Research Article

Looking Through Dementia: What Do Commercial Stock Images Tell Us About Aging and Cognitive Decline?

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Abstract

Commercial stock images are existing, artificially constructed visuals used by businesses and media outlets to articulate certain values, assumptions and beliefs. Despite their pervasiveness and accessibility, little is known about the ways in which stock images communicate meanings relating to health and illness. This study examines a broad range of common stock images that depict dementia and aging, revealing the tendency for older people with dementia to be represented in objectifying and de-humanizing terms—emphasizing disease and deficit at the expense of the whole person, whereas precluding any possibility of enduring personhood. As well as introducing a multimodal critical discourse approach that can be adopted by other researchers examining the ideological underpinnings of health and illness imagery, this study underscores the importance of critically interrogating stock photography—a much neglected, yet profoundly influential, cultural resource that can shape the ways we think about and respond to illness and disease.

Keywords

dementia; aging; multimodal critical discourse analysis; visual communication; stock images; getty; qualitative

Introduction

In recent decades, qualitative health research has become increasingly occupied with analyzing the discursive and textual dynamics of health and illness (Gwyn, 2002; Lupton, 1992). Most of this work has focused on the linguistic content of the texts being analyzed, often at the expense of exploring their nonlinguistic, particularly visual, elements such as pictures, photographs, illustrations, and so on. This monomodal perspective has been fruitful for analyses of texts in which language is the primary (or only) mode of communication, such as patient records and transcripts of health care interactions. However, nowadays many genres of communication, including websites, print media, advertising, and public health information, draw upon health-related discourses (i.e., attitudes, ideas, assumptions, values to do with health) in decidedly multimodal ways, relying not only on language but a combination of semiotic resources, including visual images, fonts, layouts, and sounds (Machin & van Leeuwen, 2007). It is important, therefore, to interrogate such multisemiotic forms of communication since, as well as being highly pervasive, they are, as Harrison (2002) rightly argues, subtly able to naturalize and reproduce certain versions of reality or otherwise "provide us with views of how things should be" (p. 857). Thus, at a time when communication is increasingly turning from words to images—to the extent that visual images now routinely permeate our lives (W. Martin, 2015)—there is a growing need for qualitative health research to engage with methods more finely attuned to identifying and systematically critiquing health-related discourse that manifests not only in language but across these different modes of communication.

To the best of our knowledge, our study is the first of its kind to examine critically the visual discourses surrounding a topical health concern, dementia, in a large sample of stock images sourced from a leading commercial image bank. Our analysis sets out to critique these images, elucidating the dementia-related and age-related discourses that are conveyed by them and which inform their design. This study thus offers a timely response to the need for more research that explores the visual discourse surrounding dementia in communication in the public sphere. At the methodological level, we set out to demonstrate how methods from multimodal critical discourse analysis (Kress & van Leeuwen, 2001, 2006;

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Machin, 2007, 2013; Machin & Mayr, 2012) can enhance the analysis of visual health communication by providing predictable and adaptable tools for describing and critically examining texts beyond the linguistic level. We also aim to demonstrate the potential of stock images—as a form of visual media that is all-too-often overlooked and taken at face value by researchers—to artfully and emphatically convey particular discourses about health and illness—discourses that, due to their pervasiveness in contemporary public communication, have the capacity to shape perceptions and understandings of health-related topics for the public at large.

We begin by introducing multimodal critical discourse analysis, providing an overview of its origins, assumptions, and applications in qualitative health research to date. We then consider commercial stock images as a source of qualitative health data, before introducing our topic of study, dementia. The methodology section describes how we sourced the stock images in our data and provides a more detailed overview of the specific concepts and tools from multimodal critical discourse analysis which we draw on in our analysis. Following this, we report our analytical findings by describing, in rich, qualitative detail, the visual discourses that surround dementia across our sample of stock images. As part of this analysis, we will also consider the dementia-related and age-related ideas, values, and identities that are both expressly and implicitly articulated by these visual resources. The article concludes with a discussion of the main findings and by reviewing the utility of multimodal critical discourse analysis as a method for exploring and critiquing (visual) health-related discourses, not only in stock imagery but across all genres of contemporary visual communication.

Background

Multimodal Critical Discourse Analysis

Any introduction to multimodal critical discourse analysis should begin with the body of approaches from which it originates, namely critical discourse analysis. With its origins in linguistics, critical discourse analysis is a theoretical perspective concerned with the ways in which ideology, power, and inequality are enacted, reproduced, and challenged through discourse (Fairclough, 1989/2014, 1995/2010; Reisigl & Wodak, 2001). On a practical level, this usually involves closely analyzing texts in terms of the linguistic choices that inform their design, with the aim of showing how those choices foreground certain kinds of ideas, values, and identities while backgrounding or concealing others (Fairclough, 2003). These communicative choices are then interpreted and related to the wider contexts in which the texts in question were produced and consumed to understand why the texts were designed in that way and to consider how they might influence and be influenced by the societies in which they originated (van Dijk, 2001).

As our introduction suggests, critical studies of discourse originally focused only on the linguistic choices made in the creation of texts. The application of multimodality to this area of study came later and was initiated by the work of linguists Gunther Kress and Theo van Leeuwen (Kress & van Leeuwen, 2001). Among other things, this work brought about two important considerations for critical discourse studies: (a) that texts create meaning through *combinations* of communicative modes that include language but, for many texts, also images, color, fonts, layouts, and sound and (2) that communication, partly as a result of technological developments, is becoming increasingly multimodal. Taking these observations as a starting point, Kress and van Leeuwen developed a series of analytical concepts that would better enable scholars working within critical discourse studies to describe and explain the role that modes *other than* language play in texts (Machin, 2007).

The majority of critical studies of health discourse have adopted a decidedly monomodal perspective, focusing on the ways that issues such as power, ideology, and inequality both shape and are shaped by language used in health-related contexts. As well as reflecting the linguistic bias of critical discourse studies generally, this tendency toward monomodality also reflects the penchant for such studies to take as their data texts that are characteristically monomodal or at least which feature language as their primary mode, for example, interactions between patients and practitioners (Wodak, 1996, 1997; Ziółkowska, 2009), interviews (Galasiński, 2008), emails (Harvey, 2012), online support groups (Brookes, in press), and suicide notes (Galasiński, 2017). Given their aims and the primacy of language in the texts they analyzed, the implementation of monomodal, linguistic approaches in such studies was not only justified but also fruitful for their analyses.

Offering something of a counterweight to this monomodal tradition, a small but growing number of studies have adopted multimodal analytic approaches to explore the relationship between health and issues such as power and ideology in texts that are characteristically multimodal in their design—making use not only of language but also of resources such as image, font, layout, and so forth. For example, Koteyko and Nerlich (2007) analyzed the multimodal discourse of online probiotic advertising. Thompson (2012) adopted a multimodal critical discourse approach to study visually personalizing and responsibilizing discourse in an online mental health community website. Harvey (2013) also adopted multimodal critical discourse analysis to critique the linguistic and visual medicalization of male

baldness in pharmaceutical advertisements for hair loss "remedies." Building on this approach, Brookes and Harvey (2015) studied the relationship between multimodal scare tactics and commercial strategies in a diabetes public awareness campaign. Investigating a similar topic, Mulderrig (2018) used multimodal critical discourse analysis to examine emotional manipulation and "nudge tactics" in social marketing produced as part of a U.K. government public health campaign targeting childhood obesity. Machin and Mayr (2012, pp. 52–56) and Brookes and Harvey (2016) analyzed multimodal discourses of commercialization and privatization in the websites of U.K. health care providers. Brookes, Harvey, and Mullany (2016) adopted a multimodal critical discourse approach to compare discourses of baby-feeding in public health texts about bottle and breast feeding. And, finally, in a recent study with more direct relevance to the current research, Brookes, Harvey, Chadborn, and Dening (2018) used a multimodal critical discourse approach to explore the linguistic and visual representation of dementia and people with dementia in a small sample of recent (Brookes et al., 2016) U.K. press articles.

This body of work reflects a relatively recent but growing interest in multimodality and (critical) health discourse. But more importantly, the insights provided by such studies collectively attest the value of a multimodal critical perspective for elucidating the power of discourse—across a wide variety of text types and on all levels of semiosis—to shape people's understandings and experiences of health and illness. The present study not only aims to add to this body of work by providing new insights into the visual discourses of dementia but also aims to expand the reach of multimodal critical discourse analysis in qualitative health research by applying it to an—until now—overlooked and often taken-for-granted textual genre in the form of commercial stock images.

Stock Images and Image Banks

Image banks, such as Getty Images and Adobe, hold many millions of images and videos which they purchase from photographers, designers, illustrators, and filmmakers. These images, which mainly consist of "clichéd photographs of consumer wellbeing or corporate achievement" (Frosh, 2008: online), are sold to designers and text producers for a license fee. The stock image industry is large, highly lucrative (worth an estimated US$2 billion annually), and continues to diversify and expand, competing with traditional photojournalism (Frosh, 2008). In this study, we focus on dementia stock images sourced from the industry leader, Getty Images. Founded in Seattle (United States) in 1995 by Irish businessman Mark Getty, Getty Images is now the world's largest supplier of stock images for businesses, consumers, and a range of media outlets. It offers a vast—and ever increasing—archive of images, illustrations, and film footage which currently totals over 80 million still images and illustrations and more than 50,000 hours of stock film footage. Getty's primary markets are creative industries (including advertisers and graphic designers), the media (print and online), and corporations (e.g., for in-house marketing). Although Getty is based in North America, its reach is global: Around half of its revenue is generated outside North America, with customers based in more than 50 countries (Machin, 2004, p. 319). Thus, the images and footage provided by Getty can be found on websites and in advertisements, newspapers, magazines, and promotional material across the globe.

The images and films held by image banks such as Getty are assigned a series of keywords or tags that denote the person, event, or thing that the image/footage is designed to represent. These labels refer to a mixture of the tangible things that are depicted in the image/footage, as well as the more abstract concepts that it is designed to represent or the idea or feeling that it is intended to evoke. Image banks are relatively easy to use. Users simply type in a search term reflecting the type of image/footage they are looking for. The website will then display all the images/films that have been assigned tags that match the search term. Depending of course on the specificity of the search term, the number of results generated will vary but typically reaches tens or hundreds of thousands of images/films. Users can then browse the material displayed, select which image(s) or footage fits their purposes and, unless it is freely available, pay online for the rights to use it. From typing in a search term to acquiring a user license, the process of obtaining an image/film from Getty and other image banks is extremely quick and convenient, taking no more than a few minutes.

In this study, we are specifically interested in dementia-related images (photographs, illustrations, and graphics) rather than films. In terms of their content, many of the images that Getty provides depict public figures and significant historical events. However, the most common (and most profitable) types of images are those which do not necessarily depict any specific person or event but which are designed to convey more abstract concepts or to conjure particular circumstances, ideas, or feelings. More often than not, these types of image display professional actors performing a role for the purpose of producing a photograph to be sold to a commercial stock bank. In other words, these abstract images seldom bear witness to any actual event taking place in the world. Yet, these types of image are more commercially appealing to image banks such as Getty because they can be purchased for a wider range of uses. Machin (2004) considers the fundamental ways in which this has changed how photographic images are used:

> What matters now is no longer only what photographs represent, when and where they were taken, and why. What matters now as much, or more, is how many different contexts they can be inserted into, both in terms of what they represent and in terms of their form, as they must be able to fit into a range of overall layout designs, for instance through colour [sic] coordination. The more they are multi-purpose, generic and decorative, the better they will sell.[1] (p. 317)

Here, Machin (2004) essentially argues that the emphasis on photography has itself switched from one of bearing witness to one of being a symbolic system. He argues that this is partly the result of a culture of branding, in which products and services are now represented using images of the ideas, meanings, and values (e.g., friendship and romance) that marketeers wish to attach to their wares rather than the uses or functions of the products and services themselves. It is important to recognize that the symbolic systems that now constitute image banks have not come about by chance but have been actively and intentionally created by large global corporations to suit their commercial needs and interests.

Understanding the sociopolitical conditions under which stock images are produced for and selected by image banks such as Getty is important as multimodal critical discourse analysis is, as we saw earlier, concerned in no small part with relating discourse to its wider contexts of production and consumption. The commercial drive for abstractness in the production and selection of stock images is significant, for this has implications for how complex issues (not least those pertaining to health) are visually represented in these images and, in turn, the vast array of texts—the websites, newspapers, adverts, and other publications—in which these resources are regularly used.

Dementia and Stock Images of Dementia

Dementia is a syndrome encapsulating a range of diseases that cause a series of cognitive impairment symptoms, including problems with memory, reasoning, perception, and communication (World Health Organization [WHO], 2017). The most prevalent type of dementia is Alzheimer's disease, whereas other variants include vascular dementia, dementia with Lewy bodies, and frontotemporal dementia (Dening & Sandilyan, 2015). Although all are subsumed under the umbrella term *dementia*, people experiencing each of these variants are likely to present with different symptoms. Even if we set aside this variance across the different strains of dementia, experiences of any dementia will be unique to the individuals affected by it—in other words, the experiences of one person living with Alzheimer's disease are typically distinct from those of another person living with the same disease (Clare, 2003; Harman & Clare, 2006). Dementia is a progressive syndrome, which means that its symptoms are likely to get worse over time. At present, there is no pharmacological cure for dementia. Accordingly, people diagnosed with the syndrome today will still have it when they die.

Dementia, it is said, presents one of the biggest global public health challenges facing the world today: 47.5 million people live with the syndrome worldwide, and there are 7.7 million new cases accruing each year (WHO, 2017). Based on these figures, the total number of people living with dementia is set to rise to 75.6 million in 2030, trebling by 2050 to 135.5 million. In 2016, the British Office of National Statistics (ONS, 2016) published a report showing that dementia had now replaced cancer and heart disease as the leading cause of death in England and Wales, now accounting for over 11 percent of all deaths registered in 2015.

With no cure in immediate sight, there is a need for research that focuses on people's lived experiences and understandings of dementia in the here and now (Lock, 2013), including how these might be shaped by cultural constructions of the syndrome, for example, in the media, public health information and other types of public communication that constitute the primary means through which people routinely access information about, and form their impressions of, dementia (Swinnen & Schweda, 2015). Indeed, in recent years, it has not been difficult to encounter such constructions in public discourse, not least in the print media, for whom dementia seems to represent an unfailingly newsworthy topic. The media's intense focus on dementia has not gone unnoticed by qualitative health researchers, with studies in this area generally reporting the pervasiveness of negative and fear-inducing representations of the syndrome, with common themes including dementia as an active agent that relentlessly kills people diagnosed with it, dementia as a loss of the self, and dementia as social death (Brookes et al., 2018; Swinnen & Schweda, 2015; Zeilig, 2014). A consequence of this consistently negative and stigmatizing representation is that perceptions of dementia among the general public are often fraught with fear and misunderstanding (Swaffer, 2014), even though, of course, having dementia does not necessarily mean that the person concerned is demented (Sabat, 2018). Persistently negative media portrayals of dementia are also problematic in the sense that they preclude or downplay the possibility of people "living well" with the syndrome; indeed, while it is true that dementia can be insufferably distressing for people living with the syndrome and their relatives and carers, this is not necessarily the case all the time, and many people living with dementia continue to lead socially and physically active lives following diagnosis (Rahman, 2014). Yet, the possibility of living well with dementia in this way is rarely—if ever—suggested by the media's take on the syndrome.

Given the newsworthy nature of dementia, producers of dementia-related texts frequently find cause to delve into the image banks offered by Getty and others to furnish their news articles, advertisements, and other publications with visuals that are designed to represent and shed light on the syndrome. Machin and Niblock (2006) have argued that the use of stock images in news media has increased over time, with news photographs taking on an increasingly symbolic, rather than descriptive, quality. They attribute this increased reliance on stock imagery to two factors: (a) stock images are cheaper and easier to access than relying on more traditional types of photojournalism (a particularly important consideration for news production companies facing financial and staff cutbacks[2]) and (b) with their more symbolic and aesthetic quality, stock images are designed to look good on the page (again, an important consideration at a time when the visual design of newspapers and other media is crucial in branding and marketing; Machin & Niblock, 2006, p. 36).

However, Caple (2013) argues that although stock images are regularly drawn upon in the design of advertising texts, and even the health and lifestyle sections of newspapers, their often-decontextualized nature means that they are not usually well suited to the design of news texts. She observes that their use has yet to be become common practice in the production of news discourse, with producers of such texts tending to opt for images that can be tied to a "discernible news context" (Caple, 2013, p. 9). Although we are sympathetic to this argument and can envisage many types of news stories for which generic stock imagery would be unlikely to be suitable (e.g., about specific people, places, or events), we are also of the view that stories about dementia are different in this respect for three main reasons. First, news stories about dementia are rarely stories about specific people, places, or events. Rather, with a few exceptions (e.g., stories about celebrities diagnosed with dementia and crimes committed against people with dementia), such reporting usually focuses on less tangible phenomena, such as dementia prevalence patterns, mortality rates, and associated risk behaviors. Because these topics do not map so neatly on to any "discernible news context," as Caple (2013, p. 9) puts it, they arguably lend themselves more readily to the use of stock images. Second, on a more practical level, stock images of dementia provide text producers with an infinitely more convenient alternative to obtaining photographs of real people living with dementia, which can be difficult to acquire from an ethics perspective. Finally, as a complex syndrome that is often difficult to understand, stock imagery affords the producers of news stories and other texts a useful (but often grossly simplifying) visual shorthand for conveying the complexities of dementia and for helping readers to identify those texts as being "about" dementia.

By examining the visual discourse in stock image representations of dementia, our study not only responds to the need for more research that examines public sphere representations of dementia but also helps to address the general paucity of studies that pay attention to the visual aspects of such representations (a notable exception being the study by Brookes et al., 2018, though this was based on a limited sample of press articles). Stock images should afford a rich source of data through which to explore the visual discourses of dementia, offering broad coverage of the types of visuals that feature prominently across a wide range of contemporary texts.

Data and Analytical Approach

Data

To obtain our data, we searched the Getty image bank using the query term "dementia" (Getty images, 2018). This generated 951 images. We then ranked the images according to "popularity" (i.e., number of uses) and extracted the top 100 images. This sample contained a mixture of photographs, illustrations, brain scans, and diagrams. Sourcing the most-used dementia images in this way helps to ensure that our analysis will unpack those visual discourses of dementia that are most prominent and have the widest contemporary reach in terms of audience. It should also be noted that, although dementia features as a search term for all the images in our database, each image has a number of other search terms, which means that they are also likely to be picked up by producers of texts relating to other (though not totally unrelated) topics, such as aging, old age, and care. The images in our data feature in a broad range of mass media, mass audience texts, the most common uses being print and online news articles. When they are picked up and used by texts producers, the abstract images provided by Getty undergo a process described by Bernstein (1990) as *recontextualization*—that is, they are anchored in particular meanings and interpretations by their contexts and situations of use, including co-occurring modes such as captions, accompanying text, and other imagery (see also Van Leeuwen, 2008). However, for the purposes of this study, we will focus on the original, decontextualized images as they would appear to visitors to the Getty website and thus to users of those images when carrying out their own searches.

Analytical Approach

The approach to multimodal critical discourse analysis we adopt is inspired by the seminal work of Kress and van Leeuwen (2001, 2006), introduced earlier, inasmuch

as we view the stock images in our data as visual texts culminating from a system of deliberate and motivated design choices made by their producers. Our approach is two tiered. In the first step, we document the visual choices evident in the design of the stock images in our data. Although Kress and van Leeuwen (2001, 2006) offer a toolkit for scrutinizing choices pertaining to multiple levels of semiosis—including language, image, font, layout, color, and sound (Kress, 2010; van Leeuwen, 1999, 2005, 2011)—this initial step of our approach draws only on those concepts that we deem to be most relevant to the composition of our photographs. Specifically, we examine the visual choices pertaining to the following elements of the stock images:

i. participants (who is depicted?);
ii. settings (where are they depicted?);
iii. gaze (where is the participant[s]' eye gaze directed—do they engage the viewer or other represented participants or look elsewhere?);
iv. angle of interaction (from what angle or perspective do we view the participant[s]?)
v. color (what choices are made in terms of brightness, saturation, purity, differentiation, and hue [see Kress & van Leeuwen, 2006, pp. 232–235]?).

Focussing in detail on these questions not only enables us to describe the material composition of the images but also allows us to begin to interpret the ideological significance of the various representational choices that inform them. Thus, in the second step of our analysis, we interpret these visual choices in terms of the discourses—that is, the dementia-related and age-related attitudes, ideas, and values—that imbue and are propagated by them. This two-tiered approach broadly corresponds to the Barthian notions of denotation (what is depicted?) and connotation (what is meant or implied? Barthes, 1977).

Both authors (linguists with training in discourse analysis) independently analyzed all 100 images in the data using the two-tiered approach described above. We then compared our analyses, which were similar, and agreed upon a set of interpretations of the images and dementia discourses. The results of this analysis are reported in the next section.

Analysis

Of the 100 dementia stock images we obtained from Getty, the majority (79) were photographic images of people with dementia (in most cases, actors intended to represent people with dementia). Eleven of the images were either brain scans depicting dementia or photographs of practitioners inspecting brain scans. The remaining 10 images were more difficult to categorize; these were more abstract images (including visual metaphors) designed to symbolize, in one way or another, particular aspects of the dementia syndrome. In this section, we will explore each of these types of image in turn, examining in finer qualitative detail the semiotic choices that are evident in their design. Rather than scrutinize the design choices evident across *all* the images in our data, we will instead focus here on recurring—and thus highly prominent—features, providing illustrative examples along the way. Although we will address each type of image separately, it is worth bearing in mind that these types of image can often feature side-by-side in their contexts of use, for instance, in newspaper articles (Brookes et al., 2018), and, as the forthcoming analysis will show, also draw on many of the same ideologies and assumptions about dementia. Thus, all three types of image—photographs of people with dementia, brain scans, and abstract images—can be viewed as drawing upon and perpetuating prominent visual discourses of dementia. Note that, by way of demonstrating the visual discourses explicated in our analysis, we will provide a series of images that we deem to be representative of the broader themes we observed.[3]

Photographs of People With Dementia

The people with dementia in our stock image data are routinely subjected to the processes of objectification and disembodiment. Beginning with the former, Figure 1 below provides an example of the most frequent kind of stock visual representation of dementia or dementia scenario: As the caption suggests, that of an older adult being tended to by a carer or relative.[4] Here the two participants are situated indoors, in a care home—rather than a private, domestic—setting, both of whom appear against a stark and hazy background that, because of its spartan character, imparts the scene with something of an institutional tone (an impression, in turn, reinforced by the anchoring caption). Although she appears out of focus, and with her back turned toward the camera (for she is not, in this image, the principal focus or subject), the participant performing the role of carer is seen in the act of lightly placing her left hand on the older woman's shoulder—a gesture quite clearly of support and what could perhaps also be taken as a sign of consolation.

As is common in these kinds of dementia care dyads, Figure 1 being no exception, the cognitively impaired participant is presented passively and seemingly rather helplessly—depicted here in some kind of listless state of suffering or otherwise fugue of numb despondency. Positioned dominantly in the middle of the frame—the "pivot around which everything turns" (Kress & van Leeuwen, 2006, p. 197)—she is the central presence, standing out in relief such that the viewer's attention is

Figure 1. Senior woman receiving help in old people's home.

unavoidably drawn toward her—and to the fact that she is seated, inactive, looking out vacantly to an unspecified point outside the frame, without apparent aim or object. Although in the intimate presence of an attentive companion, she neither speaks to nor otherwise interacts with this attending partner. Indeed, she appears to be unaware of the presence of the other—at least there is no visual cue in the photograph to suggest the contrary. She is withdrawn and disengaged, appears to be simply passing time by sitting still, performing for the camera the state or condition of "being blank" (Phinney & Chesla, 2003), a depiction in keeping with the notion of dementia as disengagement and absence (Swaffer, 2014).

Figure 1 is so composed, moreover, that a negative ("us and them") distance opens up between viewers and the central "senior" participant. Such an effect is brought about, in no small part, by the image designer's decision to capture her (as someone purportedly with dementia) in a posture where her gaze is averted away from that of the viewer. In this particular "offer" image (Kress & van Leeuwen, 2006), the absence of eye contact between us viewers and the woman makes it difficult for us to enter in any kind of symbolic personal relation with her. As she is not visually addressing us, the woman does not "demand" anything from us (Kress & van Leeuwen, 2006), does not provide us with any indication of how we should symbolically engage with her. We are not, for example, being asked to relate to her—to assume, say, a relation of social affinity with her in the way that a participant actively, knowingly looking out and smiling at us would (if anything, we are forced to adopt the perspective of the caregiver: With the camera positioned behind her, we peer over her shoulder to share her view of the person with dementia). Consequently, she appears impersonally, somewhat objectified and removed, as though she were, to quote Kress and van Leeuwen (2006, p. 119), a specimen "in a display case," an exhibit offered up for pitying scrutiny (Johnson & Bytheway, 1997). Yet, at the same time, the fact that she appears in this somewhat objectifying configuration lends the scene a degree of authenticity and makes a "special claim on our attention" (Snyder, 1980, p. 504). For with her being unaware that she is being looked at, it is as though we, who observe her, have unobtrusively stumbled upon her and her world, while she obliviously goes about her daily business of existing in it (Brookes & Harvey, 2015). This is what you would see if you were there (as carer or onlooker), this is her reality, the picture suggests, for although artificially constructed, it nonetheless purports to be an authentic window on and into the woman's world, a depiction to be taken at face value.

Depicting participants with dementia in such objectifying and somewhat pitiable terms rather than as individuals living purposeful, meaningful lives is a common occurrence in stock dementia photography. It is realized—in extremis—in what we refer to as the disembodied or truncated hands image, a pervasive kind of visual representation that is often used by the press and assorted media outlets to accompany and illustrate stories about aging and dementia. As we have observed elsewhere (Brookes et al., 2018), these particular types of image are highly predictable in composition. The hands so depicted are invariably frail and immobile (even though they are the dominant focus of the camera, they perform little action or productive function: They are at rest or else clasped together) in a gesture that, according to Tallis (2003, p. 119), signifies "apprehension" and the pointing toward unnamed "fears for the future." In Figure 2, for example, we see a pair of hands at rest on a woman's lap, the fingers of her right hand loosely, and perhaps a little anxiously, touching those of her left. Although the right hand is somewhat silhouetted against the pastel shades of her dress, the left hand is brightly, clearly lit, to the extent that is easy to pick out granular details in the texture of the skin—features such as wrinkles and creases and even the bones and joints beneath it. The hands, moreover, are tightly framed and rendered in extreme close up—or at least at such a close distance that other parts of the body, including, most significantly, the head, are excluded from view entirely, and therefore we are denied any enlightening access to the person to whom the hands belong.

It hardly needs to be pointed out—by way of recourse to any specialist semiotic framework—that this kind of imagery is blunt and unforgiving—a potent index of fragility and decline that communicates an "unsettling awareness" of the vulnerable materiality of the dementia body (Moran, 2001), a vulnerability which is further emphasized by the fact that we peer down at the hands as from a symbolic position of relative power and superiority (Ledin & Machin, 2018). Moreover, in symbolically subjecting participants to such extreme levels of objectification, these images undermine—and perhaps

Figure 2. Wrinkled old hands.

even encourage us to question—the "essential humanity" of people with dementia so depicted (Downs, Clare, & Mackenzie, 2006, p. 236). In fact, pictures like Figure 2 are doubly reductive in that they both literally and figuratively diminish the whole person—literally as what we are directly, "literally" presented with is an actual fragment of the individual, and figuratively in the sense that this fragment can be interpreted as being symbolically substituted and standing in for the whole person, as with the well-known medical metonymy whereby patients are depicted and cataloged solely in terms of their ailments or diseases (Segal, 1998, p. 92), so these participants are transformed and dehumanized to the point where, acutely excised from the frame as they are, it is impossible to personally or meaningfully relate to them.

Disembodied images such as Figure 2 run the risk of perpetuating the idea, found in much of the medical literature (Kontos, 2006), that dementia is a "loss of self" (Cohen & Eisdorfer, 2001), a disease that eradicates the wholeness and essence of the individual. Indeed, it is possible to view the reproduction of this kind of disembodied mind-separated-from-body imagery as a type of "malignant positioning" (Sabat, 2006), that is, an act of visual communication that denies or otherwise undermines the personhood of the individuals so depicted—and, by extension, people with dementia more widely. In his influential book *Dementia Reconsidered*, Kitwood (1997) famously defines personhood as the "standing or status that is bestowed upon one human being by others" (p. 8). The personhood of people with dementia, Kitwood argues, is often liable to be undermined through (intentional or otherwise) malignant acts—through processes such as stigmatization and objectification (i.e., treating people as though they were a diseased object or lump of matter)—that emphasize negative attributes and thereby threaten their sense of self-worth (Sabat, 2006, p. 289).

Accordingly, stock photographs of disembodied hands direct us to see little more than atrophy and depreciation before and instead of the person (Kitwood, 1997). Thus, they can be said to constitute what Archer, Iritani, Kimes, and Barrios (1983) describe as a species of "face-ism," that is, images that trade on the assumption that increased facial prominence is commensurate with certain positive human attributes, the head, for example, being the locus of mental life, incorporating facets such as intellect, personality, identity, and so forth. Images of nothing but body parts and appendages, therefore, reveal little, if anything, of the character or psychological insight we might have otherwise gleaned from more nuanced and holistic images of people with dementia: Certainly in no way, for instance, do they contribute to the person-centered idea that older adults with dementia possess the same value as anyone else and can be "active agents in their lives," able "to act on their world" (Downs et al., 2006, p. 245).

This is not to say that all the stock images offer representations of dementia characterized by depreciation, disease, and depersonalization. Indeed, a number of the photographic images appearing in our data set offer a more positive take on dementia. For example, in contrast to the general trends we have observed in our foregoing analysis, a minority of the stock images in our data represent people with dementia in less disembodying terms, as physically active and socially engaged with other participants, relatively free of cliché-laden graphics and postures. Take as an example the image reproduced in Figure 3.

The "senior woman" shown in this image is depicted in ways that can be contrasted with some of the more commonly reductive visual choices evident in the majority of the photographs in our data. In contrast to the disembodied hands depicted in Figure 2, we are granted a view of this woman's face and most of her body. She is shown as smiling, engaging both visually and physically with the "caregiver" sitting with her (a far cry from the socially disengaged participant featured in Figure 1, whose face was emblazoned with an expression of fear and unhappiness and whose gaze was cast out of shot, vaguely directed at something out of reach, situated beyond the scope of the image). However, this kind of depiction in Figure 3 is relatively rare in the context of the photographic images in our data, with photographed participants pictured as visually engaging with either the camera or another participant in just 14 of 79 images (less than 20%) and smiling or laughing in eight of these. Moreover, these images, though offering a decidedly more positive visual representation of the person with dementia, still tend to equate living with dementia in terms of dependency and relative inactivity. For example, the caption accompanying the photograph in Figure 3 tells us that the person who the senior woman engages with is her caregiver. Subtle visual choices combine in

Figure 3. Senior woman and caregiver.

this image, we argue, to create a symbolic relation between these participants, whereby the "caregiver" is cast in a position of power. Not only is the caregiver positioned higher up in the image relative to the person with dementia—forcing the latter to literally "look up," in near-awe, to the former—but the caregiver's authority is visually enhanced further by the positioning of her hands which cover and even encase those of the person with dementia (Kress & van Leeuwen, 2006, pp. 262–264). Thus, so powerful are the discourses of dementia identified over the course of our analysis that they can even be traced—albeit through subtler semiotic means—in images offering an ostensibly more positive representation of the syndrome and people affected by it.

Whether or not they afforded what we might perceive to be more positive depictions of dementia, all the stock images we assessed provide us with little authentic sense of people's personal experiences of dementia, deny us the opportunity of glimpsing any authentic insight into the unique worlds of real people actually living with dementia—as stock images are always produced from an outsider's perspective—and are rarely credible and realistic. The models who appear in them, for example, are typically generic figures or types who, as it were, "act out" dementia, performances based no doubt on what the image producers concerned stereotypically assume to be the saliently recognizable reality of dementia. We know and learn very little, if anything, about participants in dementia stock images—other than that they tend to suffer and are looked after by others. They are "de-storied individuals" (Eakin, 2004), subjects without any evident personal history, whose voices we never hear, whose perspectives we never share.

Brain Scans

Intriguingly, pictures of brain scans—whether appearing within an image or constituting it entirely—commonly feature in stock photography. These highly specialized, state-of-the-art visuals encode a range of technical meanings and ideological assumptions, presenting viewers with various interpretative challenges. If conventional photographs possess an "immediacy and facticity which makes us think that they are real and self-evident" (Featherstone & Hepworth, 1993, p. 306), then what claim on our attention do advanced medical imaging techniques make? These technologies have revolutionized the way we perceive the brain and the inside of the body, allowing viewers to picture the invisible (Snyder, 1980), to apprehend what cannot be perceived by the naked eye alone (Mitchell, 2015). Although the camera makes the outside world around us atomic and manageable (Sontag, 1977), neuroimaging renders "the space enclosed by the skull" (Beaulieu, 2002, p. 66) visible and articulable in apparently incontrovertible objective terms. Yet as with conventional photography, which is typically valued for its mimetic quality and hence assumed to carry a "burden of truth" (Barthes, 1977; Newton, 2013; Taylor, 1992), neuroimaging also wields immense rhetorical and persuasive power.

What makes brain scans particularly attractive to stock image producers, and the media outlets who reproduce them, is that they are arguably one of the most widely recognized icons of "neuroscientific power today" (Pickersgill, 2013, p. 326), forming a class of so-called expert images that promise to tell us the evident truth about the state and function of the human mind (Dumit, 1999). To see, after all, is to believe. Rather than take neurological images as incontestable reality, however, we consider them to be instances of "manufactured objectivity," that is, operating to some extent within the same aesthetic and technical conventions that shape the reception of other modes of popular scientific imagery (Burri & Dumit, 2008, p. 303). Neurological images are at once authoritative and fascinating—visually alluring spectacles replete with vivid colors, contours, and textures—and their aesthetic quality and hyperreality afford a unique way of viewing the brain and, by extension, the person. As van Dijck (2006) argues, imaging technologies provide us with more knowledge about health and disease than ever before. Yet, tellingly, they also do a great deal more. Peering inside someone's skull is never an innocent activity, never without ideological consequences, for neurological images "actually affect our view of the body, the way we look on disease" van Dicjk (2006, p. 6). Consider, for example, Figure 4, an illustrative example of the various dementia-related stock photographs that feature neuroimaging visuals.

The first thing to say about this image is that it is not particularly helpful to the average viewer. What, for instance, are we to make (as nonneurologists) of the series of high-resolution brain scans and the technical

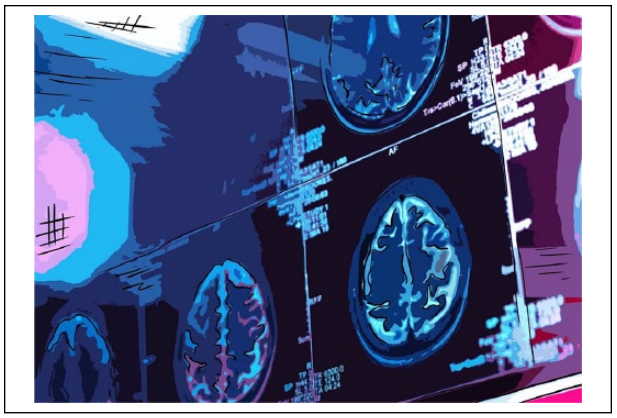

Figure 4. Human brain scan in a neurology clinic.

details (the scales, measurements, and so forth) that accompany them? Are we supposed to detect any—if there is any—potential pathology evident in the scans or otherwise make clinical sense of them? Indeed, what *exactly* are we to take from these highly technical images? From a purely heuristic perspective—accessible as they are only to experts—these neural images are virtually meaningless. Nevertheless, Figure 4 undoubtedly possesses a seductive aesthetic allure and is instinct with certain meanings and associations that will most likely be evident to, and appreciated by, "ordinary" untrained viewers. In terms of aesthetic appeal, for example, the prominent pink, blue and red light streaks at the far left and right side of the frame imbue the photograph with a highly mannered, ethereal quality (one perhaps at odds with the hyperreality of the actual scans themselves, for if we were actually present in the photograph, looking directly at neural scans in front of us, we would not of course see them in such a stylized fashion).

Yet, at the same time, there is no mistaking the fact that Figure 4, for all its aesthetic allure, is an image that powerfully transmits scientific weight and authority, evoking as it does a medical–technical outlook that emphasizes the organic aspect of dementia. If stock photographs of disembodied hands (such as Figure 2) tend to reduce people with dementia to inanimate matter, neural images have not dissimilar ideological consequences: reducing the person with dementia to their (seemingly aberrant) neurobiology. The reproduction and viewing of this kind of stock image makes it difficult to regard dementia as anything other than an organic brain disease—such that, in these strictly neural visual terms at least, the brain can potentially be seen as "the core of the patient's self" (Zimmermann, 2017, p. 81). Moreover, rendered in close organic and apparently transparent detail, there is "something intuitively right" about these bright blue, high-resolution digital brain scans and their apparent ability to disclose vital differences between the dysfunctional and normal brain (Dumit, 2003, p. 37). In seeking to make sense of all these neural images, viewers, we argue, might well be led to assume that there are two kinds of brain (and by extension, two types of people): those with and those without dementia. Inevitably, such a category error reinforces the difference between "normal" people and people with dementia, evincing a segregating "us" and "them" dichotomy. Whether intended or not, the reproduction of such technical brain imagery is only likely to reinforce the already prevailing belief that "everything a person with dementia does and feels is the outcome of brain damage and is abnormal in one way or another" (Sabat, 2014, p. 108).

Abstract and Metaphorical Images

The final recurring kind of stock image we consider takes the form of an abstract or symbolic representation that harnesses—in point of fact evolves around—a key underlying metaphor or symbol. Given the biological, medical, and cultural complexity of dementia, and the fact that, as a syndrome, it is widely, popularly misunderstood (Werner, 2003), it is not surprising that such metaphorical images abound in dementia-themed stock photography. Metaphors allow us to talk about one thing in terms of another and are therefore particularly effective at rendering diffuse, intangible, or otherwise inexpressibly complex phenomena in vividly arresting and concrete terms. Yet as Lakoff and Johnson (2003) have famously argued, metaphors are never merely descriptive garnish or poetic flourishes but profoundly affect the way we actually see or think about the world. For example, construing the human mind as though it were a machine allows us to understand the systematic nature of thoughts and cognition. At the same time, however, such a trope risks construing the individual as "broken down" or "dysfunctional" when disease is perceived to threaten that person's mind (Zimmermann, 2017, p. 73). Metaphors are thus double edged: They might illuminate and vivify complex entities but are simultaneously prone to simplifying and exaggerating them.

A striking example of this kind of stock metaphorical image is reproduced in Figure 5, a Photoshop-like illustration that is premised on the idea of dementia and/or the person with dementia as a puzzle. Here, we are presented with a medium (head and shoulders) shot of an older woman who is made to appear as though she were compact of a 60-odd piece jigsaw puzzle. Although we see her at a relatively close distance—as A. Berger (1991) notes, a medium shot signifies a personal relationship between viewer and photographed subject—we are not necessarily aligned with her. She appears at a slightly oblique angle to us (positioned to the left of the frame rather than directly in front of us) and she looks vacantly,

Figure 5. Jigsaw puzzle of a senior woman falling apart.

obliviously out of the frame rather than return our gaze, thus ruling out any nominal reciprocal social affiliation between viewer and subject. Like the "senior woman" in Figure 1, she is thus presented as "other"—an impression figuratively reinforced in this case by the conspicuous absence of a prominent piece of the jigsaw: Rather than see the woman as whole, the jigsaw satisfactorily completed and intact, what we unavoidably see (indeed this is the most noticeable and telling feature of Figure 5) is a dark cavity in the left side of her head, a carious void signifying absence and decay, the ongoing erosion of the whole person.

Although crude and oversimplifying, the use of the jigsaw motif in dementia imagery is not surprising, in line as it is with other kinds of cultural representations of dementia that associate cognitive impairment with the piecemeal dismantling of the individual. In point of fact, the brain itself—outside of any notion of neuropathology—is often construed in terms of a jigsaw puzzle, a complex organ made up of many intricate pieces that function both independently and harmoniously to inform the bigger picture of normal functioning and behavior (Du Plessis, 2011, p. 6). By this figurative logic, it only takes the absence of one piece of the jigsaw to render it irrevocably faulty—after all, what use and value is a jigsaw puzzle with a central piece missing?—and hence it is difficult not to perceive the woman in Figure 5, metaphorically rendered as she is, as similarly irredeemably deficient, a puzzle that cannot be solved.

Another discernible trope in Figure 5—though one not so immediately evident but one nonetheless that works in conjunction with the figure of the jigsaw—is the zombie metaphor, namely, the visual depiction of the person with dementia as the "living dead" (Behuniak, 2011), where dementia can be seen as the "death that leaves the body behind" (Kitwood, 1997, p. 3). A number of semiotic elements combine in Figure 5 such that the participant is rendered near zombie-like, a "non-person" existing principally as corporeal matter (recalling in this sense the truncated hands image in Figure 2). Note, for instance, the seemingly affectless, trance-like state that the woman is in, an impression clearly communicated by her vacant, objectless stare, lack of focus, and expressionless mouth, all of which unmistakably suggest that she is lacking cognition and "devoid of content" (Fontana & Smith, 1989, p. 36). Moreover, as we gaze at her, she appears to be actually falling apart before our eyes: Not only is a significant piece of her prominently absent—as indicated by the glaring dark hole in the top of her head, the lesion in the brain—but the missing jigsaw piece from her brow appears incongruously in her crown, suggesting that she is in the process of mutating, transmogrifying into something ultimately unrecognizable (note, too, how some of the joints between the jigsaw pieces appear to be coming loose, as though the wider fabric of the puzzle was becoming warped, beginning to fall apart). In addition, the coordinated use of color and lack of color differentiation—most evidently the predominant use of a muted color spectrum that extends from various shades of beige to overshadowing gray (a weak and ashen palette; Adams & Osgood, 1973)—contributes to the theme of death and decay: The taupe hues of the women's jumper, hair, and remorselessly arid background all chromatically chime with each other, combining to create a lifeless and colorless atmosphere, a gloomy scene of moribundity and deterioration.

Although no doubt arresting, the danger of this kind of death-in-life representation, according to Behuniak (2011, p. 86), is that it "delineates between those who are 'afflicted' and the rest of society" and hence "makes it possible, even justifiable, to socially marginalize those regarded as 'other.'" At any rate, this kind of metaphorical depiction of dementia fails to reach out to viewers with any degree of sensitivity, potentially inviting responses of fear and revulsion rather than empathy and compassion.

Discussion

Although pervasive, easy to access and reproduce, stock photographs of dementia and aging have received relatively little critical attention from qualitative health researchers (or indeed, for that matter, from any strain of communication scholar). This is surprising as such images are a potent and pervasive form of visual communication that subtly reproduce certain values and beliefs surrounding the aging process and therefore have the potential to shape and inform our responses to dementia. Our visual analysis of stock photographs reveals a distinct picture respecting common representations of cognitive decline. A predominant feature of these images is that, in their own unique and various ways, they

routinely foreground the biomedical and pathological aspects of aging, emphasizing, in particular, themes such as brain disorder; the (old) age of people living with dementia; and the inertia, passivity, and vulnerability of such persons, all the while promoting a "deficit" model of dementia (McGovern, 2011) that reinforces exactly those negative concepts that individuals with the syndrome themselves most emphatically resist (Zimmermann, 2017, p. 74). Rather than drawing attention to what people with dementia are able to do, and what remains of their cognitive capacities—and thereby adopt a more humanizing "assets" perspective (McGovern, 2011)—these stock images accord with the prevailing narrative of dementia that construes living with the syndrome in terms of "loss," "failure," and "meaningless existence" (Harris & Keady, 2008, p. 7). Indeed, after looking at these images, one could be forgiven for concluding that people with dementia are somehow less than persons (Sabat & Harré, 1992).

Of course, as our analysis has shown, this is not to say that the only picture of dementia offered by stock images is one of depreciation, disease, and depersonalization, for a number of the images appearing in our data set offered a more positive take on dementia, with people with dementia depicted as smiling, laughing, and visually engaging with other participants. Although such images were relatively uncommon (i.e., 11 of the 100 images in our data) and, as we have discussed, often constructed the person with dementia in dependent and relatively disempowered terms, they nevertheless gesture to the possibility of representing people with dementia as engaged and indeed socially "alive"—in sharp contrast to the majority of the images making up our data set.[5]

In emphasizing the pathological and clinical aspects of dementia, a significant proportion of the stock photographs we have examined convey the idea that the symptoms and progression of dementia are nothing but the outcome of neuropathology caused by disease (Sabat, 2014). Yet, as researchers from a biopsychosocial (as opposed to a purely biomedical) perspective have shown (see, for example, Kitwood, 1997; Sabat, 2001), the behavior and well-being of people with dementia is not only affected by damage to the brain (essential factor though it is of course) but by the social environment in which such people live their lives, including the way in which they are treated by others and how they react to the treatment of others (Sabat, 2014, p. 108). In other words, dementia is just as much a social and cultural phenomenon as it is a clinical one. Yet stock images appear to articulate only one aspect of the dementia story, privileging a biomedical point of view that is liable to heighten a "fear-reflex" that, according to Basting (2009, p. 4), "is making the experience of dementia worse." For by predominantly focusing on symptoms of pathology, stock images deny the possibility of health in dementia and older age (Davis, 2004, p. 372), not to mention the prospect of continued independence or at least some degree of autonomous living (not all people with dementia, of course, are completely dependent on the care of others).

Nevertheless, the ready availability of stock images continues to make them an immensely appealing visual resource to media outlets, with editors often assuming that it is far easier and more economical to access image banks than it is to create or otherwise obtain authentic and bespoke pictures. A recent anecdote offered by an associate of ours exemplifies the point. On asking the editors of a prominent medical publication why, in relation to a feature on dementia and aging, they had drawn upon clichéd stock photographs—images of wrinkly hands, vacant faces, and the like—our associate was informed that acquiring pictures of real people in genuine contexts of living would be needlessly time-consuming and impractical. Besides, doing so would potentially entail disrupting the prevailing narrative of dementia-as-decline, one with which average viewers are most likely to be familiar and appreciate. As Devlin, MacAskill, and Stead (2007, p. 48) point out, the notion that a reasonable quality of life is still attainable while living with dementia is, in the face of existing negative perceptions of the condition, liable to lack credibility among the general public.

That the media should offer consistently negative portrayals of dementia is hardly surprising, given that research into practices of news production has long observed negativity to be an influential criterion of newsworthiness (Galtung & Ruge, 1965). It seems reasonable, then, to suggest that there is a demand for negative and clichéd images of aging and dementia among the news media and that stock image producers—as commercial enterprises—are likely to recognize and attempt to respond to this demand in terms of the types of dementia-related images they produce, hold, and distribute every day.

Yet, of course, the danger of media organizations relying on stock images is that their use is only likely to heighten the stigma associated with dementia (Stites, Rubright, & Karlawish, 2018; Van Gorp & Vercruysse, 2012). As Ballenger (2006) observes, the stigma that attends the syndrome issues, in no small part, from the "anxiety surrounding the boundary between the pathological and the normal" or, to put it another way, dementia's unique "set of symptoms and behaviors that are judged to deviate from some notion of normal." Accordingly, the reproduction of stock images that characteristically trade upon the fear of loss of cognition and the erosion of the self are liable to sharpen dementia's already considerable stigma, casting people with the syndrome as "victims," as though there were no other

culturally sanctioned position for them to occupy. It goes without saying, therefore, that both stock photography producers and the media groups and publishers who readily draw on stock images need to reflect more critically on the potential consequences of routinely producing and reproducing visuals that focus on deficits at the expense of people's enduring abilities and potentials. There needs to be more positive, more nuanced stock images of dementia in circulation (Gove & Rohra, 2014), images that emphasize the continuing personhood of people with dementia and their capacity to "live well" with the syndrome—that is, to lead happy and socially fulfilling lives beyond their diagnoses. A wider repertoire of such images, if taken up by producers of mass audience texts, could help to "demystify" dementia and mitigate some of the dread associated with it (Devlin et al., 2007).

Our imploration here is not directed at producers of media texts alone but also those who design any type of text that represents dementia or people with dementia. It is accordingly a message that can be extended to, among others, designers of public health information, charity text designers, and the very photographers and designers who contribute images to stock banks such as Getty in the first place. For clinicians, it is important to be cognizant of the constitutional power of the visual (and linguistic) discourses of dementia in shaping the public's understandings and perceptions of dementia, for a consequence of reproducing the types of stigmatizing imagery we have encountered in our sample might be that the automatic response of people with dementia (and their relatives) to a diagnosis of the syndrome is one of fear, not just of dementia but of social death and loss of self. By promoting more positive images of people "living well" with dementia (discussed above), clinicians could contribute more positive representations of the syndrome that offer some hope and allay some of the fear, following a dementia diagnosis.

Conclusion

This is the first study to examine the representation of any health issue in commercial stock images. In critically examining visual depictions of dementia, we have aimed to respond to the call for more dementia-related qualitative research (Carmody, Traynor, & Marchetti, 2015). We also set out to demonstrate how the use of a critical multimodal approach to analyzing photographs—one that aims to systematically describe the semiotic composition of images, along with the connotations and associations that such compositions engender—can help expose attending ideologies and assumptions that might otherwise remain hidden and unchallenged. Certainly, at the very least, we hope that our investigation has drawn attention to the reductive power and influence of stock photographs of dementia and aging, along with the need to see them as ideologically motivated artifacts rather than transparent reflections of reality. As with other types of photograph, stock images seek to bestow "authenticity upon any set of appearances, however false" (J. J. Berger & Mohr, 1982, p. 97) and have the ability "to create stronger emotional and immediate cues," requiring as they do less cognitive load than nonvisual resources (Rodriguez & Dimitrova, 2011, p. 50). Consequently, if we are to apprehend the latent meanings buried beneath their surface (Fairclough, 1995/2010), it is imperative not to take visuals at face value but to critically examine the ways in which they are rhetorically, persuasively composed.

Although examining stock images does little to help us directly understand the personal experiences of people with dementia (an area of investigation that remains relatively underresearched in qualitative studies), our analysis has exposed some of the ways in which these common and taken-for-granted forms of cultural representation are able to shape public understanding of, and responses to, dementia and people living with it. Our commentary is by no means exhaustive: There are semiotic aspects of the images, and the attendant meanings arising from them, that we might have overlooked or not given full attention to. It also needs to be observed that not all viewers of the various stock photographs we have examined will necessarily "read" them in the same way as we have: We are not claiming that our semiotic analysis is, by any means, incontrovertible that others will unfailingly recover the same impressions and meanings. That said, we believe we have provided sufficient semiotic evidence with which to support our visual analyses, such that reader-viewers can appreciate and assess for themselves the ways in which we have arrived at our findings.

Finally, it needs to be pointed out that, as our focus has been on relatively decontextualized stock images, future research could build on our insights by examining how stock images contribute to the representation of dementia in their more everyday contexts of use (e.g., in newspaper articles, public health information, charity publications, and so on). Moving away from the topic of dementia, researchers could adopt the multimodal critical discourse approach used in this study—which is flexible enough to get to interrogate all kinds of multisemiotic content—to examine the visual (and linguistic) representation of a broad range of health and illness themes and issues. Given the pervasiveness of stock images pertaining to health and well-being, commercial image banks provide a rich data source for doing so.

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Notes

1. Not only does the multipurpose nature of stock photographs make them readily transplantable into a range of different settings, but also the generic aspects of such images are liable to influence meaning and inference making in their subsequent contexts of use. Although there is not the space here to consider all the contexts of use in which this happens, the example of neuroimaging helps to illustrate the point. As we elaborate in the Section "Analysis" of this article, brain images constitute a common kind of stock image possessing distinct formal features. When they appear in the context of newspaper articles or popular science journals (to illustrate, say, some neuroscientific report or story), they impart a scientific legitimacy that other visual means of representing scientific data, such as graphs and tables, are unable to convey so credibly. Indeed, the presence of a brain image in a scientific article can, in the eyes of readers, render it unquestionably accurate and reliable, even if the scientific argument accompanying it is in fact fictitious and flawed (as demonstrated by McCabe and Castel's, 2008, revealing set of experiments).
   Yet, at the same time, not only do brain images manipulate or fortify the context in which they appear, but they also convey meanings that are potentially absent in their original (clinical) context and reception of use. For example, a brain image inserted into the context of a media article (designed for a lay rather than expert audience) will take on certain extra significances outside of its native setting. Such a recontextualized image will tend to oversimplify the structure and workings of the brain when interpreted by general readers who, acclimatized to popular press reports on neuroscience, are liable to be influenced by reductive accounts of neurological processes (McCabe & Castel, 2008). Indeed, the pervasive use of neuroimaging in the popular press has given rise to what Racine, Bar-Illan, and Illes (2005) call "neuro-realism," the notion that the inferences communicated by brain images are inviolably apodictic, that is, "uncritically real, objective or effective in the eyes of the public" (Racine et al., 2005, p. 160).
2. For a discussion of the "decline" of the print media in the United Kingdom, see this recent article published by the Financial Times: https://www.ft.com/content/721da364-b728-11e6-ba85-95d1533d9a62.
3. Because of copyright restrictions, this article features illustrations rather than the original images analyzed. The original images can be found by searching for the image captions on the Getty website.
4. The image captions used in this article reflect the titles of the images given on the Getty websites.
5. Although our analysis of the kinds of dementia and aging images is critical in orientation (for what we believe to be good reasons), it is not our intention to dismiss stock images entirely. Commercial images depicting people with dementia, if used judiciously, might well have a useful educational function: They might, for instance, be useful for sensitizing health professionals with respect to recognizing and treating alterations in patient mood and affect, as well as illustrating and modeling difficulties with (mis)understanding and communication in dementia care. Images such as these, moreover, might form the starting point of discussions about personhood in dementia, raising carers' and health providers' awareness of the need for supportive therapies, family counseling, and person-centered support.

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