself appropriately are all possible symptoms of dementia. (*Daily Mail*, 2015)

In order to clarify the difference between these two types of memory impairment, the news articles in the corpus often attempt to naturalise and mitigate 'normal' memory problems while inciting anxiety regarding dementia, as demonstrated in Extract 30. The examples selected to illustrate the differences are deliberately extreme. 'Normal forgetfulness' is exemplified through mundane events - 'forgetting telephone numbers or forgetting the names of casual acquaintances' - while the memory problems attributed to dementia appear to have more severe consequences, leading to an inability to 'drive your car' or 'dress yourself appropriately'. Notably, these difficulties are more likely to occur in the middle to later stages of the syndrome rather than in the earlier stages (World Health Organization, 2017). Thus the distinction is misleading, since the suggestion is that 'misplacing keys' and so on is not evidence of dementia, when in fact it may well be indicative of the very early stages.

Further attempts to explain how normal forgetfulness differs from dementia utilise discursive strategies which simulate an intimate relationship between the reader and the journalist. Synthetic personalisation (Fairclough, 2015), emerging from the traditions of CDA, is a concept that describes the linguistic devices used by the mass media to communicate to a vast audience in a way that makes actual individual readers feel like they are being addressed directly. Both the reader and the producer of the text need to be personalised, but this personalisation is synthetic by virtue of the fact that there is no real relationship between these

two parties. Synthetic personalisation might be realised through the strategic use of personal pronouns to address the reader and imperative structures (such as 'think of it as a load off your mind' (Fairclough, 2015, p. 205)), and is especially prevalent in the language of advertising.

In relation to the distinction between 'normal' and pathological memory loss in the corpus, synthetic personalisation is evident in a number of ways. Firstly, there is a tendency to articulate the differences between forgetfulness and dementia using a question and answer format, as illustrated in Extract 31 below. A question is posed, in this case, 'Where does forgetfulness stop and dementia start?' Other question formats include 'How can you tell the difference between forgetfulness and early signs of dementia?' (*Daily Mail*, 2013) and 'Worried that forgetfulness might be an early sign of dementia?' (*Daily Telegraph*, 2015). The answer then attempts to elucidate the difference, using comparative examples and typically citing 'doctors', 'experts' or 'researchers' to legitimate its claims since these professional voices are generally construed as more reliable and authoritative (Van Dijk, 1988).

> 31. Where does **forgetfulness** stop and dementia start? Being absent-minded and forgetting where you left your keys is not the same as dementia. Doctors say absentminded people often don't properly take the information on board in the first place. By contrast, those with typical Alzheimer's disease will make a concerted effort to try to remember something, but it will nonetheless fade from memory. (*The Times*, 2015)

As a rhetorical strategy, the question and answer format is highly persuasive. It simulates a sense of conversation with the reader by presupposing they had thought about this issue, and then obligingly providing an answer. Agreement is elicited from the reader because the answer appears to be co-constructed as part of a two-way dialogue, even though no response is actually expected from the reader (Halmari, 2005). The effect is that the reader feels as though they are being addressed directly and personally (Fairclough, 2015).

Synthetic personalisation is also established through the use of the second person pronouns 'you' and 'your' (seen in both Extracts 30 and 31). Such pronouns explicitly speak to the reader, simulating conversation and creating a sense that the journalist and the reader are on familiar terms (Fairclough, 2015). It is interesting to observe how the strategic use of second person pronouns attempts to either heighten fear of dementia, or offer reassurance. In Extract 30 above, *Express Online* describes the actions of a person experiencing 'normal forgetfulness' without referring to any particular individual, for instance the description of 'misplacing keys'

as opposed to, say, 'misplacing *your* keys' or 'misplacing *one's* keys'. This implies that this constructed individual is anonymous and of no relation or consequence to the reader. In describing the actions of a person with dementia, however, the second person pronouns 'your' and 'yourself' are used: 'drive *your* car', 'dress *yourself* appropriately'. These pronouns imply that the reader is at risk of dementia rather than ordinary forgetfulness, thus establishing anxiety and suggesting that the reader should be concerned. On the other hand, the example from *The Times* (ex.31) positions the reader as the person who is 'absent-minded and forgetting where *you* left *your* keys', while people with dementia are described in the third person: 'those with Alzheimer's disease'. In consequence, the article seems to take a conciliatory tone, reassuring the reader that their memory problems are normal and othering people with dementia-related memory loss. Thus these second person pronouns are a powerful tool for exacerbating or dampening fear surrounding memory problems.

Regardless of how the second person pronouns are used, they invite the reader to take action, specifically to self-evaluate their memory problems, establishing a discourse of personal responsibility. The frequent occurrence of imperative commands alongside second person pronouns (underlined in the extracts below for clarity) strengthen the forcefulness of this call to action, prompting the reader to be vigilant about forgetfulness and seek medical help when they suspect they have transitioned from 'normal' memory problems to symptoms of dementia. These imperatives tap into the 'culture of fear' in the media described by Furedi (2006), prompting the reader to be fearful and suspicious about the possible impending calamity of developing dementia:

32. Look out for **forgetfulness**. We all lose keys on occasions but forgetting names of children and odd behaviour such as putting food in the cooker instead of the fridge should ring alarm bells. (*Express Online,* 2012)
33. Be aware of memory problems because the earlier the signs are spotted, the more successful lifestyle changes and medications are likely to be. (*Daily Mirror*, 2016)
34. See your GP if you are worried about your **memory** or think you may have dementia. (*Daily Telegraph,* 2015)
35. What should I do if I am worried about my memory? If you are worried about your **memory**, seek advice from your GP. (*Daily Mirror*, 2014)
36. SHOULD YOU BE WORRIED? TAKE THIS **MEMORY** TEST TO FIND OUT (*Daily Mail,* 2015)

In these examples, readers are directly requested to 'look out' (ex.32) and 'be aware' (ex.33), connoting danger warning signs, and 'see' (ex.34) or 'seek' (ex.35) professional assistance if unsure. Moreover, several news articles offer to 'test' (ex.36) the reader's memory, either via a quiz incorporated into the article or a link to an external website. Additionally, a discourse of panic emerges from these explicit instructions, encouraging the reader to be fearful (Furedi, 2006). The *Express Online* article, for instance, notes that certain 'odd' behaviours 'should ring alarm bells' (ex.32), while the emotive word 'worried' appears in Extracts 34 to 36. The conditional structures 'if you are worried' (ex.34), 'if I am worried' (ex.35) and 'Should you be worried?' (ex.36) encourage the reader to consider whether they are or should be concerned, seemingly speaking directly to the reader through the use of personal pronouns and establishing a sense of rapport. The recurrent emotive words and the conditional structures within which they are framed incite anxiety, reinforcing the instruction to be attentive to forgetfulness in themselves and others in case of dementia.

In the differentiation between normal and pathological memory loss, the news media draws heavily on this discourse of personal responsibility. The strategic use of the question and answer format, the personal pronouns inviting the reader to feel a sense of rapport, and the imperatives commanding the reader to take certain actions all enjoin the reader to self-evaluate their forgetfulness, and thus take responsibility for receiving a timely diagnosis. Fowler (1991, p. 183) observes similar discursive strategies in the press reporting of the salmonella-in-eggs crisis of the 1980s. He argues that such a didactic tone places the onus for avoiding ill-health on the individual reader, specifically the housewife, and that personal responsibility is constructed as 'a matter of personal dignity, pride, vigour and perhaps social acceptability'. However, this discourse of personal responsibility in the news media obscures the need for political or societal responses in relation to health threats (Kline, 2011). Thus the individual reader is positioned as being both responsible for avoiding dementia altogether (see Chapter 4 and also Peel (2014)) and for promptly diagnosing themselves if they do experience symptoms of memory problems.

## 6.5 Conclusion

In today's society, memory is understood as a way of reliving our experiences (Basting, 2009), navigating daily life (Schacter, 2001; Weisberg & Reeves, 2013) and expressing our sense of self (Rowlands, 2016). With the development of technology that promises to store information infinitely until the system breaks, society has come to expect that human memory should be likewise flawless and limitless (Schacter, 2001). Memory loss associated with dementia

threatens this theoretical position, highlighting weaknesses not just within our memory systems but in the language we use to conceptualise the processes of remembering and forgetting (Basting, 2009).

This chapter has explored how memory, and the processes of memory loss and forgetting, are represented in the British news media. The extensive focus on memory loss above other symptoms of dementia indicates a preoccupation with this symptom specifically, described in this chapter as a discourse of memory loss to reflect the priority given to this symptom above others. Beyond frequency measures alone, a variety of linguistic devices depict memory loss as a worst-case scenario. Memory loss is presented as the exemplifying feature of dementia, featuring as a consistently named symptom and oftentimes as a substitute for all other possible symptoms. This depiction of dementia offers a misleading and unrepresentative view of the symptoms of dementia and, as the chapter argued, could raise issues for individuals who may be uncertain about whether to seek a diagnosis (Aldus *et al.*, 2018).

The analysis of the metaphors drawn upon in discussion of memory was particularly illuminating in understanding the depiction of memory loss in dementia. The metaphors identified in the analysis drew upon two overarching metaphors, that of the BRAIN IS A STORAGE SYSTEM and the BRAIN IS A COMPUTER. Despite their widespread usage, scholars have come to recognise the inadequacies of these metaphors in conceptualising the brain (Randall, 2007), and the analysis presented here signals some of the shortcomings in applying these metaphors to people with dementia-related memory loss. Metaphorical constructions of memories as both moving objects and as stolen objects link the analysis in this chapter with the portrayal of dementia treatments in Chapter 5. It is implied through these metaphors that the brain might be fixable, thus asserting the discourse of science as the hero. The discussion in Chapter 9 will tease out these similarities further to consider the broader metaphors used in discussions of dementia.

The chapter found that memory loss as a result of dementia was directly contrasted with 'normal' age-related memory loss. The distinction between these two concepts was presented as a particular point of concern, with deliberately drastic examples presented to elucidate how the reader might tell the difference. The act of *forgetting* and *forgetfulness* was demarcated as a transition point between everyday life and dementia through a range of temporal expressions. Moreover, a combination of rhetorical strategies including personal pronoun use and imperatives positioned the reader as responsible for accurately identifying when this transition

occurred, drawing on a discourse of personal responsibility that implicated the reader in accurately diagnosing themselves. The discussion in Chapter 9 will return to the portrayal of memory loss in this way, contextualising the discourse of personal responsibility in relation to its potential impact on health behaviours, as well as how these representations of memory loss might influence public perception of dementia and people living with the syndrome.

# Chapter 7: Living with dementia

## 7.1 Introduction

The previous two analysis chapters have taken as their primary focus the representation of dementia itself, exploring the depiction of the pathology of dementia and its treatments, as well as the symptoms commonly associated with dementia. In this and the following analysis chapter, the representation of people with dementia will be considered. The keyword categorisation in Chapter 4 drew attention to a variety of terms for people with dementia, including *people, patients* and *sufferers*, in addition to proper nouns referring to celebrities with dementia, such as the author Terry Pratchett and the actress Prunella Scales. These keywords offer insights into how dementia is discursively constructed in relation to the individual, and how the impact of dementia is articulated and evaluated.

Given the widely acknowledged influence of the news media to influence and shape public perceptions of people living with illnesses (Seale, 2003), many advocacy organisations have published guidelines for the media suggesting preferred ways of reporting on certain health topics (see Section 2.4.2). In the context of dementia, national advocacy and research organisations tend to caution against using terms such as 'sufferer', 'victim', 'burden' and 'patient' because these might 'disempower people with dementia by making them seem passive, childlike, or worthy of pity' (Bould, 2018, p. 18). Such guidelines generally advocate the labels 'person/people with dementia' or 'person/people living with dementia' instead because this language frames the person first and does not convey judgement or assumptions about the individual (Dementia Engagement and Empowerment Project, 2014; YoungDementia UK, 2019).

The labelling of social actors in the news media has a significant ideological function (Bell, 1991). Matheson (2005, p. 24) contends that 'the act of labelling a person (or group or thing) defines how members of the society can understand and judge any action done by that person and allows them to generalize [*sic*] about them'. Where one news article might describe someone as a 'terrorist', another might label that person a 'freedom fighter', and each label perpetuates the writer's position as well as influences the ways the reader might interpret and judge that individual's actions and beliefs (Van Dijk, 1995). In this way, the lexical choices used to label social actors can reveal ideological assumptions implicit in news reporting.

From the perspectives of CDA, van Leeuwen (1995) proposes a taxonomy for the representation of social actors which offers useful insights in the present analysis. Social actors may, firstly, be *included* or *excluded*. The exclusion of social actors takes two forms: *suppression*, in which there is no reference to the social actor, such as through the deletion of a grammatical agent, and *backgrounding*, in which the social actor is mentioned but not in relation to the specific activity taking place. Social actors who are included might be represented as being *active* or *passive*, *generic* or *specific*, *individual* or *assimilated* as part of a group. They might also be depicted in terms of *functionalisation*, which denotes something they do (e.g. 'interviewer') or in terms of *identification*, which focuses on the qualities and characteristics of the social actor (e.g. 'Muslim', 'aunt', 'blonde'). Van Leeuwen's taxonomy highlights the complex choices involved in labelling individuals, and draws attention to the impact of these different linguistic strategies on the portrayal of social actors.

Alongside van Leeuwen's taxonomy, the notion of discourse prosody is also helpful in considering the representation of social actors. Chapter 3 introduced collocation as the statistical measure of the co-occurrence of certain words (Section 3.2.3). Where collocation considers the relation between two words, discourse prosody explores the associations of a word form with semantically related words, and how such associations might signal discourses (Stubbs, 2001). As an example of discourse prosody in action, Baker (2006) considers how the news media frequently associates *refugees* with words relating to the movement of liquids, such as 'streaming', 'overflowing' and 'swelling', contributing to a discourse of refugees as a natural disaster. This is unequivocally a negative judgement, implying that migration is out of control and lacking a sense of its own agency, while refugees are dehumanised and suggested to be harmful to the country. Discourse prosody looks beyond individual collocations to consider how phenomena and groups of people are recurrently depicted in semantically-related ways.

People with dementia are denoted in a variety of ways in the Dementia News Corpus. This chapter centres on some of the more salient common nouns attributed to people with dementia, while Chapter 8 considers the proper nouns that featured as key in the corpus. It is worth acknowledging that the depiction of people with dementia is seen through other keywords, such as the use of adjectives (for example *elderly* (frequency=1,329; keyness=3,412.78) or *vulnerable* (frequency=627; keyness=1,541.19), both of which were keywords) or verb forms (such as *suffering* (frequency=1,129; keyness=2,834.31), also a keyword). This analysis focuses only on noun forms because they were the most salient. Table

7.1 below reproduces the relevant keywords first seen in Chapter 4 in the semantic categories of 'People with dementia'.

*Table 7.1: Keyword common nouns for people with dementia, listed in decreasing order of keyness*

| **Keywords denoting people with dementia** | |
|---|---|
| Common nouns | *people, patients, sufferers, sufferer, residents, patient, pensioner, person, victims* |

It is apparent from this table that there is a discrepancy between the guidelines published for the media by charitable organisations on sensitive reporting of dementia (Bould, 2018) and the reality of what actually takes place in the news media. The keywords reproduced in the table appear in the top 500 keywords throughout the corpus, indicating their statistically significant prevalence compared with normal language use. Taking the most salient of these common nouns, the analysis below explores how labels for people with dementia articulate the relationship between dementia and the individual, and convey the experience of living with the syndrome.

## 7.2 Homogenising dementia: people with dementia

The labelling of those with dementia in the corpus most frequently entails the noun *people* and various modifiers, as listed in Table 7.2 below. The noun *people*, ranked as the 8th strongest keyword (frequency=12,015; keyness=14,995.24), is not used exclusively to refer to those with dementia. Nonetheless, frequency counts show that it is commonly used to describe those with dementia. Table 7.2 presents the most frequent realisations of the noun *people* as used to denote individuals with dementia. These phrases were identified using WordSmith Tool's cluster settings (see Section 3.2.4), which count set combinations of words that occur frequently.

*Table 7.2: Most frequent phrases for the noun* people *denoting those with dementia*

| **Phrases denoting people who have dementia** | **Frequency** |
|---|---|
| people with dementia | 1,293 |
| people with alzheimer's | 291 |
| people living with dementia | 222 |
| people with the condition | 110 |
| people in the UK have dementia | 72 |
| people with the disease | 49 |
| people in the UK with dementia | 46 |
| people suffering from dementia | 38 |
| people affected by dementia | 37 |
| people suffer from dementia | 30 |
| people in the UK living with dementia | 30 |

The most frequent realisation of the noun *people* as attributed to those with dementia is the phrase 'people with dementia'. Other common constructions using the noun *people* include people 'living with dementia', who 'have dementia', are 'suffer[ing] from dementia' or are 'affected by dementia'. In each of these constructions, the diagnosed condition modifies the head noun *people*. These types of constructions are examples of what has come to be called 'person-first language', an idea which emerged from disability rights groups in the 90s (Blaska, 1993) and has become standard practice in political and scientific discourse (Collier, 2012). Person-first language advocates naming the person before the disability, for example saying 'person with disabilities' as opposed to 'disabled person', so that the priority is given to the individual rather than their diagnosis. In itself, the noun *people* does not encode any particular attitudes or beliefs about the individuals concerned – it is a fairly neutral term. This explains why it is normally the preferred noun of choice in media guidelines for reporting on dementia (Bould, 2018). The saliency of the labels in Table 7.2 provides evidence of person-first language in the Dementia News Corpus, adhering to the recommendations of advocacy organisations and promoting the person before the disease.

The overwhelmingly high salience of the noun phrase 'people with dementia' above other constructions justifies further investigation of how it is used in the corpus, as a way of exploring how individuals with dementia are discursively represented. An examination of all

1,293 concordance lines for the phrase 'people with dementia' revealed that a fifth of all instances of 'people with dementia' (n=227) are preceded or proceeded by some form of quantification. The noun phrase 'people with dementia' frequently occurs alongside numerical values relating to the number of people with dementia, either in the UK or worldwide, as well as predictions for the future. Quantification is achieved through numerical or written figures, percentages, and phrases such as 'numbers of' or 'thousands of'. Some representative examples offer a snapshot of the multitude of ways in which people with dementia are quantified across the corpus, and as with the previous chapters, these concordance lines have been selected to illustrate trends across the corpus:

1. There are 850,000 **people with dementia** in Britain and this figure is expected to reach 1 million by 2025. Last year, dementia overtook heart disease as the leading cause of death in England and Wales. (*The Guardian,* 2017)
2. There are currently 670,000 **people with dementia** in England but this is predicted to double in the next 30 years. *(Daily Telegraph,* 2012)
3. It is thought there will be one million **people with dementia** in the UK by 2025, two-thirds of which will be Alzheimer's. *(Express Online,* 2015)
4. According to the Alzheimer's Society, there are an estimated 820,000 people in the UK with dementia and only 44 per cent of **people with dementia** in England, Wales and Northern Ireland receive a diagnosis. *(Daily Mail,* 2013)
5. With regard to dementia it is thought 800,000 have the disease and the cost to society is £23billion. By 2021 the number of **people with dementia** is expected to rise to a million. *(Sunday Express,* 2012)
6. The number of **people with dementia** is expected to reach 65.7 million in 2030 and 115.4 million in 2015, according to the World Health Organisation *(Independent,* 2016)
7. Our population is ageing, and with numbers of **people with dementia** expected to soar to over a million in the next decade, the rates we are seeing today are likely to be a fraction of the numbers in future. *(Daily Mail,* 2013)

As these extracts demonstrate, there is a concern in the corpus with the prevalence of dementia. The news media often relies on figures and statistics in reporting in order to enhance the persuasiveness and reliability of the story (Van Dijk, 1988). Moreover, quantification increases a story's news value by emphasising the scale of the problem (Bednarek & Caple, 2017). Fowler (1991) observes that figures and statistics in the news media can often bombard the

reader, such that they begin to blur together. Since the reader is unlikely to remember exact figures, and is in no position to determine whether a particular statistic is large, significant or indeed accurate, they will take away a general sense of the scale of the situation (Bell, 1991). The extracts above from the Dementia News Corpus aptly illustrate how the plethora of figures risks becoming blurred together for the reader. Many of the extracts feature both a current estimation of the prevalence of dementia and a prediction for the future, alongside other figures such as dates, percentages and financial costs. For example, Extract 5 features four figures in the space of just two sentences: '800,000', '£23billion', '2021' and 'a million'. Whether or not the reader remembers the exact figures and what they each mean (Fowler, 1991), the unequivocal message is of a terrifyingly large problem and an overwhelmingly high financial cost to society.

Predictions for the future are often shrouded in a sense of doubt, inciting anxiety about the prevalence of dementia. The extracts above are representative of typical verb phrases used to explain the origin of the figures: '[it is] expected' (ex.1, 6 and 7), 'is predicted' (ex.2), 'it is thought' (ex.3 and 5). Semantically, these verbs communicate uncertainty and speculation. On a grammatical level, the verb phrases utilise the passive voice and delete the agent, such that the person or people doing the expecting, predicting and thinking are unnamed, and thus entirely unknown to the reader. By concealing the sources of these figures, the articles prevent the reader from scrutinising the reliability or validity of the statements. Furthermore, the passive agent deletion potentially implies a sense of general knowledge or truth, as if 'it is thought' by so many people that it is not necessary to cite the source. The lack of clarity in the origin of these numerical figures reinforces a sense of a large-scale problem, one in which there are so many social actors involved in the 'expecting', 'predicting' and 'thinking' that they do not need to be named. As Fowler (1991, p. 169) observes, the reader is aware of a 'problem of considerable proportions…but its outlines are indistinct, like some huge threatening shape on the horizon in a bad horror movie'.

A second pattern discernible in concordance analysis of the phrase 'people with dementia' is that, as social actors, 'people with dementia' rarely occupy the agentive role within the clause. Applying Halliday's (2013) notion of transitivity, outlined in Section 3.3.3, it is apparent that 'people with dementia' are recurrently positioned as the 'goal' (actions are done to them by others) or as the 'circumstance' (their function is to provide supplementary information on such aspects as the manner or cause of the action, but they do not contribute to the action). These constructions depict people with dementia as relatively powerless as they

are acted upon and are not afforded agency. One way of identifying 'people with dementia' in the grammatical position of 'goal' is to consider instances where the noun phrase 'people with dementia' is immediately preceded by a verb (n=180). In these instances, 'people with dementia' is the 'goal' of the clause, acted upon by another social actor(s), as illustrated in the following:

8. NHS leaders have complained that they cannot discharge **people with dementia** even if they no longer need hospital treatment because there is no one to help them at home. (*The Times,* 2016)
9. Some drugs appeared to help **people with dementia** to think and reason better and even to carry out tasks in their home that they had lost the ability to perform (*The Guardian*, 2015)
10. Charities continued to use a cold-calling company even after being told it was pressuring **people with dementia**, it emerged last night. (*Daily Mail*, 2015)

In relation to the concept of transitivity (Halliday & Matthiessen, 2013), each of these examples features a transformative material process ('discharge' (ex.8), 'appeared to help' (ex.9), 'was pressuring' (ex.10)) performed by an actor ('NHS leaders/they' (ex.8), 'some drugs' (ex.9), 'a cold-calling company/it' (ex.10)). The process is done to 'people with dementia', thus indicating their status as the goal who receives the action. This grammatical positioning of 'people with dementia' as the goal in material processes is ubiquitous, consistently depicting people with dementia as at the receiving end of actions, rather than undertaking action themselves. With similar effects, the phrase 'people with dementia' is often assigned the grammatical role of 'circumstance', readily identifiable in the use of prepositional phrases. The more common phrases are listed below in Table 7.3 to provide a measure of the scope of this pattern.

*Table 7.3: Prepositions preceding 'people with dementia'*

| **Prepositional phrases** | **Frequency** |
|---|---|
| for people with dementia | 236 |
| of people with dementia | 230 |
| with people with dementia | 32 |
| to people with dementia | 29 |
| in people with dementia | 23 |

These prepositional phrases locate ‘people with dementia’ not as actors in processes but as circumstances – the background against which the processes take place (Thompson, 2013). Halliday’s (2013) functional grammar breaks down circumstances into various sub-types, including that of cause (why, for what purpose and who for?), location (where and when?), manner (in what way and by what means?), and accompaniment (who with?). These categories provide a useful lens through which to consider the positioning of ‘people with dementia’ as circumstances in processes rather than agentive actors. The following representative examples demonstrate a variety of ways in which ‘people with dementia’ might occupy the role of circumstance:

11. Hospitals are frightening and unsettling places for **people with dementia** and so we need to do all we can do reduce unnecessary and potentially harmful admissions. (*Daily Mail*, 2016)
12. The breakthrough comes amid increasing concern about the neglect of **people with dementia**. (*Daily Telegraph*, 2013)
13. Some recurring themes will be familiar to anyone who works with **people with dementia**: the difficulties of getting a diagnosis; the lack of support; and the importance of respite, day centres and advice. (*The Guardian*, 2014)
14. Much more large-scale, long-term research is needed to determine whether this technique would be beneficial to **people with dementia**. (*Daily Telegraph*, 2014)
15. Research from the King's Fund has found that cluttered ward layouts and poor signage in hospitals and care homes are the top causes of confusion and distress in **people with dementia**. (*Express Online*, 2016)

In these examples, ‘people with dementia’ are variously circumstances of cause, with the action taking place on their behalf (ex.11, 12 and 14), accompaniment, as existing alongside an agentive social actor (ex.13), and location, depicting within whom the action takes place (ex.15). Taking Extract 11 to exemplify the impact of this grammatical positioning, the attributes of ‘frightening and unsettling’ are presented as the opinions of people with dementia, yet ‘people with dementia’ themselves take the role of supplementary, background information. An alternative construction which foregrounds the agency of ‘people with dementia’ might be, ‘People with dementia find hospitals frightening and unsettling places’. By positioning ‘people with dementia’ as the circumstance rather than the actor in the clause, the articles seem to speak on behalf of people with dementia, denying them access to their own voice or opinions.

A further observation with regards to the label 'people with dementia' is that the people within this group are genericised (van Leeuwen, 1995) such that they become a homogenous, anonymous collective. There are only 7 instances in which the phrase 'people with dementia' appears with a definite article ('the people with dementia'), and on one occasion with a determiner ('those people with dementia'). The articles here denote a specific group of individuals. In all other 1,285 occurrences of the phrase, the lack of definite article or determiner indicates a lack of distinction or uniqueness; *all* people with dementia are supposedly being represented. Van Leeuwen (1995) notes that while there will always be a certain amount of generic reference in the press when general arguments and stories are being presented, not all social actors are equally genericised. In his analysis of a news article about immigration, van Leeuwen found that immigrants were frequently genericised so as to suggest a large, chaotic, fear-inducing mass. Likewise in the Dementia News Corpus, the lack of clarity regarding which people with dementia are being represented contributes to a sense of fear of the prevalence of dementia, supported by the frequent attempts to quantify 'people with dementia'. Without distinct reference points, the generic labelling of 'people with dementia' suggests that there exists an insidious mass of people living anonymously among the population. Siiner (2017) argues that this type of generic representation of people with dementia in the news media makes it difficult for readers to feel empathy towards them. Moreover, genericising 'people with dementia' means speaking for the collective group rather than allowing individual voices to be heard, effectively prohibiting people with the syndrome from disseminating their experiences (Clarke, 2006).

## 7.3 The passivity of dementia patient(s)

After the noun *people*, the next strongest keyword that relates to people with dementia is *patients*. The singular form *patient* is also a keyword featuring in the top 500 strongest keywords. Table 7.4, below, provides the frequencies and keyness values for each keyword. The nouns *patients* and *patient* connote a medical context. The Oxford English Dictionary (2019) defines a 'patient' as 'A person receiving or […] registered to receive medical treatment, esp. at a particular establishment or from a particular practitioner; a person staying in a hospital for medical treatment', thus emphasising that the individual is within a medical setting and is being actively treated by a medical practitioner. In the British National Corpus, the strongest collocates of 'patients' are 'treatment', 'treated', and 'hospital', reiterating this active engagement with the medical profession within a medical institution. Culturally, the role of the 'patient' has been afforded a lack of power and agency compared with doctors and researchers

(Mishler, 1984). Traditionally in doctor-patient interactions, 'patients' are constructed as passive and voiceless, by virtue of their lack of technical knowledge (Fisher, 1984). This positioning has been echoed in the mass media, where 'patients' are often portrayed as victims (Lupton, 1999a), and rarely as actively engaged in medical encounters or the treatment process (Frank, 2013).

*Table 7.4: Frequency and keyness values for* patients *and* patient

| **Keyword** | **Frequency** | **Keyness** |
|---|---|---|
| *patients* | 4,348 | 10,280.88 |
| *patient* | 991 | 1,225.99 |

The plural form *patients* occurs over four times more frequently than the singular *patient*, suggesting that people with dementia are referred to as a group more commonly than on an individual basis, reiterating the point made above with regards to the generic reference to 'people with dementia'. As with the noun *people*, though, it must be acknowledged that not every occurrence of these keywords refers to a person with dementia. For example, there are 29 instances of the phrase 'cancer patients', as well as 'NHS patients' (n=9), 'stroke patients' (n=7) and 'patients with depression' (n=6). However, given that the articles in the corpus were collected on the basis of featuring dementia as the main topic, and that scanning the concordance lines for each keyword suggests these keywords are predominantly used in contexts relating to dementia, it seems safe to assume that the majority of instances of *patient(s)* refer to a person or people with dementia. Where reading the extended concordance lines indicates that this is not the case, these instances have been excluded from the qualitative analysis.

The top 30 lexical collocates of both *patients* and *patient* are given in Tables 7.5 and 7.6, illustrating the semantic registers within which *patients* and *patient* are located. Identical collocates across the two tables are marked with an asterisk (*), and it can be observed that some collocates appear as plural in Table 7.5 and singular in Table 7.6 (such as 'carers' – 'carer'; 'doctors' – 'doctor'). Exploring these collocates in contextual detail illuminated two dominant and interlinked patterns: firstly, the keywords *patients* and *patient* are typically depicted as passive individuals in the context of clinical science, and secondly, that *patients* and *patient* are often associated with a discourse of abuse.

*Table 7.5: Top 30 lexical collocates of* patients, *with frequency of collocation in brackets*

| **Top 30 lexical collocates of *patients* (+/- 5 words)** |
|---|
| *dementia (956), *alzheimer's (493), *elderly (128), brains (117), *care (200), carers (73), disease (171), *hospital (97), families (86), *given (103), more (169), *found (119), mild (87), *said (130), gps (62), *nhs (51), *risk (84), *vulnerable (65), study (91), doctors (92), drug (68), hospitals (45), treatment (75), drugs (66), thousands (43), number (64), memory (91), early (86), staff (51), aged (39) |

*Table 7.6: Top 30 lexical collocates of* patient, *with frequency of collocation in brackets*

| **Top 30 lexical collocates of *patient* (+/- 5 words)** |
|---|
| *dementia (240), *elderly (32), *hospital (37), every (49), *alzheimer's (55), carer (19), *nhs (16), *care (47), year (33), after (36), *said (35), old (25), *vulnerable (15), doctor (27), ward (11), home (26), gp (11), diagnosed (23), left (19), suffering (14), family (21), concern (11), extra (11), relationship (11), *found (17), giving (11), treated (10), *risk (11), told (15), *given (12) |

A number of collocates in Tables 7.5 and 7.6 originate from a register of clinical science, with reference to pathology and disease ('dementia', 'Alzheimer's', 'brains'), treatment ('drug(s)', 'treatment', 'treated') and various individuals and institutions involved in medical practice ('hospital(s)', 'gps', 'nhs', 'doctor(s)'). This initial observation supports the contexts in the British National Corpus within which the nouns *patients* and *patient* tend to occur. Exploring this discourse of clinical science through consideration of these collocations in context, moreover, reveals that *patient(s)* are predominantly depicted as passive individuals at the mercy and whim of scientists, doctors and medical institutions. The selection of extracts below exemplify some of the ways in which passivity is conferred onto *patient(s)*, chosen to be representative of the main trends identified in these collocations:

16. Dementia **patients** are being taken into hospital for malnutrition at twice the 2010 rate as home help with eating and drinking is cut back, official figures show. *(The Times,* 2016)
17. The latest trials are thought to have failed because the drugs were given to **patients** too late in the disease process to have an effect, or were unable to

pick up subtle changes in cognition over a relatively short period. (*Independent*, 2012)

18. Almost one in three (29%) of all dementia **patients** admitted to hospital had not had their loss of cognitive function recorded when they arrived the most recent time, the CQC found. *(The Guardian,* 2013)
19. The drug, called LMTX, even slowed dementia **patients'** brain shrinkage, according to results presented yesterday at the world's largest Alzheimer's conference. *(Daily Mail,* 2016)
20. Section 117 aftercare means that if a **patient** needs to move from hospital to a care home, their fees must be paid for. (*Sunday Times*, 2014)
21. The NHS is to give up on its "cash for diagnoses" scheme that pays GPs £55 for every **patient** diagnosed with dementia. (*Daily Telegraph,* 2014)
22. The scan will allow doctors to rule out a **patient** having Alzheimer's - the most common form of the disease - or the chance that it will develop within five years. (*Daily Telegraph,* 2013)

These extracts provide an insight into the technical vocabulary which commonly surrounds depictions of dementia *patient(s)*. Here, terminology relates to clinical testing ('trials', 'drugs' (ex.17), 'drug', 'LMTX' (ex.19)) and tracking the progression of disease ('disease process', 'changes in cognition' (ex.17), 'loss of cognitive function' (ex.18), 'brain shrinkage' (ex.19), 'diagnosed' (ex.21), 'scan' (ex.22)). This specialised terminology, likely to be unfamiliar to a reader, emphasises the reliability and plausibility of the news story by suggesting that the story voices expert opinions (Van Dijk, 1988). The vocabulary choices here establish a discourse prosody of clinical experimentation, positioning *patient(s)* first and foremost as bodies which medical science can study. As 'patients' and 'patient', the individuals are reduced to figures and percentages (ex.16 and 18), anatomy (ex.19) and even as an item to be traded for money (ex.21). In sum, as 'patient(s)', people with dementia lack autonomy and are portrayed primarily in terms of being experimented on or moved around and exchanged.

Within this discourse of clinical science, opinions and facts are attributed to a variety of seemingly powerful institutions in a way that emphasises their importance and dominance. The extracts describe 'official figures' (ex.16), 'the CQC [Care Quality Commission]' (ex.18), 'results presented yesterday at the world's largest Alzheimer's conference' (ex.19), 'The NHS' (ex.21) and 'doctors' (ex.22). In these extracts, there are actual individuals ('doctors'), health care institutions ('the CQC' and 'NHS') and then 'figures' and 'results'. Interestingly, there

are no named individuals here, but the institutions appear to speak for themselves in terms of reliability. The eliteness of these sources, representing elite bodies presumed to have expert knowledge, enhances the newsworthiness of the story (Bednarek & Caple, 2017).

The voices and experiences of *patient(s)*, meanwhile, are excluded. The agent or doer of the action (Thompson, 2013) is a role rarely assigned to *patients* or a *patient*. Instead, the passive voice predominates, with or without a named agent. Taking an example, Extract 16 realises 'dementia patients' as being acted upon: 'Dementia patients are being taken into hospital for malnutrition at twice the 2010 rate'. Not only do the 'patients' not have agency and thus are grammatically depicted as having no control, the agent of the clause is omitted such that we do not know who did the taking into hospital. This is what van Leeuwen (1995) terms 'suppression', meaning social actors are excluded by avoiding all reference to them. Suppression is further realised through the nominalisation of 'home help with eating and drinking' – again, the reader does not know who is doing the helping. Nominalisation, the transformation of a verb into a noun, is prevalent in bureaucratic and academic discourse because it allows the action to be de-personalised (Fowler, 1991). Likewise, there is no verb with which to show tense, so nominalisation is generalised, not tied to a specific time (Thompson, 2013). The impact of suppressing the agent is that 'patients' become even less powerful, because they are at the mercy of entirely anonymous social actors.

Concordance analysis illuminates that the keywords *patients* and *patient* appear in the passive voice frequently. To provide some measure of quantification, Table 7.7 lists the most common constructions of *patients* or *patient* in the passive voice, as identified through the use of the auxiliary verb 'to be' followed by a past participle (not including the instances where the auxiliary 'to be' is omitted, as in Extracts 18 and 21 above).

*Table 7.7: Constructions of* patients *and* patient *in passive voice*

| ***Patients* or *patient* + past participle** | **Frequency** |
|---|---|
| patients are | 181 |
| patients were | 78 |
| patients being | 34 |
| patient was | 24 |
| patients will be | 13 |
| patients to be | 11 |
| patient who was | 9 |

In comparison to these passive forms, searching for evidence of the keywords *patients* or *patient* as the grammatical agent of a clause produces relatively few results. For example, examining concordance lines for *patients* reveals that this keyword is immediately followed by a verb attributed to the *patients* just 81 times, as in the following example from *The Times*: 'Some PCA patients report feeling that their memory is worse than it used to be' (2014). Here, 'Some PCA patients' are represented as the agent in the clause, holding agency and taking action. However, as Table 7.7 indicates, a far more dominant grammatical pattern sees the keywords *patients* or *patient* grammatically positioned using the passive voice. Where the previous analysis of the noun phrase 'people with dementia' highlighted the tendency to position 'people with dementia' as circumstances within transitivity processes, dementia 'patients' are more typically attributed the role of the receiver of the action (in transitivity terms, ironically, this grammatical role is called the 'patient' (Halliday & Matthiessen, 2013)).

The passive voice entails the manipulation of agency such that the power status of certain social actors is emphasised or diminished, and it is a highly persuasive grammatical tool in the representation of individuals (Benwell & Stokoe, 2006). In news reports of tragic events, Fowler (1991) notes that the passive voice orients the story to focus on the receiver of the action such that the tragedy is foregrounded. In the Dementia News Corpus, the prevalence of the passive voice in describing *patients* or *patient* supports this contestation, centring on the fate of the *patient(s)* as they are tested, diagnosed, and cared for, while backgrounding information about those doing the testing, diagnosing and caring. The passive voice is particularly prevalent in discussion of abuse perpetrated against people with dementia, a discourse which is prolific in the corpus and is the second major context in which the nouns *patients* and *patient* occur.

The discourse of abuse was identified in the initial keyword survey of Chapter 4, with keywords relating to abusive behaviour (*abuse*), surveillance (*footage, cctv*) and the criminal justice system (*jailed, cqc* [Care Quality Commission], *hearing, cps* [Crown Prosecution Service]). This discourse emerges in concordance analysis of the keywords *patients* and *patient*, with a particular focus on abuse which occurs within institutions, especially care homes and hospitals. Some representative examples are reproduced in Extracts 23-28, showcasing some of the passive constructions listed in Table 7.7 as well as variations which similarly passivize *patient(s)*:

23. Elderly **patients** at an NHS hospital were left covered in faeces, injured themselves crawling on urine covered floors and were physically restrained with tables and chairs. *(Daily Mail,* 2014)
24. Too many dementia **patients** are left hungry, thirsty and desperate because they aren't mentally robust enough to complain. *(The Times,* 2015)
25. Elderly dementia **patients** were kept like 'captured animals' on a mental health ward with relatives comparing their treatment to a 'zoo,' a damning report has revealed. *(Daily Mirror,* 2015)
26. A SHOCK report into dementia care has uncovered horror allegations of **patients** being manhandled, handcuffed to beds, accused of criminal damage and left for hours without food, drink or pain relief. (*Express Online,* 2016)
27. An Alzheimer's **patient** who was discharged from hospital at 5am in freezing temperatures was found when he knocked on a stranger's door 19 miles away and pleaded to come in from the cold. (*Daily Mail,* 2012)
28. In one case a 64-year-old **patient** was handcuffed to his bed by police officers after he became distressed on a ward. Families have detailed how loved ones have been manhandled, denied visits, left in soiled sheets and abandoned. (*Express Online,* 2016)
29. Dementia **patient** was left lying on the floor of care home for TWO HOURS because ambulance staff were 'too busy' to come and help. (*Daily Mail,* 2013)

As a linguistic strategy in discussions of violence and abuse, the passive voice can be extremely influential. Psycholinguistic research has shown that the use of the passive voice in describing violence tends to lead to a greater acceptance among readers of that violence (Henley *et al.*, 1995). This is partly because the passive voice diminishes perpetrator responsibility and may suggest the victim was to blame for not fighting back (Coates & Wade, 2007). In the Dementia

News Corpus, the passive voice establishes a clear sense of victimhood and inherent vulnerability in being a dementia 'patient', while the social actors perpetrating the abuse are oftentimes backgrounded or entirely excluded. Agents of the abuse are named in only two of the examples above ('police officers' (ex.28) and 'ambulance staff' (ex.29)), while in all other extracts the individuals responsible for the actions are excluded. The omission of other social actors means the focus of the clause is entirely on the victimhood of the 'patient(s)', rather than on the perpetrators.

Dementia 'patient(s)' are depicted variously as physically dangerous, utterly dependent on others, and no longer human. The references to restraint – 'physically restrained' (ex.23), 'manhandled' (ex.26 and 28) and 'handcuffed' (ex.26 and 28) – imply that people with dementia are physically aggressive and require force in order to subdue them, alluding to wrongdoing and criminality. The verbs 'left' (ex.24, 26 and 29) and 'abandoned' (ex.28) introduce the notion that people with dementia cannot be left unattended – they require constant support from healthy others. The implication is that people with dementia need others to take care of their every need; they are almost childlike in their dependency. Clarke (2006) observes the tendency in the news media to do more than infantilise people with dementia – in his analysis of magazine articles about Alzheimer's disease, people with dementia were constructed as undeserving of basic human rights. There are similar indications in the Dementia News Corpus that people with dementia lose all dignity and become less than human, with references to defecation - 'covered in faeces…crawling on urine covered floors' (ex.23), 'left in soiled sheets' (ex.28) – and the simile 'like captured animals' in a 'zoo' (ex.25). These depictions speak to cultural stereotypes of the asylum (Zeilig, 2013), with physically aggressive, completely dependent beings living in their own filth. Not only do dementia 'patients' not have grammatical agency, the lexical choices portray them as feeble, incompetent and abhorrent. This removes people with dementia from moral significance or worth because their humanity is stripped away in such representations.

## 7.4 Victimising dementia sufferer(s)

Another statistically significant label in the corpus is *sufferers*, and less frequently its singular form *sufferer*. To be a *sufferer* or *sufferers* implies that life is an immense hardship full of pain, tribulation and loss (Oxford English Dictionary, 2019). Thus the label *sufferer(s)* connotes a status of victimhood and suffering. Table 7.8 presents the frequencies and keyness values for *sufferers* and *sufferer*, and it can be seen as with *patient(s)* that the plural form is more frequent,

indicating that people with dementia are more likely to be described as a group rather than on an individual level.

*Table 7.8: Frequency and keyness values for* sufferers *and* sufferer

| Keyword | Frequency | Keyness |
|---|---|---|
| *sufferers* | 1267 | 6430.19 |
| *sufferer* | 478 | 1953.53 |

The lexical collocates of the keywords *sufferers* and *sufferer*, reproduced in Tables 7.9 and 7.10 below, provide a thematic overview of the more salient contexts in which the keywords appear. Identical collocates are marked with an asterisk (*). Both keywords collocate most strongly with 'dementia' and 'alzheimer's', providing a degree of clarification that these labels are, on the whole, being used to describe people with dementia, rather than, say, 'cancer sufferers'.

Where the label *patients* tends to locate people within a medical or scientific setting, *sufferer(s)* primarily describes individuals in the context of care, either professional caregiving or care provided by family members. This is evidenced in the saliency of collocates relating to the act of care and support ('help', 'carers', 'care'), the location in which care takes place ('home' [as in a care home or nursing home], 'beds') and the family members who support the *sufferer(s)* ('families', 'wife', 'family', 'daughter'). Collocates of the singular *sufferer* also include 'killed', 'death' and 'died' which point to potential discussions of the deaths of specific individuals.

*Table 7.9: Top 30 lexical collocates of* sufferers*, listed in order of log-likelihood and with frequency of collocation in brackets*

| **Top 30 lexical collocates of *sufferers* (+/- 5 words)** |
|---|
| *dementia (535), *alzheimer's (158), help (83), carers (42), *care (70), families (46), number (47), uk (36), disease (49), brains (33), thousands (26), condition (27), memory (28), treatment (23), britain's (13), parkinson's (18), *elderly (18), beds (14), hope (25), half (19), found (23), thirds (12), new (24), drug (19), million (16), worldwide (13), brain (23), expected (16), millions (13), *home (21) |

*Table 7.10: All lexical collocates of* sufferer*, listed in order of log-likelihood with frequency of collocation in brackets*

| **All lexical collocates of *sufferer*** |
|---|
| *dementia (308), *alzheimer's (86), old (64), year (61), *elderly (33), *home (36), *care (28), wife (21), killed (13), death (15), died (14), family (13), daughter (11), 83 (12) |

The collocates suggest that individuals labelled as *sufferers* and *sufferer* are routinely situated in the context of care that they receive, and this finding is corroborated when looking beyond individual collocations to consider all occurrences of *sufferers* and *sufferer*. A discourse which emerges prominently in concordance analysis for these collocations is that of abuse against *sufferers* and the individual *sufferer*, perpetrated within a care setting. Of all 1267 instances of the keyword *sufferers*, 354 of these (almost 30%) situate the *sufferers* as victims of abuse. This pattern is even more noticeable when looking at the singular *sufferer*, in which 280 of all 478 occurrences (60%) present a person with dementia as a victim of abuse. Beginning first with the plural form *sufferers*, a selection of concordance lines are reproduced below to provide an insight into the range of abusive practices documented:

30. Dementia **sufferers** have been left to starve or live on biscuits, with others left in soiled sheets and dirty clothes, according to a damning report warning of failures to care for the vulnerable. *(Daily Telegraph,* 2016)
31. Despite repeated Government promises to end this dangerous practice of drugging dementia **sufferers**, there is mounting evidence that it continues unabated in care homes all over the country. *(Daily Mail,* 2013)
32. Elderly patients and dementia **sufferers** have been 'restrained unnecessarily' and given 'inappropriate sedation' at a hospital where health watchdog inspectors have declared a major incident, it has emerged. *(Daily Telegraph*, 2014)
33. Dementia **sufferers** face 'Russian roulette' at hospitals as thousands are discharged in middle of night; Elderly patients are being handcuffed to beds and denied food and pain relief, the Alzheimer's Society revealed. (*Daily Mirror*, 2016)
34. Dementia **sufferers** in a private care home were "pelted with bean bags" and tormented by their carers, with one victim having their foot stamped on and another being tipped out of a wheelchair, a court heard. *(Independent,* 2013)

35. A perverted careworker who filmed herself sexually assaulting vulnerable elderly **sufferers** at a care home has been jailed for ten years. *(Express Online*, 2015)
36. Callous tricksters conned elderly dementia **sufferers** out of thousands of pounds in heartless crimes; Kevin Richardson, with the help of cousin James, who works for a local council, even drove some of the pensioners to the bank to get them to withdraw money. *(Daily Mirror*, 2016, headline and lead paragraph)
37. An antiques dealer and his two accomplices who arranged the theft of cherished antiques from the homes of elderly Alzheimer's **sufferers** while they slept have been jailed for a total of 19 years. (*Daily Telegraph*, 2015)

Concordance analysis for the label *sufferers* in the corpus suggests that the discourse of abuse is broadly divided into abuse which is depicted on a national scale, and abuse which takes place on a more individual level, reflected in Extracts 30-33 and Extracts 34-37, respectively. In a number of cases, articles in the Dementia News Corpus describe abuse against dementia *sufferers* as a widespread issue taking place nationally. Reports of this type generate fear around the condition because the implicit assumption is that dementia *sufferers* are inherently vulnerable, weak, and likely to be abused at some point in their care. Presenting abuse against dementia *sufferers* as a national issue is realised through a variety of linguistic features. First and foremost, as shown in Extracts 30-33 above, the label *sufferers* is frequently used in a generic way, referring to no individuals in particular (van Leeuwen, 1995). This anonymity and vagueness implies that the term *sufferers* represents all, or at least many, people with dementia. The social actors involved in documenting or reporting the abuse tend to be large organisations (such as 'health watchdog inspectors' (ex'.32) or 'the Alzheimer's Society' (ex.33)) rather than individual people. This gives the impression that the problem is of significant enough proportions that it needs addressing by official institutions. A variety of intensifiers emphasise the scale of the problem – for instance, 'all over the country' (ex.31), 'a major incident' (ex.32), 'thousands' (ex.33). Moreover, the grammatical device of nominalisation (Thompson, 2013) is used, obscuring the agent performing the abuse and thus casting the perpetrator or perpetrators as anonymous, possibly numerous individuals acting in unknown locations. For example, the abusive behaviour in Extract 31 is captured in the noun phrase 'this dangerous practice of drugging dementia sufferers'. The action here is nominalised as a noun, 'practice'. Without an agent or 'doer' of the action, we are left with the impression that unknown people, in unknown quantities, are undertaking this abuse across the UK.

Altogether, this contributes to the portrayal of the 'dementia sufferers' as victims caught in a crisis of institutional failings of far-reaching, chaotic proportions.

Abuse against dementia *sufferers* is also individualised, as Extracts 34 to 37 demonstrate. In other words, the action is situated in a localised context and involves specific social actors, rather than seeming to represent all people in all contexts. In these instances, the label *sufferers* appears alongside a range of abuse types, including physical (ex.34), sexual (ex.35) and financial abuse (ex.36 and 37). The abuse tends to take place in singular locations, for example 'a care home' (ex.35), and perpetrators are identified either by name (e.g. 'Kevin Richardson, with the help of cousin James' (ex.36)) or are labelled in terms of their profession ('carers' (ex.34), 'a perverted careworker' (ex.35), 'an antiques dealer and his two accomplices' (ex.37)). Labelling social actors based on something they do (such as 'careworker') is what van Leeuwen (1995) terms 'functionalisation', and this differs from 'identification', which depicts a person based on their perceived qualities and characteristics. Labelling perpetrators of abuse in relation to their career, especially when their profession is care work, creates a disjunct between expectations of carers as kind and loving versus the abusive behaviour attributed to them. Meanwhile, 'sufferers' are depicted in terms of 'identification'; that is to say that being a 'sufferer' of dementia is a core characteristic, a state of being rather than a lifestyle choice, in much the same way that a social actor might be labelled as 'tall' or 'blonde'. The subtle difference in these types of labels for perpetrators of abuse and people with dementia, respectively, reinforces the perception that people with dementia are inherently vulnerable and at risk because they require care and are in no position to defend themselves.

Reinforcing the individuality of these abusive behaviours, news reports of abuse against specific dementia 'sufferers' tend to describe the judicial process, establishing the particular incident as an individual, isolated problem. Some examples from the extracts above include 'a court heard' (ex.34), 'jailed for ten years' (ex.35) and 'jailed for a total of 19 years' (ex.37). It has been observed elsewhere that abuse against elderly people is most commonly reported in the media while the case is moving through the justice system (Beard & Payne, 2005). As a consequence, abuse against the elderly is typically depicted as a crime problem or an individual problem rather than a social issue that requires intervention or policy changes (Mastin *et al.*, 2007). In other words, readers are encouraged to see the issue of elder abuse as a local, individual concern, devoid from a broader political or social background. The articles in the Dementia News Corpus that individualise abuse against people with dementia thus remove the

issue from a national or political sphere and reduce opportunities to consider how society might address the problem.

The singular label *sufferer* appears in largely the same contexts as its plural form, but with significantly more graphic descriptions of abuse. Out of a number of particularly explicit examples which could have been reproduced, four extended concordances are given in Extracts 38 to 41, representative of the highly sensational language used to describe and evaluate abuse perpetrated against individuals with dementia:

38. A self-pitying killer who stabbed an 85-year-old woman to death has whined about prison life after just one day behind bars. The monster talked his way into tragic dementia **sufferer** Eleanor Whitelaw's home and plunged a pair of scissors into her neck seven times. (*Daily Mirror*, 2015)
39. An 83-year-old Alzheimer's **sufferer** who was left with horrific injuries after 'pure scum' burglars stormed her home and attacked her was beaten so badly that her family feared she was dead. Zallu Hassan suffered severe facial injuries including a broken cheekbone and jaw and a fractured eye socket after the gang stormed her home in Ilford, Essex. (*Daily Mail*, 2015)
40. THESE are the horrific bruises inflicted on a 90-year-old dementia **sufferer** by her cruel live-in carer. Terrified Muriel Munro was beaten black and blue on her face, arms, legs, ears and feet by evil Dorothy Kerridge, 56, during the last months of her life. (*Express Online*, 2015)
41. A blind dementia **sufferer** died after she was found covered in 20 cuts and bruises following a month-long stay at a £825-a-week care home. Pamela Matthews's family were shocked when the 85-year-old developed deep gashes, carpet burns and extensive bruising during her stay at Woodbine Manor, Bognor Regis. (*Daily Mail*, 2017)

A range of linguistic features are at work in these examples to construct the dementia *sufferer* as a victim of abuse. In contrast to the relatively more muted examples of institutional abuse given in Extracts 30 to 37, these extracts describe in extremely graphic and almost voyeuristic detail how individuals with dementia were physically abused. The verbs recounting the abuse are sensational, for example ‘stabbed’ and ‘plunged’ (ex.38) or ‘stormed’ and ‘attacked’ (ex.39). In transitivity terms, these verbs are transformative material processes (Thompson, 2013), or in other words they represent an action being ‘done to’ a participant in a way that

alters their previous state. In the cases presented here, this choice of verb emphasises that the *sufferer* is acted upon by others, and therefore has no control over their own situation. The descriptions of injuries generally focus on specific body parts – 'neck' (ex.38), 'broken cheekbone and jaw and a fractured eye socket' (ex.39), 'face, arms, legs, ears and feet' (ex.40) – which almost fetishises the violence. Alliteration is another recurrent feature contributing to the vivid and detailed imagery – 'plunged a pair' (ex.38), 'beaten black and blue' (ex.40). It is worth noting that several articles reporting on individual abuse in this way refer to accompanying images (as seen, for instance, in the capitals 'THESE' in Extract 40). A brief and by no means comprehensive or systematic examination of the original article online (McLelland, 2015) reveals that the images given to accompany this particular article are close-up photographs of an elderly woman's face and legs, covered in bruises and cuts. These graphic images reinforce the article's linguistic depiction of horrific violence perpetrated against individuals with dementia.

The abuse described is perpetrated against specific, named individuals, thus constructing abuse against people with dementia as a localised phenomenon. Typically, the *sufferer* is given a name, as in 'dementia sufferer Eleanor Whitelaw' (ex.38), and a specific geographic location may be identified, such as 'her home in Ilford, Essex' (ex.39). Personal information about ordinary people, such as names, residence and jobs, enhances a story's newsworthiness by constructing an event as directly affecting real individuals (Bednarek & Caple, 2017). Unlike the generic references to multiple unknown *sufferers* which suggested that abuse was taking place nationally, the personalisation of the singular *sufferer* establishes the issue on a very local level. This is reinforced through the labelling of the perpetrators. Some examples from the extracts above include 'monster' (ex.38), ''pure scum' burglars' (ex.39) and 'evil Dorothy Kerridge' (ex.40). These descriptions, which attribute monstrous qualities to the individuals, suggest that the perpetrators are somehow less human. The implication is that these incidents are exceptional, affecting specific and singular individuals, rather than part of a wider social issue of institutional abuse.

It is implied that a dementia *sufferer* is inherently vulnerable and weak, and thus at risk of being abused by virtue of their status as a *sufferer*. The dementia *sufferer* is generally constructed as fundamentally vulnerable through a variety of adjectives that emphasise elderliness and frailty. The *sufferer* is described using adjectives like 'tragic' (ex.38), 'terrified' (ex.40) and 'blind' (ex.41), each implying that people with dementia are frail and unable to protect themselves. Moreover, each example above states the age of the *sufferer*, for example,

‘An 83-year-old Alzheimer’s sufferer’ (ex.39). In fact, Table 7.10, above, highlighted that strong collocates of the keyword *sufferer* relate to age (e.g. ‘elderly’, ‘old’, ‘year’). The label *sufferer* is frequently accompanied by the specific age of the individual, and less frequently by other adjectives that contribute to a sense of vulnerability and weakness. Table 7.11, below, lists all adjectives that modify the label *sufferer*.

*Table 7.11: Adjectives modifying* sufferer*, with frequencies in brackets and ‘x’ representing a numerical figure*

| **Adjectives modifying *sufferer*** |
| --- |
| *x*-year-old (58), [sufferer,] *x* (31), elderly (25), vulnerable (6), frail (4), blind (3), tragic (2), trusting (1) |

Although providing factual information such as age is a common feature of news discourse (Bell, 1991), the ages presented here also serve to victimise the individuals by explicitly stating their elderliness, and by implication, their vulnerability. There is a bias in the news media towards viewing certain social groups as more worthy of the status of ‘victim’, namely elderly women and young children, by virtue of their perceived defencelessness and innocence (Greer, 2017). The Dementia News Corpus provides ample evidence that people with dementia are positioned as particularly vulnerable. The adjectives listed in Table 7.11 promote the idea that a dementia ‘sufferer’ is dependent and helpless, due either to their advanced age (*‘x*-year-old’, ‘elderly’), physical disabilities (‘frail’, ‘blind’) or inherent risk of harm (‘vulnerable’, ‘tragic’, ‘trusting’).

Clark (1992) analysed news reporting of crimes of sexual violence, and identified that when women are depicted as sexually unavailable (by virtue of being married, or a housewife, or a young girl), the male perpetrators are construed as fiends. In contrast, when the female victims are portrayed as fallen or sexually available (prostitutes, or blonde, or unmarried with children), there was a lessening of blame associated with the men – instead they were depicted as sex-starved, justifying their behaviour to some extent. In the articles in the Dementia News Corpus, the abusers are all evaluated pejoratively, such as ‘self-pitying killer’ (ex.38), for example, and we can see that people with dementia are explicitly identified as victims. Yet it seems that the news media suggests that abuse and neglect are inevitable outcomes, because of the repeated emphasis on the inherent vulnerability of the dementia *sufferer(s)*. Where Clark identifies that abuse is depicted as natural or inevitable when females behave in a particular

way, so in the Dementia News Corpus abuse against people with dementia is construed as expected (albeit wrong), because *sufferer(s)* are frail and unable to defend themselves. Thus the discourse of abuse, which victimises dementia *sufferer(s)*, perpetuates fear surrounding the condition.

## 7.5 Conclusion

Labels for social actors divide people into categories, and they are a useful tool in the news media because they can convey a lot of meaning in just a few words (Matheson, 2005). This chapter has investigated the most common labels attributed to people with dementia in the corpus, namely *people* with dementia, *patient(s)* and *sufferer(s)*. Quantitative analysis highlighted these labels as being the most salient in comparison to general language (see Chapter 4), and a qualitative exploration shed light on how these labels are used to construct people living with dementia.

The analysis found that people with dementia are commonly labelled through the phrase 'people with dementia'. Although this phrase is an example of 'person-first language' (Blaska, 1993), prioritising the person before the illness, the analysis highlighted how this phrase was used to quantify and genericise people with dementia. Through the grammatical concept of transitivity (Halliday & Matthiessen, 2013), it was noted that social actors described as 'people with dementia' rarely occupy an agentive position in the clause, and are more likely to be depicted as being acted upon rather than taking action for themselves. This grammatical reduction of agency was similarly seen in the label *patient(s)*. People with dementia described as *patients* or a *patient* were primarily positioned within a discourse of clinical science and research, and agency was manipulated through the use of the passive voice to construct *patient(s)* as passive and helpless, continuously acted upon by the authorities within science, medicine and the government. A discourse of abuse was a predominant feature of the labels *sufferers* and *sufferer*, particularly in the context of care. Labelling people as dementia *sufferers* or a *sufferer* recurrently occurred alongside descriptions of their inherent vulnerability, such as through references to old age and general frailty. Through the discourse of abuse, it was implied that dementia inherently makes a person weak, vulnerable and passive in the face of violence and abuse.

While the analysis in this chapter considered the more salient common nouns attributed to people with dementia, the following chapter explores proper nouns describing people with dementia, specifically celebrities with dementia. Complementing the findings from this

chapter, Chapter 8 considers how some of the issues of passivity and victimhood raised in this chapter are represented in relation to specific individuals.

# Chapter 8: Celebrity stories of dementia

## 8.1 Introduction

Celebrity stories of illness have proliferated in the news media in recent decades. This has been attributed to a growing media interest in medical science, as well as the cult of the celebrity and the rise in tabloid journalism (Lerner, 2006). The keywords presented in Chapter 4 highlighted the statistically significant frequencies of a number of proper nouns. While a few related to individuals who were regularly quoted (e.g. *cameron* [David Cameron, the then Prime Minister] or *doug* [Doug Brown, Chief Research and Policy Officer at Alzheimer's Society]), many proper nouns referred to celebrities diagnosed with dementia. Building upon the insights gleaned in the previous chapter, this chapter explores prominent celebrity stories of dementia to investigate how dementia is represented in relation to specific individuals.

News reports of celebrity illnesses have been credited with promoting health-seeking behaviours. For instance, Kylie Minogue's diagnosis of breast cancer in 2005 was widely reported in the Australian press, and was followed immediately by a 40% increase in bookings for breast cancer screenings (Chapman *et al.*, 2005); the number of women booking smear test appointments increased by 19% following news reports of British reality star Jade Goody's death from cervical cancer (MacArthur *et al.*, 2011); and coverage of Brazilian president Lula da Silva's diagnosis of laryngeal cancer corresponded with a 67% increase in Google queries for information on how to stop smoking (Ayers *et al.*, 2014). However, celebrity stories of illness may present an unrealistic, glamorous version of the illness, which could be detrimental to readers who are experiencing the same condition (Ashton & Feasey, 2014). It is generally acknowledged that media reporting of celebrity suicide, for instance, can cause 'copy-cat' suicides and have devastating effects on suicide rates (Stack, 1987; Stack, 2003; Chen *et al.*, 2010). The power and influence, both positive and negative, of celebrity illness stories is significant.

*Table 8.1: Keywords denoting celebrities with dementia in the Dementia News Corpus, listed in order of keyness*

| Keyword | Frequency | Keyness | Number of articles | Year of publication | Full name | Profession |
|---|---|---|---|---|---|---|
| *janner* | 429 | 2,776.33 | 36 | 2015 | Greville Janner | Member of House of Lords |
| *pratchett, [terry]* | 270 [336] | 1,770.48 [886.55] | 72 | 2012-2017 | Terry Pratchett | Author |
| *wilder* | 196 | 820.41 | 10 | 2016 | Gene Wilder | Actor |
| *astle* | 117 | 770.78 | 46 | 2014-2017 | Jeff Astle | Footballer |
| *stiles* | 124 | 686.17 | 31 | 2016-2017 | Nobby Stiles | Footballer |
| *prunella* | 89 | 509.77 | 30 | 2014-2015 | Prunella Scales | Actor |

Table 8.1, above, presents the keywords denoting celebrities in the Dementia News Corpus, along with information regarding each keyword's frequency in the corpus, the number of articles containing the keyword, the years in which these articles were published, and the full name and profession of the individual concerned. It can be seen that, although Greville Janner is mentioned by far the most frequently, there are significantly more articles that mention Terry Pratchett (identified by the keyword *pratchett* and not the first name *terry*, also a keyword, but used to refer to a number of other individuals in the corpus). The years that the articles were published tend to correlate either to the year they announced they had dementia (Nobby Stiles in 2016; Prunella Scales in 2014), the year they died (Gene Wilder in 2016), or in the case of Greville Janner, the year events related to his dementia occurred (he later died in the same year, 2015). Jeff Astle died in 2002, so the number of articles discussing him in relation to dementia is intriguing. Finally, Terry Pratchett announced his dementia diagnosis in 2007, and later died in 2015. The articles that reference him span the entire data collection period, and are not solely focused on his death in 2015, suggesting a keen interest in the media on Pratchett in relation to the topic of dementia.

The keywords listed in Table 8.1 most commonly occur in articles in which the entire focus is on the named individual and the fact that they have or had dementia (although a small number of articles mention the celebrity only once, in passing reference). The articles containing these keywords can be broadly divided into four groups, based on their overall content: articles that focus on celebrities who live with dementia; articles concerned with celebrities dying with dementia; articles about the association between football and dementia;

and articles about the contentious case of Greville Janner. With this distinction in mind, the following analysis considers how these celebrities with dementia are depicted, and what this might reveal about the news media's representation of living with dementia.

## 8.2 Life with dementia: Terry Pratchett and Prunella Scales

In the Dementia News Corpus, a number of articles centre on celebrities who are living with dementia, most popularly Terry Pratchett and Prunella Scales. Of the 72 articles featuring Terry Pratchett, 31 were published before his death in March 2015, reporting on his life with dementia and his advocacy work with regards to dementia and assisted dying. Meanwhile, during the period of data collection, it was announced by her husband that Prunella Scales had been diagnosed with dementia. Although this announcement received limited coverage at the time (just 2 articles), Scales remained in the news for another year as articles were periodically produced in reference to her life with dementia. News reports of Scales' and Pratchett's lives with dementia are complex and contradictory, blending a discourse of tragedy for the loss of talent, with a discourse of living well with dementia, along with a discourse of scepticism about their remaining abilities.

As the analysis of the previous chapter illuminated, exploration of the labels attributed to people with dementia offers a lens through which to consider how both the individuals and dementia are constructed. News reporting of Terry Pratchett before his death in 2015 linked him to dementia in a number of ways. In comparison to the construction of generic people with dementia as passive and vulnerable *patients* and *sufferers*, descriptions of Terry Pratchett having dementia generally position him as active and in terms of his achievements and status. The following are representative of how Pratchett is generally introduced:

1. In recent years, author Sir Terry **Pratchett**, who was diagnosed with Alzheimer's disease in 2007, has become a vocal advocate of assisted dying being legalised and regulated in the UK - saying: 'I live in hope I can jump before I am pushed.' (*Daily Mail*, 2014)

2. Author Terry **Pratchett**, who announced he had Alzheimer's in 2007 and made a heartbreaking documentary about his disease for the BBC, said: "One of the best things I ever did was to stand up and say I had dementia." (*The Sun*, 2014)

3. SIR TERRY **PRATCHETT**, the bestselling author who is suffering from dementia, has accused David Cameron of failing in his pledge to tackle the crisis caused by the disease. (*The Sunday Times*, 2013)

4. Terry **Pratchett**, who announced his diagnosis with early onset Alzheimer's seven years ago, has pulled out of a Discworld convention later this summer, saying "the Embuggerance is finally catching up with me". (*The Guardian,* 2014)

Originating from a range of news stories between 2012 and 2015, these extracts show a number of similarities in the positioning of Pratchett in relation to dementia. While Extract 3 describes Pratchett as 'suffering from dementia', this description is by no means the norm. There are just 10 instances across the whole corpus in which Pratchett and his dementia are described using the lemma SUFFER ('suffers/sufferer/suffering/suffered'). More frequently, the condition is mentioned in terms of a diagnosis, as in 'was diagnosed' (ex.1) and 'announced his diagnosis' (ex.4), or through an active construction which emphasises his disclosure of the syndrome, such as 'who announced he had Alzheimer's' (ex.2). Notably, Pratchett is recurrently introduced in relation to his achievements: 'author Sir Terry Pratchett' (ex.1), 'Author Terry Pratchett' (ex.2), 'SIR TERRY PRATCHETT, the bestselling author' (ex.3). In emphasising the act of diagnosis, or the moment of disclosure, and Pratchett's status in society, the articles distance Pratchett from the syndrome, suggesting that there is more to him than the disease. This strategy is in contrast to the labelling of people as *patient(s)* and *sufferer(s)*, in which there is little consideration of the person or people behind the disease.

After announcing his diagnosis to the public, Pratchett continued to work, publishing five novels, and campaigning for the right to assisted dying in the UK (Terry Pratchett Books, 2019). News reports both before and after his death drew attention to this, subtly contrasting his sustained abilities with the deficits more stereotypically associated with dementia. While some news articles conveyed admiration for Pratchett's lifestyle, others took a sceptical approach, questioning how representative it was. A selection of examples are reproduced to highlight the implicit and explicit evaluations made about Pratchett's ability to keep working:

5. **Pratchett** has been as prolific as ever since he announced his Alzheimer's, publishing well-received titles including the Discworld novels Snuff and Raising Steam, the Victorian London-set Dodger, and a collaboration with science fiction author Stephen Baxter, The Long Earth. (*The Guardian,* 2014)

6. It was only in July 2014 that **Pratchett** was finally forced by his condition to cancel public engagements. He continued writing almost to the end - though

he had to dictate his books because his skill as a touch-typist […] had deserted him. (*Daily Telegraph*, 2015)

7. YOU'VE got to hand it to Terry **Pratchett**. Even when discussing the difficult subject of his rare form of Alzheimer's he can't help but look on the bright side and even throw in a few jokes for good measure. […] In short Terry **Pratchett** is not slowing down. If anything he's speeding up. (*Express Online,* 2012)

8. **Pratchett** managed to finish seven more books even after Alzheimer's set in and Mr Wilkins talked about his determination to continue. (*Daily Mail*, 2017)

9. Terry **Pratchett** was the ambassador for articulate Alzheimer's, but I recognised nothing of his lucidity, because for me dementia was the robbing of my dad's voice and writing, the slow shrinking of his vocabulary. (*The Guardian,* 2015)

10. Although sufferers such as Sir Terry **Pratchett** can speak eloquently about the disease in its early stages, the ability to communicate gradually deteriorates as the disease progresses: it was left to others to tell the tale of how words turned treacherous and slid away from that great writer, Iris Murdoch. (*Daily Telegraph*, 2013)

In reporting on his life with dementia, the articles in the corpus repeatedly highlight that Pratchett challenged stereotypes about what a person with dementia can and cannot do. Discursive choices emphasise that his abilities and creative output exceeded expectations: 'prolific as ever' (ex.5), 'only in July 2014' (ex.6), 'continued writing' (ex.6), 'Pratchett is not slowing down. If anything he's speeding up' (ex.7). These evaluations position Pratchett in opposition to perceived stereotypes of dementia, which would expect a diagnosed person to stop working, and certainly to be unable to produce publishable, successful works of fiction. The first three extracts above draw on a discourse of active citizenship, showcasing Pratchett's continued contribution to society and reflecting admiration and appreciation for his work.

However, there is evidence in the corpus that some news makers seek to delegitimise his work and contributions precisely because he does not fit the stereotype of a person with dementia. The *Daily Mail*, for instance writes that he 'managed to finish seven more books even after Alzheimer's set in' (ex.8). The verb 'managed' suggests that the act of writing was a struggle and was an abnormal accomplishment, in light of his having dementia. The latter

two extracts (ex.9 and ex.10) reflect on Pratchett's ability to openly discuss the disease, seemingly in blatant disregard for the normative expectation that a person with dementia cannot communicate effectively. One writer in *The Guardian*, whose father had dementia and reflects upon the differences between Pratchett and his own father, seems to mock Pratchett as 'the ambassador for articulate Alzheimer's' (ex.9), suggesting that his communicative abilities represent a distinct, and less severe, type of Alzheimer's in comparison to the writer's experience and expectations of the disease. Meanwhile, the *Daily Telegraph* writer in Extract 10 points out that 'the ability to communicate gradually deteriorates', implying that Pratchett's ability to 'speak eloquently' is fleeting. In turn, this type of reporting suggests that Pratchett is not representative of a person with dementia, because he does not (publicly) display evidence of the deficits normally associated with the syndrome.

In comparison to these descriptions and evaluations of Pratchett's life with dementia, Prunella Scales is represented in the corpus primarily in terms of struggling with dementia. To begin with, the language used to link her with dementia recurrently describes her 'suffering' or 'battling' the condition, along with a metaphorical loss of self as dementia progresses. A selection of concordance lines are provided below to illustrate such descriptions:

11. **Prunella** Scales, the actress, is suffering from a mild "sort of Alzheimer's", her husband Timothy West has disclosed. (*Daily Telegraph,* 2014)

12. How we cope with Pru's Alzheimer's: Timothy West reveals wife **Prunella** Scales' brave battle against illness (*Daily Mail*, 2014)

13. Now Timothy West has revealed the heartache at seeing his wife **Prunella** Scales slip away during her battle with dementia. (*Daily Mail*, 2015)

14. ACTOR Timothy West has told of his heartbreak at watching wife **Prunella** Scales "disappear" before his eyes as she slowly succumbs to dementia. (*The Sun*, 2015)

15. **Prunella** has previously spoken of her battle with dementia. She said: "I'm very grateful that nowadays things are diagnosed and named and you are taught how to deal with them." (*The Sun*, 2015)

Compared with the relative absence of language that depicts living with dementia as an act of sufferance seen in news reports of Terry Pratchett, Prunella Scales is almost exclusively depicted as 'suffering from' (ex.11) or being engaged in a 'battle' (ex.12, 13 and 15) with

dementia. The lemma SUFFER positions Scales as a victim, with implications of immense pain and hardship. On the other hand, the military metaphor of dementia as a 'battle' asserts that she is engaged in a fight, setting up the false expectation that there could be a winner and a loser in the experience of dementia. In either case, Scales is portrayed as struggling with dementia, rather than living well. Her husband and fellow actor, Timothy West, is cited throughout the news coverage, and in the extracts above he is both directly and indirectly quoted as describing Scales' loss of self as a result of dementia: 'slip away' (ex.13), '"disappear" before his eyes as she slowly succumbs to dementia' (ex.14). Whether or not West used this exact language is unclear from the articles; nonetheless, the metaphorical disappearance of Scales' identity establishes a sense of loss, reinforced through reference to 'heartache' (ex.13) and 'heartbreak' (ex.14). In short, news coverage of Scales utilises a discourse of the loss of self to establish the hardship of her and her husband's life with dementia.

The discourse of loss is compounded by comparison between her previous accomplishments and her present deficits. One of Scales' most well-known acting roles was as Sybil Fawlty in the BBC comedy *Fawlty Towers*, and this is regularly referenced in opposition to her current state of health. Extracts 16 to 18, below, offer some extended examples of the distinction made between her acting career and her present life. For instance, in Extract 17, the *Daily Telegraph* writer estimates Scales' fame ('famous to millions') in her role in *Fawlty Towers* and juxtaposes this with the 'gradual disappearance' being brought about by dementia. There is a heavy focus on Scales' memory loss above any other symptoms of dementia – 'struggling with her memory' (ex.16), 'robbing […] her memories' (ex.18) – which creates a sense of nostalgia; the readers and fans of *Fawlty Towers* must remember her role in the show, because she 'may not remember them at all' (ex.18). There is a keen feeling of tragic loss for the talent that Scales once had, and for the fact that she will not remember it.

16. **Prunella** Scales, best known for her role in the classic comedy Fawlty Towers, told in 2013 how she was struggling with her memory, and could not even recall the year she married her husband - which was 1963. (*Daily Mail*, 2015)

17. SHE is famous to millions as the woman whose organisational abilities kept Fawlty Towers running, but **Prunella** Scales's real-life partner has revealed his pain at the actress's "gradual disappearance" after being diagnosed with Alzheimer's. (*Daily Telegraph,* 2015)

18. Whether **Prunella** remembers any of those roles with as much fondness as those who watched her is doubtful now. Indeed she may not remember them at all. Dementia is robbing the 83-year-old actress of her memories with a ruthless rapidity. (*Express Online*, 2015)

As with Terry Pratchett, though, Scales defied expectations by continuing to work after her diagnosis of Alzheimer's disease, featuring in a Channel 4 documentary entitled *Great Canal Journeys*, in which she and her husband travelled on a narrowboat along the canals and discussed their life with dementia, along with other acting jobs. In the same vein as the evaluation of Pratchett in this regard, Scales' determination to continue working is both framed as a noble effort, and cynically mocked in light of her perceived deficits. For example:

19. Today, despite the condition's worsening effects, **Prunella** continues to work on projects including radio scripts. The couple recently won praise for their 2014 Channel 4 travelogue Great Canal Journeys, which besides celebrating their love of Britain's waterways, shone a light on living with dementia. (*The Sun*, 2015)

20. **Prunella** Scales yesterday vowed that her dementia diagnosis would not stop her working. The 83-year-old said 'one can cope' with memory loss, and that some form of dementia is 'extremely common' in later life. (*Daily Mail*, 2016)

21. Yet **Prunella**, despite being 82 and not able to remember what year her children were born or when she married, is still acting. Her ambition is to die on stage at the eighth curtain call and she's compos mentis enough to take part in a More4 documentary about the canal boat holidays she and her husband enjoy. (*Express Online*, 2014)

These extracts demonstrate how Scales' very active and productive life with dementia is explicitly contrasted with the challenges of dementia, for example comparing 'the condition's worsening effects' with the reality that Scales continues to 'work on projects' (ex.19). Where this is applauded in Extract 19, focusing on her achievements in her work, there is a sense that her determination is mocked in Extract 21 from *Express Online*. The writer highlights that she has forgotten dates for significant life events, and 'yet' is 'still' acting. These adverbs communicate surprise, suggesting that her behaviour is at odds with stereotypes of dementia. As with Pratchett, Scales' life with dementia is highlighted as abnormal in comparison with normative expectations of what a person with dementia can do.

## 8.3 Dying with dementia: Terry Pratchett and Gene Wilder

During the period of time covered in the corpus, two celebrities with dementia sadly passed away – Terry Pratchett in March 2015 and Gene Wilder in August 2016. In the corpus, there were 13 and 9 articles, respectively, published immediately after these dates to notify readers of their deaths and commemorate their lives. Newspaper obituaries reflect and influence cultural values (Hume & Bressers, 2010), and as such, examining the coverage of deaths among celebrities with dementia contributes to an understanding of the overall representation of dementia in the news media. Although, as the analysis above has shown, Pratchett was already a high-profile individual in the media in relation to dementia, Wilder did not feature at all in the corpus until he died; he and his family did not publicly disclose his diagnosis. A sample of headlines and lead paragraphs taken from articles reporting on the deaths of Pratchett and Wilder are reproduced below, representative of the openings of the articles published during this time.

22. 'The world has lost one of its brightest, sharpest minds': Tributes paid to best-selling author Sir Terry **Pratchett** as he dies aged 66 after long battle with Alzheimer's (*Daily Mail*, 2015, headline)

23. Author Terry **Pratchett** has died at the age of 66 after a battle with Alzheimer's (*Independent*, 2015, headline)

24. Terry **Pratchett** on the disease that finally claimed him; The much-loved author died aged 66 last week, seven years after revealing he had a rare form of dementia. (*Observer*, 2015, lead paragraph)

25. SIR TERRY **PRATCHETT** 1948-2015 Best-selling writer of Discworld novels loses his battle with Alzheimer's (*Daily Mirror*, 2015, headline)

26. Gene **Wilder** dies aged 83 after secret Alzheimers battle following glittering Hollywood career (*Daily Mirror*, 2016, headline)

27. Gene **Wilder** died holding hands with his family while listening to Somewhere Over the Rainbow... after Alzheimer's battle which he kept secret from fans so he wouldn't upset them (*Daily Mail*, 2016, headline)

28. Gene **Wilder**, Hollywood comedy genius, dies after battle with Alzheimer's (*Daily Telegraph*, 2016, headline)

29. Gene **Wilder**, the man who brought Willy Wonka to life in 1971's Willy Wonka & the Chocolate Factory, has died at 83-years-old. He spent his later years suffering from Alzheimer's. (*Express Online*, 2016, lead paragraph)

It can be seen that headlines and lead paragraphs in news coverage of Pratchett and Wilder's deaths predominantly use a military metaphor to position dementia as a 'battle'. The military metaphor performs a number of different functions. Firstly, the metaphor dramatises the story, establishing it as a newsworthy event through hyperbolic language of violence and death (Bell, 1991). The description of a 'battle' also personifies dementia as a living being with agency and power. The individual is positioned in opposition to dementia, and life with dementia is implied to have been an immense struggle and hardship. In addition, the individual is implied to be a failure for having 'lost' the 'battle'. As has been mentioned previously, and argued persuasively by a number of scholars (e.g. Johnstone (2013), Lane *et al.*, (2013), George & Whitehouse (2014)), military metaphors can be inappropriate in the context of dementia because there is no cure, so the person with dementia will inevitably 'lose', and many people with dementia are older, meaning they may not feel in a position to 'fight'. Moreover, military metaphors focus on the immediate, localised fight between patient and illness, rather than planning for the future or considering how communities can support people with dementia (Lane *et al.*, 2013).

The metaphor is not exclusive to the headlines and lead paragraphs of news articles about Pratchett and Wilder's deaths. Examining the extracts in their original contexts reveals that the military metaphor of DEMENTIA IS A BATTLE is continued throughout the rest of the articles. The presence of the battle metaphor to describe Pratchett's death is curious given that news reports during his life avoided such language. Where Pratchett was seen to be living well with dementia, after his death his dementia came to be depicted as the enemy against which he 'battled'. On the other hand, Wilder withheld information about his diagnosis of dementia, keeping it a 'secret' (ex.26 and 27). Minimal information was shared with the public or the news media regarding Wilder's life with dementia, beyond a statement from Wilder's nephew notifying of his death from 'complications from Alzheimer's disease' and the decision to keep this private so as to avoid upsetting fans. Thus the description of his 'battle' (ex.26-28) or 'suffering' (ex.29) with dementia imposes a stereotype of dementia, namely that life with dementia is a miserable, painful act of sufferance, and refutes the possibility that Wilder actually lived well with the condition.

A discourse of nostalgia for lost talent is evident in news reporting of Pratchett and Wilder's deaths. For instance, in the extracts above, Pratchett and Wilder are recurrently described in terms of their successful careers, such as 'best-selling author' (ex.22), 'much-loved author' (ex.24), 'glittering Hollywood career' (ex.26), and 'Hollywood comedy genius' (ex.28). The superlatives used to describe Pratchett intensify the sense of loss; he is described as one of the 'brightest, sharpest minds' (ex.22), and a 'best-selling' (ex.22 and 25) author, emphasising his talent above others. Wilder's talent is conveyed in hyperbolic evaluations: 'glittering' (ex.26), 'genius' (ex.28), 'brought Willy Wonka to life' (ex.29). Kitch and Hume (2008) observe that journalists engage in a sort of collective nostalgia when reporting on celebrity deaths, constructing the individuals as icons in popular-culture. These appraisals of Pratchett and Wilder's careers and talents heighten the sense of tragedy since their creative output has now been lost to the world. In turn, as observed by Kirkman (2006) and Basting (2009), this type of reporting suggests that dementia is more tragic because it affects an individual with extraordinary talents and abilities.

## 8.4 Footballers and dementia

A key topic within the corpus is of footballers who have developed dementia; words that appeared as key in Table 4.1 include two famous footballer players who developed dementia, *astle* (frequency=117; keyness=770.78) and *stiles* (frequency=124; keyness=686.17), in addition to the keyword *footballers* (frequency=214; keyness=897.82). The interest in Astle and Stiles, and footballers more generally, stems from growing societal concerns regarding the controversial link between heading the football and developing dementia. In 2002, the former West Bromwich Albion and England player Jeff Astle died at the age of 59. At his inquest, the coroner recorded a verdict of "death by industrial disease" (death caused as a result of harm or disease sustained at work) as a result of traumatic injury to the brain from years of heading the ball (Eaton, 2002). Following this, it emerged in the media that a number of former professional football players had been diagnosed with dementia, including former England player Nobby Stiles who began to show dementia-like symptoms in his early 60s. As the issue gained traction in the media, the Professional Footballers' Association (PFA) called for research into the game to determine the impact of heading on the brain (Football Association, 2017). At present, the limited research that has been undertaken does not suggest a link between heading the ball and dementia, although this research is hampered by methodological problems and it is evident that significantly more is needed to establish the long-term consequences of heading (Vann Jones *et al.*, 2014; Rutherford *et al.*, 2019).

In the Dementia News Corpus, Jeff Astle is depicted as the face of football-related dementia. Because the ruling at his inquest of "death by industrial disease" was the first of its kind among footballers in the UK, he is recurrently referenced in relation to the topic of football and dementia. No articles focus exclusively on him or his life; rather, articles refer to him when contextualising the issue of heading and dementia. The following concordance lines offer an overview of a number of patterns identified in analysis of the keyword *astle*:

30. Jeff **Astle** had the first diagnosis of CTE in an ex-footballer after his family asked for his brain to be re-examined three years ago. He had the brain of an 89-year-old. (*Daily Mirror*, 2017)

31. The Football Association are facing mounting anger over the failure to publish potentially lifesaving research promised by them in the wake of former West Bromwich Albion and England centre-forward Jeff **Astle's** death at the age of 59 from early onset dementia. (*Daily Mail*, 2014)

32. **Astle** died 15 years ago last Thursday, though despite the promise after his inquest that research would be undertaken to investigate whether or not there might be a link, there has been none. (*Independent*, 2017)

33. Concerns were first raised following the death of former England and West Brom striker Jeff **Astle**, aged just 59, in 2002. He was found to have CTE which a coroner ruled was caused by heading old fashioned heavy leather balls. (*Express Online*, 2017)

34. **Astle** died aged 59 from 'industrial disease' which a Home Office pathologist blamed on heading footballs but the FA admit a promised 10-year study into links between dementia and head injuries was not completed. (*Daily Mail*, 2014)

35. It is 15 years since an inquest ruled that the former England striker Jeff **Astle** had been killed by industrial disease following repeated blows to the head during his career. His daughter, Claire Wheeler, yesterday responded to this latest survey by accusing the Professional Footballers' Association and the FA of having been more concerned with "protecting the product" of football than the players. (*Daily Telegraph*, 2017)

36. Having shown an exceptional talent for heading, **Astle** died in 2002, aged 59, again from dementia. The pathologist who examined his brain found that it resembled that of a boxer. A coroner agreed that the probable cause of death was "industrial disease" - namely, the cumulative ravages of thousands of headers. (*Daily Telegraph*, 2017)

Temporal references emphasise that Astle's case was the first to raise concerns about the link between heading and dementia; his is described as the 'first' diagnosis (ex.30), and it is often noted that '15 years' (ex.32 and 35) have passed since his death. Indeed, Extract 33 explicitly states that 'concerns were first raised' after Astle's death 'in 2002'. It is notable that the focus is on his death, specifically, rather than his life with dementia. His death is implied to be the catalyst for current concerns and research. For example, Extract 31 describes research 'promised in the wake of…Astle's death', while Extract 33 outlines that the issue came to light 'following the death of…Astle'. Extract 32 refers to research promised 'after his inquest' and Extract 34 describes a 'promised 10-year study' that did not take place after his death. The recurrent references to his death, and the focus on events that took place afterwards, transform Astle into a martyr-type figure. His life with dementia is never actually mentioned at all; it is the act of his dying, and the subsequent inquest, which make him noteworthy.

The sense of martyrdom is reinforced through descriptions of his former talents, as seen similarly in articles about the deaths of Pratchett and Wilder. Most articles outline Astle's achievements in his profession, for example in descriptions such as 'an exceptional talent for heading' (ex.36), or 'former England and West Brom striker' (ex.33). The latter example highlights Astle's elite status (Bednarek & Caple, 2017) as a member of the England football team, establishing a sense of his importance and relevance in society. Meanwhile, the articles create a sense of tragedy that such talent was lost. Although providing factual information about social actors such as their age is a common feature of the news media (Bell, 1991), Astle's relatively young age, 59, arguably challenges dominant stereotypes that people with dementia are elderly. Astle's dementia would generally be classed as 'working age dementia' or 'young onset dementia', referring to dementia which develops when a person is of working age (Alzheimer's Society, 2019). The references to his age, with occasional evaluations such as 'aged *just* 59' (ex.33, my emphasis), communicate the idea that his dementia was abnormal, contradicting normative expectations about who is affected by dementia. The *Daily Mirror*, for instance, explicitly recounts that 'He had the brain of an 89-year-old' (ex.30), thus implying that his diagnosis of dementia was an irregular and unexpected outcome on the basis that he

was not elderly. The underlying assumption here is that dementia is less tragic or unusual when it affects older people, contributing to the misconception that dementia only affects the elderly (McParland *et al.*, 2012).

Emerging clearly from the concordance lines for the keyword *astle* is a discourse of conspiracy. By constructing Astle as a martyr who died too young of an abnormal condition, the news articles signal a sense of injustice. But, rather than villainising dementia as the enemy of football players, these articles target the Football Association (FA) and Professional Footballers Association (PFA). These organisations are both directly and indirectly accused of wrongdoing, through a variety of linguistic devices which assign blame and incite distrust. The issue at hand is a proposed lack of research into the link between heading the ball and dementia. This is communicated through hyperbolic vocabulary – 'the failure to publish potentially lifesaving research' (ex.31) – and unmitigated negative statements such as 'there has been none' (ex.32) and 'was not completed' (ex.34) which convey a sense of finality. Moreover, several articles quote Astle's family members, such as in Extract 35, in which direct and indirect speech are blended: 'more concerned with "protecting the product" of football than the players'. The use of direct speech lends validity to the article (Bell, 1991), and contributes to the sense of injustice as bereaved family members speak out against large institutions.

Transitive verbal processes such as 'admit' (ex.34) and 'accusing' (ex.35) imply culpability and a sense of judgement. According to Halliday's systemic functional grammar (Halliday & Matthiessen, 2013), verbal processes require a 'sayer' (such as the FA in Extract 34), and a 'verbiage' or the content of what is said (such as 'a promised 10-year study into links between dementia and head injuries was not completed' (ex.34)). Verbal processes can include a 'receiver', the person to whom the saying is directed, but in the case of Extract 34 no social actor is named to denote to whom the FA made their admittance. As such, implicitly the article and its readers are positioned as responsible for judging this confession. Meanwhile, as in the case of Extract 35, verbal processes can include a 'target' (the entity targeted by the process of saying) (Halliday & Matthiessen, 2013). In Extract 35, the verb 'accusing' is targeted at the PFA and FA, so these social actors are judged negatively by the 'sayer'. Lexically, the verb choices themselves connote wrongdoing and guilt, with both 'admit' and 'accusing' implying a level of fault.

Several articles refer to the 'promise' of or 'promised' research (ex.32 and 34), suggesting that these organisations deliberately went back on their word by failing to undertake

it. Grammatical agency is manipulated through the use of nominalisation (Halliday & Matthiessen, 2013), such as 'the failure to publish potentially lifesaving research' (ex.31). Here, nominalisation allows the article to avoid directly accusing the FA of withholding research, since it is not explicitly stated who failed to publish the research, although it is strongly implied to be the FA given that they are the only social actor named. Additionally, the passive forms 'are facing mounting anger' (ex.31) and 'Concerns were first raised' (ex.33) omit the social actors who are angry or raising concerns, such that these feelings are suggested to be widespread and universal. Through these linguistic strategies, the news articles in the corpus take a clear stand against the FA and PFA, both implicitly and explicitly suggesting that these institutions have orchestrated a cover-up to avoid damage to their sport.

During the period of study, the family of Nobby Stiles, who played for Manchester United and England, revealed that he had advanced dementia. From the announcement of this diagnosis in August 2016, the keyword *stiles* featured in news articles discussing the link between football and dementia. As with Jeff Astle, Stiles' dementia was itself less of a concern; the news media chose to focus on his diagnosis as evidence of the harmful effects of football, and thus a conspiracy among the FA and PFA. For instance, the keyword *stiles* often appears in lists of professional footballers who have developed dementia, such as in Extract 37:

> 37. Twenty-five ex-footballers with dementia have come forward in just one week, the Sunday Mirror can reveal. It means more that 75 new cases have emerged since the Mirror first revealed how 300 former footballers had been diagnosed with the disease last year. They include three of the 1966 World Cup winners Martin Peters, Nobby **Stiles**, and Ray Wilson. (*Daily Mirror*, 2017)

In examples such as this, Stiles' diagnosis of dementia is used as evidence of the link between football and dementia. Pseudo-scientific language ('75 new cases', 'diagnosed with the disease') combines with precise figures ('twenty-five', '75', '300') and named individuals ('Martin Peters, Nobby Stiles, and Ray Wilson') to establish the legitimacy and reliability of the information. The numbers suggest scientific precision, which is misleading given the limited research which has been undertaken (Rutherford *et al.*, 2019). References to an exposition ('have come forward', 'the Mirror first revealed') allude to a conspiracy, with the newspaper championing itself as the institution to unveil the cover-up and highlight potential wrongdoing.

Where Stiles' life with dementia is mentioned, it is represented in terms of plight. The tragic depiction of his dementia contributes to the severity of the accusation levelled at the FA and PFA, with the message that while these organisations have remained inactive and resistant to research, another footballer has had his life blighted by dementia. Some illustrative examples include:

38. THE family of World Cup winner Nobby **Stiles** spoke yesterday of his battle with dementia and claimed he had been failed by the game he loved. The former Manchester United star, who also has prostate cancer, was struck down by Alzheimer's and vascular dementia 15 years ago. (*Express Online,* 2017)

39. The story of Nobby **Stiles'** struggle with dementia has heightened awareness of the fight for research into possible links between degenerative brain disease and football, campaigners have told The Independent. **Stiles**, 74, has been fighting Alzheimer's and vascular dementia for 15 years and has now lost the powers of speech. (*Independent,* 2017)

40. The evidence suggesting a connection between headers and brain injury is thrown into starkest relief when one considers England's beloved World Cup class of 1966. Martin Peters, who scored the first goal in the final, is suffering from such an advanced stage of dementia that he struggles to recall daughter Leann's name. Nobby **Stiles's** toils with the same illness are so acute that house visits are off limits to all but his closest family. (*Daily Telegraph*, 2017)

41. But football has buried its collective head in the sand, deluded in its belief that head injuries were not its problem […] Tell that to Martin Peters' family, Nobby **Stiles'**, Ray Wilson's and the countless hundreds of former players suffering early onset dementia as a direct result of their time spent doing their job. Playing football. They have all been betrayed. (*Daily Mail*, 2017)

Echoing the analysis above of other celebrities with dementia, it is noted that Stiles' previous talents are juxtaposed with a pejorative evaluation of his current life with dementia. Stiles is especially and frequently labelled in terms of his role on the England football team in the year they won the World Cup: 'World cup winner' (ex.38); 'England's beloved World Cup class of 1966' (ex.40). Such labelling implies that Stiles is a national hero, and contrasts sharply with the sense of decline conveyed within the military metaphors describing his life now: 'battle with dementia', 'struck down by Alzheimer's' (ex.38); 'fighting Alzheimer's and vascular

dementia' (ex.39); 'toils with the same illness' (ex.40). This contrast feeds into the discourse of conspiracy, with the implication that the inaction of football's institutions has resulted in this tragedy.

News articles about both Astle's and Stiles' dementia on the whole take the contested view that heading the football causes dementia. In seeking to convey this message to their readers, the articles simplify the narrative into discrete characters and processes, creating an archetypal story that is consonant with reader expectations (Bednarek & Caple, 2019). There are victims (Astle, Stiles, and other footballers, each of whom are presented as having had successful careers which makes their decline even more tragic and unjust), there are villains (the FA and PFA, who are depicted as deliberately concealing evidence), and there is a simple cause-effect process, namely that football causes dementia. Causality is often simplified in the news media so that events are constructed as 'A causes B', while in reality 'A' is just one part of an incredibly complex phenomenon that results in 'B' (Boholm, 2009). In news stories of crime and criminals, this simplification may lead to the perpetrator or accused being depicted as acting intentionally and maliciously with no consideration of any other relevant motivating factors (Berrington & Honkatukia, 2002). For instance, in the extracts above, the issue of heading the football and dementia is described in the following ways: 'failed by the game he loved' (ex.38) and 'buried its collective head in the sand, deluded in its belief that head injuries were not its problem' (ex.41). The transformative material processes ('failed', 'buried', 'deluded') imply intentionality, suggesting that the FA and PFA have deliberately withheld information or resisted undertaking research. More implicitly, some news articles refer to the collection of 'evidence' (such as ex.40) or the act of campaigning for research (such as ex.39), thus asserting that a link between football and dementia does indeed exist and indirectly criticising football's institutions for not recognising this. A personal connection is made between the footballers with dementia, and football itself, as seen in the statements, 'failed by the game he loved' (ex.38) and 'They have all been betrayed' (ex.41). Such emotive language suggests that football and its institutions are the enemy, not dementia, and indicates that Stiles and fellow footballers have been grievously wronged through football's negligence.

## 8.5 The case of Greville Janner

The most frequently occurring proper noun in the Dementia News Corpus is *janner,* referring to the former MP and member of the House of Lords, Greville Janner. In 2013, Leicestershire Police launched an investigation into allegations that Janner had been sexually abusing children since the 1970s. This investigation revealed that allegations and evidence against Janner had

been put to the authorities from 1991 onwards, but institutional failings meant that Janner had not previously been prosecuted (Crown Prosection Service, 2015). In April 2015, despite a body of evidence sufficient for charging and prosecuting Janner, the Crown Prosecution Service (CPS) ruled that no charges would be brought against him, due to a medical condition that would make him unfit to stand trial: dementia. This decision was criticised by a number of parties, not least the alleged victims and the news media, particularly because Janner was still a full member of the House of Lords at this time. An independent review in June 2015 overturned the decision not to prosecute, and a date was set to determine whether or not Janner was fit to stand trial. On 7 December 2015, it was ruled that Janner was officially not fit to stand trial due to the severity of his dementia, and accordingly a 'trial of the facts' would take place. Janner died later in the month, and at this point all criminal proceedings against him ended.

The case of Greville Janner garnered significant media attention, and was newsworthy for a number of reasons. First and foremost, the case involved a high-profile individual accused of a serious crime that affected numerous individuals, thus meeting the criteria of focusing on an event which was elite, unexpected, negative and impactful (Bednarek & Caple, 2017). The victims of the crime were young children, who are ideologically associated with innocence and helplessness, thus making them 'ideal' victims of crime in the news media (Greer, 2017). Research suggests that news stories of crime, and in particular stories of child sexual abuse, are more newsworthy when the perpetrator holds a position of authority (Wilczynski & Sinclair, 1999). Also, the disputed and controversial ruling that Janner would not be prosecuted enhanced the story's newsworthiness (Mejia *et al.*, 2012). Moreover, crime stories are made more compelling by evidence of institutional failings and cover-ups (Greer, 2017), of which it was suggested there were plenty in Janner's case.

In the Dementia News Corpus, 36 articles report on the unfolding events of Janner's case in 2015. The articles cover the period of time from the announcement of the decision not to charge him in April, to his death in December. The case presented an ideological challenge for the news media. On the one hand, Janner was alleged to be a perpetrator of sexual violence against children, a role normatively villainised by the news media (Wilczynski & Sinclair, 1999). On the other hand, Janner was reported to have severe dementia, which previous analysis throughout this thesis has shown would ordinarily afford him the status of helpless and vulnerable 'victim'. Apart from a single article in *The Guardian*, published after Janner's death explicitly supporting the original ruling that he was not fit for trial, the articles in the

Dementia News Corpus respond to this complexity and contradiction by attempting to discredit his diagnosis of dementia, or at the very least suggest that it was not severe enough to prohibit his trial. The extracts below are selected to capture a range of delegitimisation strategies found in concordance analysis for the keyword *janner*.

42. The Labour peer Lord **Janner** accused of "some of the most serious sexual crimes imaginable" will not face trial because of the "severity" of his dementia, the Crown Prosecution Service (CPS) has confirmed. (*Independent*, 2015)

43. Forgive my cynicism at the timely onset of Lord **Janner's** 'dementia'; Labour peer Greville **Janner** - who has been excused prosecution for alleged sexual assaults on medical grounds - has sufficient marbles left to have claimed more than £100,000 in Parliamentary allowances. (*Daily Telegraph*, 2015)

44. Lord Greville **Janner** - the Labour peer accused of molesting young boys in the 1970s and 1980s - could be tested by experts to prove he has dementia as part of civil claims brought by his alleged victims, a lawyer has said. The family of the 86-year-old politician has been told he will not face child abuse charges because of his memory problems, but he could still face civil action from complainants. (*Daily Mail*, 2015)

45. The Labour grandee controversially escaped prosecution for a string of child abuse allegations because the Crown Prosecution Service said Alzheimer's has left him unfit to face trial. But analysis of Westminster attendance records revealed that **Janner**, 86, attended the House of Lords almost daily and claimed more than £100,000 in expenses in the four years after he was diagnosed with the disease. (*Daily Mail*, 2015)

46. He was diagnosed with dementia in 2009 but the severity of his condition is thought to have deteriorated since he became a suspect. Lord **Janner** has Alzheimer's and is said to require round-the-clock care. (*Daily Mirror*, 2015)

47. As Oskar Groening, the so-called Accountant of Auschwitz, goes on trial at the age of 93 for his complicity in war crimes, the 86-year-old Labour peer Greville **Janner** is excused prosecution for 22 alleged sexual offences against nine boys

> in his Leicestershire constituency, from the 1960s to the 1980s, because he is suffering from "severe dementia". (*Daily Telegraph*, 2015)

A recurrent pattern in concordance analysis for *janner* is variation on the phrase 'because of dementia'. Extracts 42, 44 and 47 exemplify this clearly. Structurally, the list of Janner's alleged crimes appears first – such as '22 alleged sexual offences against nine boys in his Leicestershire constituency, from the 1960s to the 1980s' (ex.47) – before stating that he will not be prosecuted 'because' he has dementia. The effect is that the conjunction 'because' reads like an excuse, paling in comparison to the horrific and detailed accounts of Janner's crimes.

The severity of his dementia is called into question through the strategic use of quotation marks and reported speech. Extracts 42, 43 and 47 illustrate the use of quotation marks - for example, 'the "severity" of his dementia' (ex.42) - to imply that his diagnosis is an opinion rather than a fact. The quotation marks also distance the news article from the words (Bell, 1991), clarifying that the journalist is not complicit in the ruling. Similarly, the use of reporting verbs such as 'say' and 'said' implicitly undermine the legitimacy of Janner's dementia, in phrases such as 'the Crown Prosecution Service said Alzheimer's has left him unfit to face trial' (ex.45) or '[he] is said to require round-the-clock care' (ex.46). By highlighting that this information is second-hand, the news articles offer speculation as to the truth of the statements, thus casting doubt on the plausibility of Janner's diagnosis.

Some articles concede that Janner's diagnosis may be accurate, but attempt to minimise the challenges of dementia in their descriptions of the condition. On six occasions in the corpus, news articles describe Janner's dementia as 'memory problems' or 'memory loss' (for example, see Extract 44). This labelling seeks to trivialise the impact that dementia has had on him in order to suggest that he is well enough for prosecution. A similar effect is seen in the labelling of Janner's capacity as having 'sufficient marbles' (ex.43); the writer tries to measure his level of cognitive function in this belittling metaphor. In Extract 47, Janner is compared with 93-year-old Oskar Groening, who at the time of the article was facing prosecution for Nazi war-crimes. It is implied that, if Groening can be tried at his older age, so too can Janner; his '"severe dementia"' is suggested to be irrelevant. These mitigation strategies contradict the discourse of loss of self and agency that has been identified elsewhere in the corpus in depictions of people with dementia. Previous analysis in this thesis, particularly Chapter 7, noted that the news media emphasised the severity and disabling nature of dementia, but in the case of Janner, dementia is constructed as no more challenging than old age.

Janner is also explicitly excused of faking his diagnosis. Locating his diagnosis temporally ('timely onset' (ex.43); 'since he became a suspect' (ex.46)) draws the reader's attention to the improbability that his symptoms developed coincidentally after the police investigation. In some cases, he is represented as an active social actor, with a number of transformative material processes (Halliday & Matthiessen, 2013) attributed to him, such as 'attended' (ex.45) and 'claimed' (ex.43 and 45). These verb choices construct Janner as a full and capable member of society able to undertake his role in the House of Lords without assistance. In other instances, verb choices highlight his agency in the process of avoiding the trial: Extract 45 describes how he 'escaped' prosecution, while other examples not listed above include 'avoided' (*Daily Mirror*, 2015) and 'dodges' (*Express Online*, 2015). Here, Janner is depicted as acting intentionally and with full capacity, therefore suggesting that his diagnosis is fake.

Earlier analysis of the footballers Jeff Astle and Nobby Stiles drew attention to the prevalence of a discourse of conspiracy or cover-up in news articles about football and dementia. A similar discourse is found in news articles about Greville Janner, supporting Greer's (2017) assertion that news reports of crime are inherently more newsworthy when there is evidence of institutional failure or conspiracy. Extracts 48 and 49, below, illustrate two very explicit ways in which the news media allude to a conspiracy:

> 48. The CPS was today accused of double standards for not prosecuting Lord **Janner** after it emerged at least 19 men with dementia have been convicted of child sex offences since 2010, including ten in the past year. MailOnline can reveal that some paedophiles, including several too ill to enter a plea, have still been prosecuted and in some cases jailed for the rest of their lives because of historic sex attacks. (*Daily Mail*, 2015)
>
> 49. A man who claims he was abused by Lord **Janner** branded the decision not to pursue the case 'a disgrace' and accused prosecutors of protecting the politician because of his status. In an angry statement released via Leicestershire Police, the alleged victim told of the 'pain and suffering' he claims to have suffered. (*Daily Mail*, 2015)

The conspiracy discourse in articles about Janner centres on the belief that Janner was not historically prosecuted, and will not be prosecuted in the future, because of his political position. This discourse is evident in the language of accusation and exposition, such as

‘accused’ (ex.48 and 49) and ‘MailOnline can reveal’ (ex.48), echoing the allusions to a conspiracy among football institutions argued above. The articles directly raise the possibility of ‘double standards’ since other individuals with serious illnesses ‘have still been prosecuted’ (ex.48), and ‘protecting the politician because of his status’ (ex.49). These representative examples attribute the accusation of wrongdoing to others, deflecting responsibility from the newspaper while also reproducing and sustaining the allegation. Extract 48, for instance, omits a social actor in the passive construction ‘was today accused’, neglecting to mention who has done the accusing, while Extract 49 directly attributes the accusation to an alleged victim. The use of reported speech (‘“a disgrace”’, ‘“pain and suffering”’) emphasises the reliability of the story (Van Dijk, 1988), and also adds a personal dimension such that the reader is invited to feel sympathy for the alleged victim and support their point of view. This conspiracy discourse further undermines the legitimacy of Janner’s diagnosis of advanced dementia, suggesting that the dementia itself is not a hindrance to prosecution and that it is just an excuse to conceal a broader institutional cover-up.

## 8.6 Conclusion

In the news media, stories of celebrity illnesses and deaths can have a profound impact on the general public’s response to illness (Chapman *et al.*, 2005). Such news reports reflect and sculpt cultural beliefs and values (Kitch & Hume, 2008). Accordingly, while acknowledging that celebrity illness stories may misrepresent the reality of living with an illness (Ashton & Feasey, 2014), this chapter has investigated the representations of six celebrities with dementia to consider how news reports recount and describe the syndrome and life with it.

The lives of Terry Pratchett and Prunella Scales, both of whom continued to work after their diagnoses of dementia, were periodically reported on during the time period of the present study. Both celebrities defied dominant stereotypes about dementia in their determination to maintain high-profile careers, and this attitude received a mixed response in the news media. Pratchett was framed through a discourse of living well, with an emphasis on his continued abilities and talents, although a tone of scepticism was evident in certain articles describing his professional achievements since his diagnosis. On the other hand, Scales was represented predominantly in terms of ‘suffering’ with dementia, and was largely spoken for by her husband rather than speaking out herself.

A discourse of loss was evident in news reports of celebrities with dementia, both during their lives (Pratchett and Scales) and after they had died (Pratchett and Wilder). This

discourse described their former talents and achievements, in direct contrast to their current state of health. Corroborating the argument put forth by Basting (2009), this comparison suggests that dementia is particularly tragic because the individual's creative output has been lost to the world. The discourse of loss was also found in news reports of the footballers Jeff Astle and Nobby Stiles, although these articles were more prominently coloured by a discourse of conspiracy. This discourse centred on the possibility that football's governing bodies were intentionally concealing evidence of the link between football and dementia. Jeff Astle was constructed in the corpus as a martyr for this cause, while Nobby Stiles' dementia was represented in terms of plight and struggle, contributing to the conspiracy discourse by emphasising the tragedy of football-related dementia.

The contentious case of Greville Janner earned significant media attention in the corpus. It was found that news articles sought to delegitimise his dementia diagnosis, suggesting that his dementia was not severe enough to prohibit his trial, or even that it was entirely faked. This contrasted with more normative depictions of people with dementia found throughout the thesis, which tended to focus on passivity and vulnerability as inherent characteristics of a person with dementia. Instead of portraying Janner as a weak, helpless victim of dementia, the news articles attempted to discredit the diagnosis and cast him as an active agent in the deception, thus firmly establishing Janner's status as the 'villain' of the story. A discourse of conspiracy supported this depiction, with implications of a government cover-up protecting Janner because of his status as a politician, again obscuring the relevance of his dementia diagnosis. In Janner's case, a morality discourse overshadowed the discourse of dementia as loss.

Having analysed the representation of dementia and people with dementia in the preceding four chapters, the final chapter of this study, Chapter 9, reflects upon the various discourses used by the news media to articulate dementia.

# Chapter 9: Concluding discussion

## 9.1 Introduction

In recognition of the increasing challenge that dementia poses to society, this study examined the dominant discourses of dementia created and perpetuated in the British news media, analysing a large sample of news articles published in national newspapers between 2012 and 2017 about dementia. Combining the analytical approaches of corpus linguistics and Critical Discourse Analysis (CDA), the study offers both quantitative and qualitative perspectives on representations of dementia in the press. Corpus linguistic tools helped to identify statistically significant linguistic items and patterns, while CDA informed the qualitative analysis, interrogating salient language patterns in context to identify how they functioned in texts and to reveal the discourses underlying them. This methodological combination illuminated some of the predominant ways in which the British news media conceptualise, discuss and evaluate dementia and those with the syndrome.

The thesis set out to consider the following questions:

1. How is dementia discursively constructed in the British news media?
2. How are people with dementia, and the experience of living with dementia, represented?
3. What are the implications of these representations for cultural attitudes and beliefs about dementia and the experience of living with it?

In this concluding chapter, these research questions are addressed through a synthesis and review of the study's key findings. The significance of the findings is highlighted in light of existing literature on the subject of dementia in the news media and, more broadly, the role of the news media in disseminating information about health and illness. The chapter then examines the practical implications of the study in terms of its contributions to research, as well as for journalists, policy makers and advocacy groups. Consideration is given to the limitations of the study, with a particular focus on the methodological approach of corpus-assisted CDA. Finally, the chapter points to directions in which future research might progress, and ends with some concluding remarks.

## 9.2 Discourses of dementia in the British news media

### 9.2.1 Biomedical discourse

Dementia is predominantly constructed in the Dementia News Corpus using a broad discourse of biomedicine, which seeks to consider disease pathology, causation, prevalence, treatments and a cure. This finding supports previous research, which has identified a pervasive discourse of biomedicine in news reporting of dementia (Clarke, 2006; Kirkman, 2006; Kang *et al.*, 2010; Doyle *et al.*, 2012). As noted in Chapter 2, the news media generally discusses health issues in terms of biomedicine, with a focus on disease causation, prevalence, symptoms, and treatment options (Kline, 2011). Evidence for the pervasiveness of this biomedical discourse in the corpus emerged in the quantitative survey reported in Chapter 4, where a significant number of keywords related to disease pathology, clinical practice and research, and treatment options.

The dominant and overarching biomedical discourse construes dementia through a sub-discourse of dementia as a pathological disease process. This is evidenced in the definition of dementia as a clinical syndrome, as presented in Section 5.2, and the focus on neurobiological changes in the brain that cause dementia, as documented in Section 5.3. Moreover, the prevalent concern with treatment options for dementia and a possible dementia cure, examined in Sections 5.4 and 5.5, positions dementia as a treatable disease process. The representation of dementia as a specific disease is important; historic conceptualisations saw dementia as a natural part of ageing (Ballenger, 2006), and recent survey research of the British public suggests that this attitude remains somewhat pervasive (McParland *et al.*, 2012). In contrast, the present study highlights that the biomedical model of dementia is extremely dominant in the news media, discursively positioning dementia as an organic disease process which is not inherently natural, and could be treated or prevented. This conceptualisation, emerging from the scientific community in the 20$^{th}$ century with the discovery of Alzheimer's disease (Lock, 2013), indicates that the news media adheres to the understanding of dementia which dominates scientific knowledge of the syndrome.

As Chapter 2 documented, the biomedical model of dementia was a useful means of securing support and funding for research into dementia (Fox, 1989). However, the appropriateness of the biomedical discourse has been called into question because it frames dementia as a technical problem which can only be fixed by science (Kitwood, 1997). This argument is supported by the analysis of Chapters 5 and 6, which demonstrated how a discourse of science as hero was pervasive within the biomedical discourse. A chief concern in the data is with the development of treatments and a cure for dementia, and these are predominantly of

a pharmaceutical nature. Indeed, Chapter 5 noted a relative absence of references to non-pharmaceutical treatments, of which there are many (James & Fossey, 2013), while drug therapies are given significant prominence. Furthermore, the science-as-hero discourse depicts the concept of a dementia cure as a tangible reality, which further reinforces the faith in science as the most viable response to dementia. Section 5.5 described the linguistic strategies through which the news media creates expectations that a cure exists somewhere in the world, waiting to be revealed by scientists. Although there is no cure and no likelihood of one in the near future (Dening & Babu Sandilyan, 2015b), the articles in the corpus attempt to mitigate this fact to suggest that, with sufficient time and resources, scientists will be able to locate a cure. In this way, the news media implicitly encourages faith in the power of science to overcome the present reality. As George (2010, p. 587) notes, such a linguistic manipulation of the facts promises more than science can deliver, and may raise unwarranted hopes for readers who are living with dementia themselves or who have family or friends with the syndrome.

The biomedical discourse inherently excludes the experiences and voices of people with dementia, an observation that concurs with Clarke (2006) and Kirkman's (2006) studies of dementia in the news, both of whom argue that the absence of voices of people with dementia is a consequence of the dominance of the biomedical framing of dementia. Section 7.3 charted the tendency to present people with dementia as 'patients' within the context of a clinical environment. In the role of 'patients', people with dementia were afforded little to no agency, recurrently depicted as being acted upon and spoken for rather than acting or speaking for themselves. Those who did have agency were scientists, doctors, clinical institutions, and even the pharmaceutical treatments themselves as they acted upon the brains of people with dementia. This exclusion of the experiences of people with dementia is concurrent with wider societal discourses which have typically depicted the patient as passive and the doctor or scientist as expert, agentive and heroic (Gwyn, 2001; Kline, 2011; Lupton, 2012). The implication is that dementia renders an individual as helpless, with no room to consider people with dementia being active participants in their care, or in the development of treatment options.

Despite the prevalence of the discourse of science as the hero, the analysis also pointed to areas in which the news media highlights the challenges that science will have to overcome in order to respond to dementia, pointing to a potential discourse of dementia as a scientific conundrum. The analysis presented in Section 5.4 observed a number of linguistic strategies used to emphasise the scientific struggle in the search for a dementia cure. By presenting

dementia as a disease without a current cure, the news media heightens its news value; a disease which results in death, affects thousands of people and has no cure has inherent news value because of its negative message and high impact factor (Bednarek & Caple, 2019). Other diseases that meet similar criteria have been HIV/AIDS and cancer, both of which have received considerable media attention (Lupton, 1999b). It is thus no surprise that the news media presents the bleak prospects in discussions of the scientific pursuit of treatments. Lupton (2012) argues that portrayals of the fallibility and limitations of medical science only recently started to appear in the media in the 21st century; prior to this, medical professionals were represented as infallible and the science-as-hero discourse was epidemic. However, although the science-as-hero story clashes with a fatalism that acknowledges a lack of hope, the present study argues that the representation of the challenges of identifying a cure only serve to reinforce the power and valorisation of medical science. While the news media evokes helplessness and confusion regarding the lack of a cure, there is also the clear suggestion that a cure is a tangible reality at some point in the future, given sufficient and appropriate resources. In other words, the sense of hopelessness attached to dementia encourages support for the research agenda by highlighting the heroism of medical science in the face of such adversity.

As Clarke (2006, p. 274) astutely observes, the emphasis placed on the scientific community in the news media 'reinforce[s] the power of medicine and pharmaceuticals as the appropriate and benign instrument of social control'. In accordance with previous research, which has highlighted the increasing medicalisation of health and illness in the news media, such that a biomedical discourse predominates and attention is deflected away from non-medical treatments (Kline, 2011), this study observes that non-biomedical discourses are largely backgrounded. Most notably, a psychosocial discourse, which counters the biomedical discourse by placing emphasis on psychological factors and the social environment within which the person with dementia lives (Marshall, 1993; Kitwood, 1997; Brooker, 2004), is obscured by the dominance of the biomedical discourse. By restricting the view of dementia to a predominantly biomedical discourse, the news media positions dementia primarily as a medical and scientific problem, rather than an issue which requires societal involvement and change. Moreover, to put such stock in pharmaceutical responses focuses the public agenda exclusively on pharmaceutical research rather than issues of prevention and postponement, which may be more scientifically plausible ways of addressing dementia (Lock, 2013).

### 9.2.2 Metaphors of dementia

The overarching biomedical discourse, and its sub-discourses of science as the hero and the patient as passive, were sustained in the corpus through the prolific use of two metaphors. These metaphors, THE BODY IS A MACHINE and DISEASE IS AN INVADER, appeared in various forms across the corpus, and were analysed in detail in Chapters 5 and 6 to describe the articulation of the neurobiological processes of dementia, and the highly abstract concept of memory loss. Metaphors are a useful way of explaining scientific theories and concepts (Boyd, 1993; Semino, 2008), as well as abstract topics like illness and death (Lupton, 2012; Demmen *et al.*, 2015; Demjén & Semino, 2016). Metaphors can play a pedagogical function, articulating complex scientific phenomenon for a lay audience (Aubusson *et al.*, 2006). Previous scholars have observed that metaphors are readily drawn upon in cultural representations of dementia (Behuniak, 2011; Johnstone, 2013; Zeilig, 2013; George *et al.*, 2016). While these researchers have interrogated small samples of media texts, the present study examined 3,022 news articles, and thus the analysis focused only on those metaphors which were the most frequent and identifiable through corpus methods (see Section 3.4.1).

The metaphor of THE BODY IS A MACHINE was realised through a number of expressions that likened the neurobiological changes in the brain to everyday, mundane objects and experiences. Section 5.2 detailed the prevalence of metaphors that rendered the development of plaques and tangles in the brain as the build-up of waste in a pipe, or a faulty computer system, while in Section 6.7.2, metaphors that conceptualised memory loss as an issue of computer storage and processing similarly drew on the overarching metaphor of THE BODY IS A MACHINE. The broad metaphor of THE BODY IS A MACHINE simplifies the processes of disease to relatable and concrete events that a lay audience can comprehend, thus a useful linguistic resource for journalists when explaining disease pathology (Williams Camus, 2009). The metaphor implies that individual parts of the body can be fixed or replaced (Hauser *et al.*, 2017). In the case of news reporting of dementia, the metaphor of THE BODY IS A MACHINE establishes a sense of need for scientific research to remedy the problem, because a discrete part of the body (the brain) is broken and requires a mechanical solution.

The second prominent metaphor, DISEASE IS AN INVADER, depicted dementia as a violent enemy which invaded the human body. The broad metaphor of DISEASE AS INVADER is prolific in cultural stories of disease (Sontag, 1978; Gwyn, 2001; Lupton, 2012). This metaphor sees disease as an enemy invader that must be attacked and defeated (Hauser *et al.*, 2017), and the individual with the disease becomes a passive battleground upon which doctors and scientists

fight against the invader (Slobod, 2012). Identified in similar studies of news reporting of dementia (Clarke, 2006; Van Gorp & Vercruysse, 2012; Brookes *et al.*, 2018), the present study found that the metaphor of dementia as an invader of the body encouraged combative, military responses. For example, Chapter 5 examined the recurrent use of militaristic language in descriptions of treatments for dementia. In Chapter 6, the invader metaphor was again noted in analysis of the concept of memory loss, with memories likened to precious objects that could be 'stolen' by dementia, and dementia treatments capable of 'halting' or 'slowing' this process. With dementia as an invader of the body, science was hailed as the hero and as absolutely vital to the effort to stop dementia.

These two broad metaphors, THE BODY IS A MACHINE and DISEASE IS AN INVADER, result in conceptualisations of dementia as a fixable problem that science can address. This may motivate and encourage research funding and support (Cohen, 2011; George, 2010; Lane *et al.*, 2013), since 'hope must be sustained if funding is to keep flowing' (Lock, 2013, pp. 3-4). Aside from research interests, machinery and military metaphors may be a useful way of distancing the individual with dementia from an incompetent, diseased identity (Saunders, 1998). Moreover, such metaphors break down highly abstract concepts into tangible elements, thus enabling a non-expert audience to conceptualise dementia (Boyd, 1993; Aubusson *et al.*, 2006; Semino, 2008). Yet the use of these metaphors in discussions of health and illness is contentious (see Hodgkin (1985), Sontag (1978), Lupton (2012)). This study has illuminated that mechanical and military metaphors simplify dementia into discrete cause and effect processes - for instance, the notion that the build-up of amyloid in the brain causes dementia. The scientific reality is much more complex, since the very assumption that amyloid causes dementia has been called into question (Kametani & Hasegawa, 2018). With so much uncertainty and the reality that a cure for dementia is scientifically unlikely, mechanical and military metaphors place an undue focus on the power of science to 'fix' or 'combat' the disease, instead of considering how preventative behaviours or environmental factors could impact disease development (George *et al.*, 2016; Hauser *et al.*, 2017).

A further point, and one which will be returned to below, is that reducing people with dementia to faulty machinery or enemy-occupied battlegrounds fuels stigma of dementia, since individuals are presented as broken and entirely passive, in need of scientists to repair or save them. The military metaphor in discussions of dementia has been frequently critiqued, with commentators noting that the metaphor evokes the public's anxieties about their own mortality and helplessness and reinforces cultural fear of dementia (George, 2010; Lane *et al.*, 2013;

George *et al.*, 2016; Johnstone, 2016). The present study develops this line of argument to highlight the equally insidious nature of the machinery metaphor, which disregards the personhood of the individual and sees them only as a technical problem. This finding is in accordance with general studies of illness in the media, in which patients are typically presented as passive, helpless bodies upon which medical science can experiment (Lupton, 2012).

### 9.2.3 Memory loss discourse

The present study is the first of its kind to consider how the symptoms of dementia are presented in the news media. It was found that memory loss, one symptom of dementia, was overly represented in the corpus, constituting a specific discourse of memory loss. The extensive focus on memory loss above all other symptoms of dementia indicates that this symptom is a source of particular concern, supporting Basting's (2009) supposition that memory loss is the symptom most frequently culturally associated with dementia. Yet as detailed in Chapters 2 and 6, memory is just one aspect of cognitive functioning that is impaired by dementia; other functions that might be affected are attention, language, motor skills and social cognition (American Psychiatric Association, 2013). The fact that the news media focuses so comprehensively on memory alone indicates a significant knowledge gap, whereby audiences are presented with excessive information about one symptom to the detriment of others. Certainly memory loss presents challenges for the individual experiencing it (Gillies, 2000; Snyder, 2001; Clare, 2002; Beard *et al.*, 2009), but focusing almost exclusively on this one symptom obscures discussion of other aspects of cognitive functioning that may be impaired, reducing opportunities for empathy and understanding of the full experiences of the person with dementia. Moreover, although memory loss is often the earliest noticeable problem to arise (Babu Sandilyan & Dening, 2015), memory problems may not necessarily be present in all people with dementia, especially in the earlier stages of the disease, and are not the main symptom in some types of dementia such as frontotemporal dementia (Sachdev, 2013). By framing dementia through the discourse of memory loss alone, the news media implies that this symptom is the only one deserving of concern, discrediting the relevance of other cognitive changes that may be indicative of dementia.

The discourse of memory loss exacerbates fear of dementia by evoking cultural anxieties about ageing and decline. Basting (2009, p. 23) observes that 'As we focus our labor [*sic*] on the act of remembering, both for ourselves and for future generations, we also exacerbate the shame and fear surrounding forgetting and the human frailty, dependency, and mortality with which forgetting is linked.' In attempting to conceptualise and explain

pathological memory loss, the news media draws upon a discourse of hypercognition (adapted from Post (2000)) which dictates that humans should remember everything, and anything less than this expectation must be indicative of pathological decline. The metaphors of THE BRAIN IS A STORAGE SYSTEM and THE BRAIN IS A COMPUTER SYSTEM articulate this hypercognitive discourse, establishing expectations that we should remember everything forever by likening memory to a logical, technological system. Forgetfulness is demarcated as the transition from normal life to dementia, and, as is explicated below, there is a chief concern with the difference between 'normal' and pathological memory problems. The idea of the infallible memory system has been fuelled by the development of technology, whereby we have become accustomed to being able to preserve information indefinitely and precisely on computer systems (Edelman, 2006; Basting, 2009; Caygill, 2010). But conceptualising the brain as a computer, and thus memory as part of the computer system, results in unrealistic expectations about what humans are capable of (Randall, 2007), and fuels fear of people experiencing memory decline. The cultural association between memory and identity means that a person with dementia is viewed as less of a person because they are experiencing memory decline (Brockmeier, 2014). As Post (2000, p. 4) writes, 'Too great an emphasis placed on rationality and memory, arguably the cardinal values of modern technological societies, wrongly suggests an exclusion of people with dementia from the sphere of human dignity and respect'. In other words, the discourse of hypercognition which underlies the general memory loss discourse exacerbates the stigma of dementia by evoking fear and revulsion of human mortality.

A second key finding from the examination of the concept of memory loss was the emergence of a discourse of personal responsibility which positioned the reader as responsible for distinguishing between 'normal', age-related memory loss, and memory loss as a symptom of dementia. The news articles in the corpus attempted to explicate the difference between these two concepts while seeming to speak directly to the reader through extensive use of synthetic personalisation (Fairclough, 2015), essentially encouraging the reader to diagnose themselves and others based on their memory performance. Encapsulating this point illustratively is the headline 'Should you be worried? Take this memory test to find out' (*Daily Mail,* 2015), discussed in Chapter 6. This finding supports the supposition that health messages in the media are becoming increasingly individualised by depicting the reader as responsible for the cause and cure of health threats (Kline, 2011). This individualisation is achieved through the proliferation of an overarching neoliberal discourse which seeks to establish social, political and economic arrangements in society based on capitalist principles and the individual

responsibility of citizens (Springer, 2016). The individualisation of health by these means discourages or even conceals the need for political, social and economic responses to health issues (Fowler, 1991; McGregor, 2001). Studies of dementia in the news media conducted by Peel (2014) and Lawless and Augoustinos (2017) both argued that readers were positioned as responsible for preventing the development of dementia, with a direct consequence of this individualisation being that those with dementia assume blame for failing to prevent the disease.

The neoliberal discourse in news articles about dementia may, however, have some positive implications, since readers are encouraged to monitor their memories and seek medical help if they have concerns. Seeking an early diagnosis of dementia may have benefits both for the individual concerned as well as economic and social advantages such as reduced burden on the care system (Banerjee & Wittenberg, 2009). On the other hand, the analysis in Chapter 6 argued that the distinction between normal and pathological memory loss was often presented in a highly misleading way, producing confusion regarding which behaviours are indicative of normal ageing and which are symptomatic of dementia. Recent survey research indicates uncertainty among members of the public about the distinction between these concepts (Devlin *et al.*, 2007; Cherry *et al.*, 2010; Laditka *et al.*, 2011), and the present study suggests that the news media contributes to this diagnostic confusion.

This is unsurprising in consideration of Seale's (2003) astute observation that the news media exists to entertain and sell rather than provide accurate health information; the confusion created in the news media between normal and pathological memory decline enhances the newsworthiness of the issue. In positioning memory assessment as the reader's individual responsibility, but then failing to provide clear or accurate guidance on what constitutes pathological memory decline, the news media lures the reader into the story to emphasise the proximity and relevance of the issue to the audience, while also attesting to the news values of negativity, impact and superlativeness (Fowler, 1991). The study argues that this strategy in the news media promotes fear and revulsion of those with dementia by attempting to demarcate categories of 'us' without the syndrome and 'them' who have it. Rather than encouraging readers to seek medical help if they have concerns about their memory, the neoliberal discourse attaches a sense of shame to a dementia diagnosis, which could have prohibitive effects on individual help-seeking behaviour and diagnostic rates (Bunn *et al.*, 2012; Dubois *et al.*, 2016).

## 9.3 Representing the person with dementia

### 9.3.1 Discourse of dementia as loss of self

Despite the efforts of advocacy organisations to challenge the stigmatising and stereotypical language used to describe people with dementia (Dementia Engagement and Empowerment Project, 2014; The Alzheimer Society of Ireland, 2017; Alzheimer's Society, 2018; Bould, 2018; YoungDementia UK, 2019), this study finds that the news media relies on potentially harmful tropes to portray people living with the syndrome. Concurring with previous work, the study found that the predominant discourse used to construct people with dementia in the corpus was one of loss of self (Clarke, 2006; Basting, 2009; Van Gorp & Vercruysse, 2012; Brookes *et al.*, 2018; Harvey & Brookes, 2019). Chapters 7 and 8 detailed how, through a variety of grammatical and lexical features, people with dementia were recurrently positioned as passive, inert, vacant, vulnerable and unable to speak or act for themselves, alluding to the concept of the person with dementia as an 'empty shell' so prevalent in public knowledge of dementia (Corner & Bond, 2004; Devlin *et al.*, 2007; McParland *et al.*, 2012).

The discourse of dementia as loss of self was articulated in a number of ways. The analysis pointed to the homogenisation of people with dementia, grouping and denoting all people with dementia into an undifferentiated, anonymous mass which obscured any sense of individuality or personhood (see Sections 7.2-7.4). Keywords denoting people with dementia were up to four times more frequent in plural rather than singular form, supporting the assertion that people with dementia were recurrently represented as a homogenous group. Furthermore, the quantification of people with dementia, discussed in Section 7.2, gave the impression of a large-scale and increasing problem, demarcating a group of people for whom dementia is the defining and exclusive characteristic. Siiner (2017) noted a similar trend in Norwegian news reporting, arguing that such a trope makes it hard for the reader to feel empathy because individual voices are backgrounded. By denying people with dementia any individuality in their representation, the news media conceals any other aspects of the person, implying that dementia causes all other attributes of a person to disappear. Without the opportunity to access the experiences and voices of people with dementia, a clear line is drawn between 'us' without dementia and 'them' with dementia, heightening fear attached to the syndrome.

Additionally, there was a tendency to confer grammatical passivity onto people with dementia such that they were very rarely depicted as active participants in their lives (see Sections 7.2-7.4). The implication through this grammatical positioning was that dementia intrinsically denies a person the ability to be an active member of society; they become

dependent on healthy others to make decisions, manage daily life and speak about their experiences. Moreover, through this viewpoint people with dementia were reduced to their neurobiology, which was highlighted as being faulty or damaged (see Section 5.2; Section 6.2.2). In other words, people with dementia were depicted in terms of their deficits alone. There was a notable infantilisation and dehumanisation of people with dementia, corroborating Clarke's (2006) conclusion that the news media suggest people with dementia do not deserve ethical treatment because they are less than human. Stories of celebrities with dementia, analysed in Chapter 8, were largely tragic tales lamenting the loss of talent, which, as Basting (2009) observes, suggests that that dementia is less tragic when it affects ordinary people compared with those with elite status. Through the discourse of loss, there was little evidence that people with dementia might be agentive, or live full lives, or contribute to society, even though this is entirely possible with the right support (Swaffer, 2015).

One exception to this is the representation of Terry Pratchett, the best-selling author with dementia who continued to work after his diagnosis and was depicted as living well with the syndrome (see Section 8.2). Celebrity stories of illness can be incredibly powerful in influencing public health behaviours (Chapman *et al.*, 2005; MacArthur *et al.*, 2011; Ayers *et al.*, 2014), and so the portrayal of Pratchett as an active, successful, articulate member of society, which relied upon a discourse which might be labelled as active citizenship, has the power to change the narrative of dementia as loss. As a celebrity, Pratchett occupied a privileged position because he was inherently more newsworthy than an ordinary individual (Bednarek & Caple, 2019), and thus was granted access to the news media to disseminate his experiences.

However, the analysis highlighted that the discourse of loss was so integral to the news media's portrayal of dementia that Pratchett's diagnosis was called into question because he did not fit the stereotype; this was likewise the case with the actress Prunella Scales, who also worked after her diagnosis (see Section 8.2). Unable to reconcile the discourse of active citizenship with the stereotypical discourse of loss of self, the news media resorted to delegitimising the diagnosis, illuminating how dominant and ingrained the discourse of loss is in the representation of people with dementia. For slightly different reasons, this was also evidenced in the representation of Greville Janner, the politician with dementia accused of child sex offences (Section 8.5). The prevailing discourse of loss of self was seemingly incompatible with the discourse which positions the news media as morally opposed to child abuse, thus the news media set about to discredit the validity of Janner's diagnosis, perhaps to avoid a

representation which might invoke pity or support the ruling that Janner was incapable of standing trial. Emerging clearly from this analysis is the insidious and all-encompassing nature of the discourse of loss of self, such that any person with dementia must either fit the stereotype or have their diagnosis delegitimised, in order to maintain the dominance of the loss-of-self discourse.

The discourse of dementia as loss of self relates to the understanding that the mind is separate to the body, a philosophical notion famously described by René Descartes (1596-1650) (Tweyman, 1993). Cartesian dualism, as it came to be known, argued that the mind and body were two distinct substances; the body could exist without a mind (in animals), the mind could exist without a body (in heaven), or the two could exist together in a living human (Duncan, 2000). The dichotomy of mind and body has permeated modern medicine, wherein the body is understood as a biological organism with discrete parts that can be diseased or damaged, and the mind is immaterial, separate and enduring despite disease (Mehta, 2011). This conceptualisation underlies the discourse of the loss of self in dementia, positing that dementia progressively damages the mind, leaving behind an 'empty' body. Van Gorp and Vercruysse (2012) raise awareness of the consequences of this approach; people with dementia are seen to exist only on a material level, lacking autonomy and unable to communicate since their soul has disappeared. The discourse of loss of self encourages care practices based on the notion that the person is no longer a person (Guendouzi & Muller, 2006), and is likely to contribute toward a lack of hope, self-esteem and sense of dignity among those with the condition (Gerritsen *et al.*, 2018).

Given the values of newsworthiness to which the news media subscribe, it is unsurprising that the discourse of loss of self is used to articulate dementia; a syndrome that seemingly obliterates a person's identity and humanity certainly constitutes a negative, superlative event with high impact, cultural proximity, consonant with stereotypes of ageing and death (see Bell (1991) and Fowler (1991)). The discourse fuels support for the research agenda by emphasising the devastating consequences of dementia and evoking pity for the plight of those diagnosed. But, as Basting (2009, p. 39) writes, 'it's important that we see what gets left on the cutting room floor during the making of such tragic stories'. The loss-of-self discourse has been repeatedly challenged by advocates such as the prominent voices of Kitwood (1997), Sabat and colleagues (Sabat & Harré, 1992; Sabat & Collins, 1999; Sabat, 2001; Sabat, 2002) and Swaffer (2014; 2015), each of whom argue that the person with dementia remains a person despite their disease. The dominance of this discourse in news

media representations of dementia promotes a reductionist stereotype that dehumanises people with dementia and does not allow for alternative discourses that might envision an active and full life after a dementia diagnosis.

### 9.3.2 Discourse of abuse

Stemming from the discourse of the loss of self is the discourse of abuse (seen in Sections 7.3 and 7.4). Care practices, both institutional and on an individual level, were repeatedly depicted through the discourse of abuse, representing people with dementia as victims of physical, sexual, financial and institutional abuse and neglect. The study found that this abuse was presented as inevitable because people with dementia were positioned as inherent victims by virtue of having dementia. As with the discourse of loss of self, the discourse of abuse elided the possibility that people with dementia could be anything more than passive and dependent on healthy others. Kirkman (2006) highlighted that tales of negligence gained the most coverage over the longest periods of time in news reporting of dementia in New Zealand, recounting local instances of abuse within specific contexts as well as generalised, national issues. The present study extends this finding to demonstrate the prevalence of these types of stories in the British news media.

Stories of the abuse and neglect of people with dementia meet a number of the news media's criteria for newsworthiness, encompassing highly dramatic and negative events that affect both vast numbers of people and specific named individuals, and taking place in cultural proximity to the audience (see Bell (1991) and Fowler (1991)). Moreover, the discourse of abuse against people with dementia is consonant (Bednarek & Caple, 2014) with the dominant image of a person with dementia as vulnerable and at risk. Where public attitudes associated dementia with a loss of control, independence and dignity (Corner & Bond, 2004; Devlin *et al.*, 2007; McParland *et al.*, 2012), so the findings from this study point to the depiction in the news media of people with dementia as unable to defend themselves and entirely dependent on others. As a result, the news media implies that abuse and neglect is an inevitable consequence of having dementia, because people with dementia are so vulnerable. Reinforced through the prolific use of the passive voice, emphasis on the elderliness of individuals with dementia, and phrases such as 'they aren't mentally robust enough to complain' (*The Times*, 2015; see Section 7.3), articles in the Dementia News Corpus construct people with dementia as objects of pity, frailty and immobility.

The representation of people with dementia as victims reflects cultural anxieties about ageing in general. There exists a pervasive stereotype that older people are at higher risk from crime than younger generations (Fattah & Sacco, 1989; Pain, 2001), linked to the prevailing cultural belief that the elderly are incompetent, helpless, and deserving of pity (Cuddy *et al.*, 2005). These ageist attitudes have been identified as prolific in the news media, where older people are typically portrayed as victims, frail and inherently vulnerable (Fealy *et al.*, 2012; Lepianka, 2015; Marier & Revelli, 2017). The present study's findings suggest that dementia exacerbates and heightens existing cultural fears of becoming dependent and frail, perpetuating a cultural stereotype that the elderly are extremely vulnerable and burdensome on those around them.

Such a representation ignites fear of developing the condition by implying that a diagnosis of dementia transforms a person from capable to inherent and continual victimhood. This is likely to have negative consequences not just for the wellbeing of those already living with dementia (Gerritsen *et al.*, 2018), but this reductionist representation could also inhibit help-seeking by people with early symptoms of the syndrome. Negative attitudes towards dementia, and the stigma that arises from these perceptions, are key barriers to individuals seeking a diagnosis when they are experiencing symptoms (Bunn *et al.*, 2012; Dubois *et al.*, 2016). Yet a timely diagnosis offers opportunities for early intervention, allowing for better management of the symptoms and a postponement of the individual entering a care home (Dubois *et al.*, 2016). Thus the perpetuation of stigmatising representations of dementia, depicting those with the syndrome as having entirely lost their past selves and becoming vulnerable victims at the mercy of those around them, may have dangerous consequences for readers who resist accessing medical help for fear of succumbing to the dominant and insidious stereotypes perpetuated in the news media.

## 9.4 Implications of this study

### 9.4.1 Contributions to research

The key findings discussed and reviewed above corroborate and strengthen existing scholarship on dementia in the news media, adding perspectives from a British context to an international field of enquiry. As the preceding discussion has illuminated, the findings of this study agree with insights from previous research that the news media relies on discourses of biomedicine and loss of self (Clarke, 2006; Kirkman, 2006; Kang *et al.*, 2010; Van Gorp & Vercruysse, 2012; Siiner, 2017), and offers new insights into the discursive representation of memory loss, abuse of people with dementia, and celebrities with dementia. Extending the predominantly

thematic approach to the analysis of news articles taken in previous studies, the present study utilises the methodological combination of corpus-assisted Critical Discourse Analysis, generating new and unique perspectives on the news media's representation of dementia.

The present study is the first of its kind to analyse such a large sample of data about dementia from the British news media. The analysis of five years' worth of news articles published about dementia was made possible by the application of corpus linguistic techniques, which enable researchers to survey vast amounts of linguistic data automatically rather than manually reading each text (Baker, 2010). By compiling and analysing such a large dataset, the study is able to make claims about dementia in the British news media that are more representative than if only a small sample had been considered. In this way, the study extends work by the likes of Brookes and colleagues (2018), whose study of dementia in the British news media focused on a single news event and thus analysed eleven individual articles.

A second advantage of the corpus approach is the inclusion of quantitative perspectives. Corpus linguistic tools offer the researcher a neutral starting point for analysis (Marchi & Taylor, 2018), such that the direction of the analysis can be guided by the most statistically salient language patterns rather than the researcher's own intuition. Instead of making a judgement about which topics and themes were likely to be more prominent in the corpus, the keyword analysis described in Chapter 4 presented the words in the corpus that were statistically significantly more frequent than general language, therefore reducing researcher bias in the selection of linguistic patterns for further examination. Furthermore, linguistic patterns could be quantified, and thus the analysis was able to comment on the actual prevalence of certain discourses across the data. The quantitative insights gained from the methods of corpus linguistic thus provide a measure of statistical validity and generalisability which have not previously been possible in purely qualitative studies of dementia in the news media.

Alongside the quantitative insights of corpus linguistics, the study drew upon perspectives of CDA to interrogate discursive constructions of dementia. CDA provides a lens through which the analysis moves beyond simply describing linguistic patterns to interpreting them in the context of their production and reception, exploring how language constructs social reality and considering issues of hegemony and power in this social representation (Fairclough, 2015). In other words, CDA considers how certain language patterns constitute and perpetuate particular discourses. As with Siiner's (2017) explicit CDA stance in his analysis of dementia

in the Norwegian press, the corpus-assisted CDA approach adopted in the present study has allowed for the identification and interpretation of dominant and minority discourses in the news media's representation of dementia, explicitly drawing attention to the potential consequences of the hegemonic discourses for people living with dementia and members of the general public. The perspectives of CDA thus elaborate upon the thematic insights offered by previous scholarly work (Clarke, 2006; Kirkman, 2006; Kang *et al.*, 2010; Van Gorp & Vercruysse, 2012) to consider how language shapes and reflects social practices and structures (Angermuller *et al.*, 2014).

The combined methodological approach of corpus linguistics and CDA is still in its relative infancy in studies of health communication. While it has been utilised in news media analyses, particularly in the context of representations of minority groups (Baker *et al.*, 2008; Gabrielatos & Baker, 2008; Khosravinik, 2009; Jaworska & Krishnamurthy, 2012; Taylor, 2014; Tobin & Lyddy, 2014), only a handful of studies have utilised this approach to consider representations of health and illness in the press (Koteyko *et al.*, 2008; Makamani & Mutasa, 2017; Siiner, 2017; Tang & Rundblad, 2017; Liu & Zhang, 2018), and even fewer to explore the constructions of health and illness in other discursive contexts (Lukač, 2011; Hunt & Harvey, 2015; Kinloch, 2018). This study has demonstrated the utility of such an approach in the analysis of cultural representations of disease, specifically in the sphere of the news media. In this way, the study contributes to the growing field of corpus-assisted CDA analyses of the news media, and expands the scope of corpus-based health research to demonstrate how the combination of quantitative and qualitative methods can illuminate dominant discourses surrounding particular diseases in the press.

### 9.4.2 Recommendations for journalists and news makers

Beyond making a contribution to the research literature, this study also has practical implications for journalists and news makers, who could benefit from the findings presented in the thesis. This study has interrogated a large sample of news articles and offered a critical analysis which described and interpreted the dominant discourses used to conceptualise dementia. In accordance with the aims of Critical Discourse Analysis (Fairclough, 2015; Flowerdew & Richardson, 2018), the study sought to raise awareness of these powerful discourses in order to highlight how they might contribute to the stigmatisation and oppression of people with dementia. But before speculating on the ways in which the news media might alter their portrayal of dementia to incorporate alternative, potentially less stigmatising

discourses, it is necessary to first reflect upon the reasons why the news media might rely upon and reproduce the discourses discussed above.

Discourse is a form of social practice that is shaped by the context within which it is produced and received (Angermuller *et al.*, 2014). Discourses in the news media are accordingly sculpted and restricted by structural, social and economic factors involved in making news (Van Dijk, 1988). Section 2.5.1 outlined the values by which the news media determine which events will be deemed as 'news'. Throughout the analysis of Chapters 5-8 and in the preceding discussion of the study's findings, these values, particularly those of negativity, impact, superlativeness and proximity, have been shown to be evident in the discursive construction of dementia as a catastrophic and prolific obliteration of self and autonomy. With the adage that bad news sells (Bell, 1991), the news media is motivated to foreground the devastation and impact of dementia above positive stories of living well, and to incite fear of a prolific epidemic among readers in order to highlight the proximity and relevance of the issue. If the news media depicted dementia as a commonplace, unexceptional change in daily life and showed people with dementia continuing to work and contribute to society – as in the cases of Terry Pratchett and Prunella Scales – the topic would become inherently less newsworthy.

Furthermore, because the news media needs to present events and stories in ways that are unambiguous so that a lay audience can understand (Bell, 1991), newsmakers rely on stereotypes that are consonant with societal knowledge and beliefs. The reductionist and harmful discourse of dementia as a loss of self reflects ageist stereotypes that associate declining mental capacity with loss of worth and value in society (Post, 2000). As this discourse of dementia as a loss of self is perpetuated in the news media, so it sustains the stereotype in society: 'The occurrence of a striking event will reinforce a stereotype, and, reciprocally, the firmer the stereotype, the more likely are relevant events to become news' (Fowler, 1991, p. 17). Meanwhile, the biomedical discourse which prioritises clinical science over psychosocial interventions is consonant with a general societal faith in science and pharmaceuticals as the solution to health problems (Clarke, 2006). Moreover, the dominance of the biomedical discourse reflects the news media's need to simplify, rationalise and explain a scientifically uncertain phenomenon while working to tight deadlines. As Brookes and colleagues (2018, p. 390) conclude, the biological and medical complexity of dementia requires simplification and objectification in the news media in order to confer 'a measure of symbolic order on the syndrome, while simultaneously affording the public the illusion that they are seeing things

plainly and clearly'. The drive to produce newsworthy and readily understandable stories necessarily constrains and restricts the discourses from which the news media can reproduce in the attempt to articulate the inherently abstract, unstable and scientifically uncertain concept of dementia.

That is not to say, however, that the news media cannot and should not consider alternative discourses in the representation of dementia. Explicitly advocating for social change is a crucial part of the agenda of Critical Discourse Analysis (Toolan, 1997; Fairclough, 2001), and in this vein the study offers some recommendations for journalists and news makers, in light of the findings that have arisen in the analysis and the preceding discussion. However, it must be emphasised that it is problematic to be prescriptive about 'good' and 'bad' language surrounding dementia, due to the highly personal, sensitive and charged nature of the condition. Language which describes dementia as a 'fight' might be helpful and offer hope to one person and their family living with dementia, while another person with dementia might find such militaristic language degrading and distressing (Gerritsen *et al.*, 2018). In addition, there may be value in the representation of 'suffering with' dementia rather than 'living well', because these representations might better reflect the actual lived experiences of many people with dementia (Gilleard, 2018). With this in mind, the following suggestions are intended to raise awareness of alternative portrayals rather than prescribe a solution to an incredibly complex phenomenon:

- The news media should consider broadening discussion of dementia away from a purely biomedical standpoint to also consider issues of prevention and long-term care. This would better reflect the way in which the focus of dementia research has extended beyond the development of a cure to consider disease prevention and improving care standards (Department of Health & Social Care, 2013; Department of Health, 2015; Alzheimer's Society, 2017c; UK Dementia Research Institute, 2019), in recognition that a cure for dementia is scientifically unlikely in the immediate future. Moving away from the biomedical discourse would also enable consideration of the individual with dementia and their social environment (Marshall, 1993; Kitwood, 1997; Sabat, 2002; Clarke, 2006; Kirkman, 2006).
- News makers might choose to focus on the enduring humanity, dignity and rights of people with dementia rather than the dominant stigmatising portrayal of dementia as a loss of self. This would mean attending to the 'personhood'

(Kitwood, 1997) and ‘citizenship’ (Bartlett & O'Connor, 2007) of the individual, or even viewing dementia as a disability (Shakespeare *et al.*, 2017), representing people with dementia as agentive human beings rather than passive and inert objects acted upon by others. Depicting dementia in these terms would promote the concept that dementia does not obliterate a person’s identity or their need for inclusion, empathy and compassion. Moreover, these conceptualisations would encourage the news media’s agenda to shift from extensive focus on pharmaceutical drugs to the ways in which society can care for people with dementia.

- In general, the news media should seek to include the voices of people with dementia where possible in order to adopt a more ‘person-centred’ (Kitwood, 1997) approach to the portrayal of dementia. Stories of people with dementia living well, and first-hand accounts of the impact of dementia on individuals, would provide a counter-balance to the dominant stereotype of a person with dementia as an ‘empty shell’ and promote the understanding that a person with dementia can still live a full life despite their disease (Swaffer, 2015). The news media might also consider seeking comments from people living with dementia in response to stories about dementia, rather than solely scientific experts or spokespeople from national charities such as the Alzheimer’s Society. Including the opinions and perspectives of people with dementia would not only enhance the newsworthiness of the story by adding a personal face (Bednarek & Caple, 2019), but would also counterbalance the dominant view that people with dementia need to be spoken for by healthy others.
- Journalists should try to avoid labels that denote people with dementia in a negative or stigmatising light. As advocated by national dementia charities and groups (Dementia Engagement and Empowerment Project, 2014; The Alzheimer Society of Ireland, 2017; Alzheimer's Society, 2018; Bould, 2018; YoungDementia UK, 2019), neutral language like ‘person with dementia’ is more sensitive and appropriate than labels which obscure the personhood of the individual, such as ‘patient’ or ‘sufferer’. This study lends a further voice to the call for the news media to refrain from relying on reductionist and stereotyped labels when depicting people with dementia.

### 9.4.3 Implications for policy makers and advocacy organisations

After the G8 Dementia Summit of 2013, global leaders committed to raising public knowledge of dementia in recognition that this would have many benefits including improving diagnostic rates and reducing societal stigma (Department of Health & Social Care, 2013). Since the news media is such an influential source of information for the public on matters of health and illness (Lupton, 1999a; Gwyn, 2001; Ramon, 2006), and also specifically for dementia (Corner & Bond, 2004; Devlin *et al.*, 2007), this study contributes insights relevant for the G8 declaration, and for policy makers working towards raising public knowledge of dementia. The issues that are reported in the news media help to set the public's agenda for the issues which are to be considered important and pressing (McCombs & Guo, 2014). Therefore this study illuminates which dementia-related issues are likely to be high on the public's agenda, in particular the need for a pharmaceutical intervention, the role of memory, and the loss of self and agency in dementia.

The study has noted a number of areas in which the public may be receiving inaccurate or misleading information about dementia, and has argued that these representations of dementia could prevent individuals from seeking medical help and reduce the wellbeing of those living with dementia. For instance, while dementia was predominantly formulated as a medical condition and not a natural part of ageing, Chapter 6 critiqued the prevalent focus on memory loss above any other symptom of dementia, highlighting that the exclusion of other cognitive symptoms misrepresents the reality of the syndrome. Likewise, the conflicting messages perpetuated regarding the difference between 'normal' memory problems and dementia could cause confusion and the capacity for individual readers to mistake symptoms of dementia for normal ageing, or vice versa. Chapters 7 and 8 argued that the pervasive discourse of the loss of self implied that dementia obliterated all sense of identity and humanity, and could not only prohibit help-seeking but also incite stigmatisation of people living with the syndrome.

These insights about potential gaps in public knowledge are beneficial to policy makers and advocacy organisations who aim to raise public awareness of dementia. By understanding the dominant representations of dementia in the media, policy makers and organisations can more effectively target misinformation or misunderstanding in any awareness-raising efforts. The concern with memory loss above other symptoms of dementia is an issue deserving of particular redress to raise awareness of the numerous cognitive and behavioural symptoms that are indicative of dementia. The news media cannot be expected to offer complete and accurate

information about health topics (Seale, 2003), but since the news media is such a vital source for the public on matters relating to health and illness, it is imperative that policy makers consider the information being shared in the news media when discussing how to raise public awareness of dementia.

## 9.5 Methodological evaluation

The corpus-assisted CDA approach utilised in this study involved the interrogation of a large data set, totalling over 2 million words: the largest study of representations of dementia in the British news media to date. As Section 9.4.1 described above, the methodological combination of corpus tools and CDA remains a relatively new approach in studies of news reporting about health, and this study shows its viability as a method for interrogating discourses of illness and disease in the news media. Overall, the methods utilised in the present study demonstrate how quantitative and qualitative perspectives can complement and enrich one another in the analysis of news media discourses, generating findings which are statistically salient across a large dataset. Although this methodological combination addressed many of the criticisms historically levelled against CDA (see Section 3.3.4), there are several limitations that should be acknowledged. The review of these limitations does not intend to undermine the validity of the findings discussed above but rather to highlight the scope for future research to extend and strengthen the arguments put forth in the present study.

In examining a data set of 2 million words, the analysis was necessarily selective because it was not possible within the scope of this study to interrogate every area of interest. Only the strongest linguistic patterns relevant to the research questions were pursued in close detail, leaving the less frequent areas relatively unexplored. The quantitative measure of keywords, described in Chapter 4, offered an overview of the dominant words in the data, but as Rayson (2008) points out, the keyword procedure generates more keywords than the researcher is logistically able to analyse. The selection of items for further analysis in Chapters 5-8 was thus a qualitative judgement, guided by the research questions and the strength of the keywords in the corpus, but nonetheless requiring the researcher's judgement and subjectivity (Charteris-Black & Seale, 2010). Practical considerations also restricted the number of keywords that could be analysed in close detail. For instance, despite the large number of keywords relating to the theme of biomedicine, only six are considered in their discursive contexts in Chapter 5. The representation of dementia through an analysis of other keywords, such as *diagnosis, care* or *research* might illuminate alternative, less salient discourses which would enrich the study.

In a similar vein, the measure of collocation offered insights into the dominant language patterns surrounding particular keywords, but the analysis concentrated only on the strongest of these. Not only might less strong collocates reveal different discourses of dementia, the very measure of collocation can only identify words based on frequency measures. That is to say that semantically related words with low frequencies (such as 'fighting', 'battle', 'kill', 'target') may collectively signal a particular discourse, but individually do not occur frequently enough to be designated as a collocate (Baker, 2006). It is thus necessary to acknowledge that less salient discourses might have been overlooked in favour of the most dominant discourses of dementia readily identifiable through corpus techniques.

The categorisation of keywords reported in Chapter 4 was undertaken systematically, but nonetheless this task also required researcher intuition and judgement. In this survey chapter, keywords were divided into semantic categories, a process which was informed by the uses of those keywords in context and the themes identified in the literature on dementia in the news media. Despite attempts to be systematic, another researcher might well identify different semantic categories which would resultantly frame the data in an alternative way. For example, keywords relating to the broad semantic category of 'Biomedicine' were divided into subsections of 'Physiology', 'Diagnosis' and so on, but an equally valid categorisation would group all these keywords under one heading, or differentiate between keywords referring to neurobiological processes and those relating to other aspects of health and medicine. The categorisation of keywords according to semantic fields requires researcher intuition and subjectivity (Mahlberg & McIntyre, 2011), meaning that another researcher might take a different analytical direction in their approach to the corpus.

The study considered several dominant metaphors apparent in the corpus, an aspect of the analysis which required a combination of quantitative measures and intuition. As outlined in Section 3.4.1, the identification of metaphors took the following form: collocates with meanings which were incongruent to the search word were examined in contextual detail to assess if the usage was largely metaphorical (for example, the word 'robbing' collocating with the keyword *memories*). If the collocate was deemed to be used in a metaphorical way, all concordance lines were searched manually for evidence of alternative realisations of the metaphor (such as references to 'stealing' or 'plundering' memories). This procedure assumed that semantic incongruence might signal metaphorical expressions, which is not the only way of identifying metaphor (Sardinha, 2006), and moreover drew on common sense to judge whether an expression was metaphorical or not (Stefanowitsch, 2007). Identifying metaphors

in corpora is a challenging task, and there remains no automatic or entirely reliable procedure with which to attempt it (Cameron & Deignan, 2003; Stefanowitsch, 2007). There are many alternative methods of identifying metaphors in corpora, which might usefully detect other metaphors and offer different interpretations of the construction of dementia in the corpus (see Charteris-Black (2004), Deignan (2005), Koller (2007) and Stefanowitsch (2007)).

In order to compile the corpus, news articles were decontextualised. That is to say that images, fonts, layouts, and other multimodal information was lost in the transformation from the original news article into corpus-readable format. This decontextualisation is a key limitation of the study, since multimodal features contribute to news media discourses (Caple & Bednarek, 2016). Moreover, recent research has highlighted the importance of news media images in perpetuating harmful and reductionist stereotypes about dementia (Brookes *et al.*, 2018; Harvey & Brookes, 2019). Although an exclusive focus on the language utilised in news media texts about dementia has allowed for a detailed interrogation of the linguistic discourses of dementia, it must be highlighted that multimodal features of the texts have accordingly been ignored. Future researchers may wish to rectify this omission by searching for the original news articles online and collating information about the multimodal features in order to bolster the analysis.

Beyond the limitations of the quantitative, corpus-based side of the analysis, it is necessary to acknowledge that the qualitative identification and naming of discourses is a subjective endeavour. This point is articulated by Baker (2006, p. 4): 'any act of naming or defining a discourse is […] interpretive […]. Where I see a discourse, you may see a different discourse, or no discourse'. The discourses identified in the present study have been subject to the researcher's judgement based on knowledge of existing research and thorough linguistic examination of the contexts within which the discourses occurred. Nonetheless, another researcher might well identify different discourses, or interpret the same discourses in alternative ways. In this discussion chapter, and the previous analysis chapters, the study has commented upon alternative discourses which might counter the hegemonic stereotypes perpetuated in dominant discourses of dementia, but these again are interpretive and speculative. Sunderland (2004) suggests that discourse analysts should ideally offer their identified and named discourses to other researchers, independent of their field of enquiry, for scrutiny and triangulation. This proposal may strengthen the analysis of discourses and ought to be considered by future researchers.

## 9.6 Future research directions

In addition to addressing the methodological limitations listed in the preceding section, future researchers may wish to further mine the Dementia News Corpus, much of which remains unstudied due to the necessarily selective nature of the corpus-assisted analysis conducted in this thesis. Salient keywords which may offer fruitful insights into the news media's representation of dementia include the various labels for dementia (*dementia, alzheimer's, vascular, cte, pca* and so on), as well as themes of dementia prevention and dementia advocacy, which were signalled as 'key' through the survey of the corpus in Chapter 4. The present study focused only on the most dominant discourses emergent in the corpus, leaving open the invitation for future researchers to consider less dominant counter discourses which may challenge hegemonic depictions of the syndrome.

Though the scope of the study was broad, encapsulating five years' worth of news articles about dementia, it cannot be said to be representative of all types of mass communication; other forms of mass media can be equally influential in the public sphere (Wimmer & Dominick, 2013). Studying the representation of dementia in other mediums such as film, fiction, and online spaces like Twitter would complement the findings of the present thesis, confirming the study of dementia discourses as a fertile and productive field of inquiry and contributing greater awareness of the impact of these discourses on public understandings of the condition.

Additionally, future researchers may wish to consider the real-world influence of these discourses on people living with dementia; how do those with the syndrome reflect upon the dominant stereotypes perpetuated about dementia, especially those which are most stigmatising and fear-inducing? How might the discourses identified in the present study impact an individual's decision to seek medical help if confronted with the symptoms of dementia? One criticism of CDA is that it prioritises the analyst's perspectives and interpretations of discourses (Breeze, 2011), but not all readers will interpret texts in the same way. It is acknowledged that this study, which has critiqued the absence of the experiences of people with dementia in the news media, has not included those voices in this research, and it is hoped that researchers working in this field may take that into consideration in future work, so that alternative interpretations of the discourses reported in this study might be foregrounded and discussed.

## 9.7 Concluding remarks

This thesis has investigated the discourses drawn upon in British news media reporting of dementia, harnessing the largest collection of news media articles about dementia to date and the first study of its kind to consider in such detail contemporary representations of dementia in the British press. By utilising the methodological combination of corpus linguistics and Critical Discourse Analysis, the study has paid close attention to salient linguistic features across the corpus, identifying the most dominant discourses and interrogating them in contextual detail. The study has argued that the discourses most commonly used to represent dementia may have harmful consequences for public knowledge of and attitudes towards dementia, potentially impacting public decisions about whether to seek a diagnosis, and how to treat those currently living with dementia. This concluding chapter has highlighted potential areas for improvement among news makers, and has offered some recommendations for policy makers and advocacy organisations aiming to raise public knowledge of the syndrome.

As the number of people diagnosed with dementia continues to increase across the world, and with no scientific cure expected in the near future, it is vitally important to focus upon how dementia might be prevented, and how the quality of life of people living with dementia can be enhanced (Lock, 2013). Where this study has interrogated the discursive representation of dementia in the widely influential cultural sphere of the news media, so it is hoped that future research will continue to respond to the World Health Organization's (2012) call to recognise dementia as a public health priority and seek to raise public understanding of the syndrome, so that people diagnosed with dementia in the future may live without the stigma and fear that has surrounded the syndrome for so long.

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