

Title: The many faces of diabetes: A critical multimodal analysis of diabetes pages on Facebook

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Abstract

Health communication published on Facebook has become a popular source of medical information and large organisations now utilise Facebook's communicative affordances to disseminate multimodal representations of health and illness. Drawing on a sample of posts to two popular diabetes-related Facebook pages, this paper examines the multimodal representation of people with diabetes and volunteers for diabetes charities. These posts draw upon visual and linguistic features of social intimacy to synthesise personal relationships with their pages' audiences and to foster user involvement with their authoring organisations. While this user participation may ultimately benefit people with diabetes, the personalised discourse evident on these pages also serves their organisations strategic and financial agendas.

Keywords

Multimodal discourse analysis; Health communication; Facebook; Diabetes; Social media; Synthetic personalisation

Introduction

A significant component of the public uptake of Internet technologies over the past twenty years has been growing use of the Internet as a medium for communicating health and medical information. The consumption, production and reproduction of health-related content has become a widespread practice online, sustained through diverse applications and activities including emailing or tweeting clinicians, accessing online health records and contributing to health communities on the world wide web (Segal, 2009). As the web has

become a principle source of health information for lay individuals in the developed world, websites have become a central medium in the on-going negotiation of meanings around health and illness, including the commodification of health and healthy lifestyle choices (Koteyko, 2009). As increasing broadband speeds have enabled rapid access of media rich webpages, online health discourses have also become increasingly multimodal through combinations of text, images, animations, audio recordings and video.

The recent growth in the use of social media applications – and particularly social networking sites such as Facebook and Twitter – has underscored the salience of the web as a medium for multimodal health communication. Social media sites are used as a source of health information by over a third of adults in some developed nations (Fox, 2011) and facilitate easy, low-cost production of multimodal health discourses by a range of lay individuals and institutional agents. Using a site such as Facebook, representations of health and illness can be rapidly published, disseminated and consumed by thousands of users, meaning they have the potential to influence health beliefs and behaviours on a large scale. Despite this, little critically-motivated research has sought to explicate the multimodal representations of health articulated in this particular context. In light of this, and building on ongoing linguistic research (Hunt & Koteyko, under review), this paper adopts a critical social semiotic approach to analyse multimodal health communication on Facebook. Specifically, I analyse two popular pages' representations of people who either have diabetes – a chronic condition with a growing prevalence in developed nations – or are involved in its care.

The Internet and health

In parallel with the increasingly pervasive use of the Internet for health, social scientific research has developed to explicate online health discourses and their implications for healthcare. Early sociological work on 'e-health' was frequently optimistic about the

potential of the web to empower lay users by offering them ready access to medical information with which they could reflexively understand their conditions and make informed health choices (Nettleton and Burrows, 2003). Celebratory accounts also claimed that the Internet would disrupt the paternalistic, professionalised hierarchies of traditional healthcare through the growth of lay expertise (Nettleton *et al.*, 2005). Hardey (1999, 2001), for instance, argued that public participation on the web would mean that medical discourses would no longer be the preserve of medical professionals and that alternative representations of health and illness based on patient experience would be able to emerge. Likewise, Fox and Ward (2006) discern a range of 'health identities' in online health communities that variously align with, appropriate and contest expert understandings of the body and medical technologies, suggesting the web is indeed a context in which medically unorthodox health discourses can flourish.

Optimism around the health potentials of the Internet has been renewed by the recent development of 'Web 2.0' applications, and particularly social media. In contrast to early static webpages with limited interactive opportunities, social media platforms such as social networking sites (SNSs) enable multiple connected users to collaborate in producing, modifying and distributing multimodal content online. With an attendant rhetoric of democratic participation and 'crowdsourcing' solutions of problematic issues, social networking sites are claimed to provide even greater opportunities for health information seeking and peer-to-peer social support, thereby taking web-driven patient empowerment 'to a new level' (Eysenbach, 2008, n.p.).

In contrast to early formulations of the web as a medium that promotes diversity in health discourses, more recent sociological research has emphasised the institutional nature of much online health information. Seale (2005) argues that the technical availability of diverse representations of illness on the web does not dictate actual patterns of consumption by users,

particularly when web browsing is mediated by search engines. Well-resourced, mainstream health organisations are more able to exploit search engine algorithms to ensure their websites appear high on search results and hence receive a high proportion of traffic (Mager, 2009). This in turn means that representations of health and illness that accord with the agendas of these government, commercial and charitable organisations come to dominate many users' experiences of online health discourse. Health content on such organisational websites is conveyed to users by drawing on the multisemiotic potential of the web and the communicative power of design to encode health ideologies and produce a particular response in a way that users may not consciously be aware of (Thompson, 2012, p. 397). Rather than simply democratising and diversifying cultural representations of illness, therefore, the Internet can also constitute a medium through which longstanding medical and commercial orthodoxies are reproduced (Conrad, 2005).

This contention is borne out in recent multimodal analyses of health websites. Harvey (2013) examines popular websites related to baldness, identifying the medicalization of male hair loss as a strategy for promoting pharmaceutical treatments to prospective consumers. The balding man is depicted visually and verbally as an isolated biomedical specimen suffering from 'androgenic alopecia' due to the over-production of 'dihydrotestosterone' (2013, p. 705) and users are invited to use diagnostic tools to assess their own chances of hair loss. Faced with the visual representation of the bald man as an outcast, website visitors are impelled to 'save the hair' (p. 698), consuming pharmaceutical products as a means to evade the social isolation with which baldness is associated. Conversely, hirsute men are represented as attractive, confident ideals using 'demand' images in which men stare directly at the viewer, meeting them face on (Kress and van Leeuwen, 2006). This eye contact simulates an amiable social relationship with the viewer who is visually addressed as an equal. Contrasting with the isolation of the balding man, these images cast ample hair as a

source of confidence and esteem and construct hair loss treatments as both a physical intervention on the body and a social and psychological remedy.

Similarly, Moran and Lee's (2013) multimodal analysis of websites that promote female genital cosmetic surgery identifies a comparable representation of people who undergo medical procedures as conventionally attractive, able bodied and desirable. Web content produced by cosmetic surgery businesses present the recipient of surgery as empowered, playful and sexually confident and also employ 'demand' images to draw the viewer into this representation of 'successful femininity' (2013, p. 377). These images are situated against text that medicalises the unaltered body, describing it in terms of biological malfunction and emotional dissatisfaction. In parallel with Harvey (2013), Moran and Lee demonstrate that problematizing the unmodified body forms the first half of a rhetorical strategy that cues individualised surgical intervention as a source of 'psychological and emotional benefits, promoting inner well-being' (2013, p. 375). In each case, this rhetorical strategy works across semiotic modes to produce a problem-solution structure in which linguistic content that configures the body as a site of pathology is juxtaposed against images of beautiful men and women who represent the outcome of medical intervention.

Rather than the anticipated erosion of traditional medical authority by lay, experiential accounts of health and illness, these papers illustrate the permeation of biomedical discourses through the web (Miah and Rich, 2008). In each case, medicalization is married to consumerist discourses of self-empowerment that serve the commercial agendas of their authoring organisations. The result is a representation of the health as a project to be developed by reflexive social actors making informed consumer choices (Conrad, 2005; Koteyko 2009), with websites serving as a medium through which this message can be delivered to potential consumers.

These analyses of commercial health websites are apposite for examining health-related content on Facebook, in which pages managed by large commercial, state and non-profit organisations attract a significantly larger number of subscribers ('Likes') than those by lay individuals. For example, a search for English language diabetes-related content on Facebook in May 2014 indicated that the top three organisational pages had a combined audience of 2.5 million subscribers, while the three most populated groups run by lay individuals had a total of around 49,000 members. These subscription numbers suggest that organisational content is disseminated to far larger audiences than are typically found in lay-run Facebook groups, while all such content is contained within the commercial 'walled garden' of Facebook itself (McCown and Nelson, 2009). In this light, Facebook and other Web 2.0 applications have been described as a part of a 'digital patient experience economy' in which patients' online participation is valued and, in some cases, commodified by organisations (Lupton, 2014). Delivering financial value from patients' online participation can adopt various forms depending on the organisation. Methods include raising funds for non-profit organisations through promoting donations and volunteering, selling access to patient-generated data and advertising on popular sites, promoting for-sale products, and producing long-term savings for state healthcare systems by improving patient education and self-management. These financial agendas may be obscured from or ignored by Facebook users, who may nevertheless benefit from mutual sharing of knowledge with peers, increased social support, a greater understanding of their condition and, potentially, improved health (Ziebland and Wyke, 2012).

Along with people with other chronic health conditions, individuals with diabetes mellitus are regarded as a group that could benefit from the peer support and health education content available on social networking sites (Zhang *et al.*, 2013). The chronic nature of these conditions also means that SNS users may participate online on a long-term basis and hence

receive extensive exposure to the representations of diabetes produced by the organisations who have accrued the largest audiences on Facebook. Popular diabetes-related pages on Facebook therefore represent an apt analytical site for examining multimodal health discourses on SNSs. However, in contrast to Harvey (2013) and Moran and Lee's (2013) studies, which address physiological states at the contested borders of medical pathology, type 1 and type 2 diabetes are widely accepted as deleterious – and currently incurable – health problems. It is likely, therefore, that representations of illness will differ from those identified in previous multimodal research as the medical status of diabetes might be assumed to be given knowledge for the viewer. Similarly, while previous studies have examined content produced on the websites of businesses, Facebook provides a context in which commercial, charitable and state organisations operate. The varying agendas of the two organisations I examine below thus also result in representations of diabetes that diverge from the medicalising trend found in previous work on commercial websites.

Data

Combining queries in Facebook's internal search function with searches within Facebook using Google, I identified diabetes-related Facebook pages established by UK organisations. Using the organisations' external websites where necessary, pages were then grouped into commercial, non-profit and state National Health Service (NHS) organisations. This processes resulted in a collection of 51 diabetes-related pages comprised of 16 Facebook pages run by commercial organisations, 16 pages run by NHS services and 19 pages run by non-profits. Despite the relatively high number of diabetes-related Facebook pages, the membership of pages within each category is highly concentrated; that is, a few pages have a very large number of subscribers while most have only a few hundred. In keeping with Seale (2005), this indicates that the majority of diabetes content consumed by Facebook users is filtered through a handful of very popular pages. NHS pages in particular have very few

(under 350) subscribers, suggesting they have marginal audiences relative to non-profits and commercial businesses. Given this, the analysis in this paper focuses on the two most heavily subscribed commercial and charitable organisations. These are:

Diabetes UK (<https://www.facebook.com/diabetesuk>) – 70,994 subscribers: Facebook page for the UK’s largest diabetes charity, which provides patient information and support, campaigns to improve healthcare services and funds research into diabetes treatments and prevention.

Diabetes.co.uk (<https://www.facebook.com/Diabetes.co.uk>) – 135,373 subscribers: A company specialising in providing online information and support for people with diabetes and their carers. Advertising space is sold on their external website (www.diabetes.co.uk).

We extracted the first most recent fifty posts made by each organisation as they appeared when the pages were accessed. This sample covered varying lengths of time for the two organisations; Diabetes UK publishes posts several times a week, with the sampled posts spanning five months’ worth of content. In contrast, Diabetes.co.uk publishes posts several times per day, with the fifty sampled content covering two weeks’ worth of posts. While other forthcoming work addresses the textual elements of the sampled posts, the analysis below is concerned with 72 posts in the sample that represent diabetes multi-modally through the combination of images and text. Moreover, I focus specifically on those posts involving visual representations of human participants.

Analytical Framework

In considering the multimodal representation of diabetes on these Facebook pages I draw on work in critical social semiotics (Hodge and Kress, 1988). Social semiotics has been particularly interested in the analysis of texts in which meaning making depends on the

interplay of different modes of semiotic interaction. In multimodal texts, the interrelation of, for example, ‘typographical’ linguistic communication – where differences between structures are marked categorically – with ‘topographical’ visual semiosis – where differences in meaning are a matter of degree – results in new resources for communicating representations of reality and enacting social relations between the text and audience (O’Halloran, 2008, p. 454). Critical social semiotics is an apt approach to the study of contemporary social media applications that are heavily multimodal, frequently combining text, image and video content within a single webpage. Indeed, all content posted to a Facebook page will involve linguistic, pictorial and hypertext semiosis, with site-generated textual information denoting the time or date of posting arranged alongside the name and a thumbnail image of the poster’s profile picture. The user-authored content of a post may then also combine written text with images, hyperlinks, geographical information and embedded media content from websites outside of Facebook (see Figure 1 below). The high proportion of images in the sampled posts suggests that visual content is an important semiotic resource with which messages about diabetes are communicated on these pages. In contrast, none of the sampled posts included audio recording and only one contained a playable video. By examining posts to these pages from a multimodal perspective, the analysis below attends to the combinations of verbal and visual content in communicating messages about diabetes and negotiating the relationship between each organisation and their respective audience.

Linguistically, the analysis focuses on which social actors are included in posts, how they are represented, and what processes are attributed to them. This examination of the representation of social actors is intended to identify how diabetes is framed as a condition involving specific social roles and actions. Given Facebook’s potential for facilitating interaction, I also consider linguistic strategies through which the organisations seek to foster interaction with

their audiences, such as the use of interrogative and imperative structures in their posts (Hunt and Koteyko, under review).

A further multimodal resource with which this organisation-audience relationship is managed is through the use of hyperlinks that facilitate navigation between (parts of) different webpages. Although hyperlinks enable users to navigate between different online texts and shape their own ‘trajectories’ across the web (Lemke, 2002), they nevertheless remain author driven (Mautner, 2005a), allowing the text producer to foreground pathways for a reader to follow beyond the immediate webpage. As such, hyperlinks constitute a resource for enacting social relations on the Facebook pages (Kok, 2004), with authors proposing further online texts with which the user can opt to engage. In considering the organisations’ verbal and visual representations of diabetes, therefore, the analysis also considers how the organisations deploy hypertext links and their role in the posts in which they are used.

In orienting to ‘critical’ social semiotics, my analysis aligns itself with the wider field of critical discourse analysis (CDA), which regards discursive acts as both socially constitutive and socially constituted (Fairclough, 1995). From this CDA perspective, discourse is used to construct representations of social situations, actors and values while also being situated within broader social contexts that leave traces in the text (Wodak and Meyer, 2009). To this end, I have adapted an analytical model from previous critical research on multimodal health communication (Koteyko and Nerlich 2007, p 22-23 and see Harvey, 2013; Koteyko, 2009) to analyse representations of diabetes on Facebook. This three-fold analytical framework considers the representation of social actors in multimodal texts, the relationships the texts establish between the represented actors and the text authors, and the wider discourses of health and illness to which the texts contribute. Key analytical questions for this framework are provided below:

Discursive representations:

Which social actors and processes are included and excluded in the pages' posts? How are social actors represented linguistically (how are they nominated? Are they represented as named individuals, functional categories such as 'doctor' or as homogenous groups such as 'people with diabetes'?) and visually (do they simulate eye contact with the viewer? How are social actors positioned in relation to the viewer?), and what processes are attributed to them?

Social relations:

What kinds of social relations are constructed between the users of the Facebook pages and the social actors represented in the pages' posts? How do the posts position Facebook users in relation to the pages as a whole? For example, are they positioned as diabetes patients in need of education, able capable self-managers or health professionals seeking further information?

Multimodal discourse as socio-cultural practice:

How do the page authors' combined use of text and images relate to social structures and practices related to health and illness more broadly?

Analysis

Based on these analytical questions, I identify three overarching strategies that account for thematically consistent representations of social actors across the Facebook pages: 1) representing the diabetic individual as desirable despite their physical ill health; 2) representing charitable volunteering as socially engaging and effective; 3) emphasising the emotional difficulty of diabetes. These strategies are employed variably between the two Facebook pages to realise each organisation's respective agendas and to increase on- and offline interactions between each organisation and their page's audience. The following sections address each of these strategies in turn before considering how they serve the

interests of their authoring organisations and the broader discourses of health and illness in which these strategies participate.

1) Representing the diabetic individual as desirable despite their physical ill health

More than half of the sampled multimodal posts employ images that depict human participants, suggesting that visual images of people constitute a significant vehicle for conveying representational meaning on these diabetes pages (Harvey, 2013). However, in only a small minority of these images are the participants clearly associated with diabetes symptoms or management practices, such as through images presenting insulin injection or the use of blood glucose monitors and insulin pumps. Instead, the organisations use professionally shot, stock photographs to represent diabetes via images of isolated ‘normal’ people in relatively mundane settings (Machin, 2004). These images are devoid of any visible indication of physical illness or discomfort and reproduce a representation of wellness experienced by attractive, amiable-looking individuals in harmonious, ordinary environments.



Figure 1 – Post to Diabetes.co.uk

A typical example of this is the image in Figure 1, a stock photograph of a confident-looking woman at the wheel of a car. The image is tightly framed to contain just the woman's face, arm and shoulders and a portion of the car's interior, removing any additional visual context that might indicate other meanings (Lister and Wells, 2001). The horizontal vector created by the woman's arm create a narrative image, suggesting that the woman is actively in control of the car and is on the verge of driving away (Jewitt and Oyama, 2004). The relative brightness of different areas of the image highlights the car's glove box to the left of the image and the face of the woman, whose gaze is directed straight at the viewer. This visual 'demand' (Kress and van Leeuwen, 2006) establishes a social relation with the viewer, with the woman's smile and the representation of proximity between her and the viewer suggesting this is a

relationship of relaxed social affinity. This visual address is reiterated verbally in post's text, which moves from a generic reference to 'people with diabetes' to addressing the page's audience generically as 'some of you' and then to a direct interrogative that addresses the reader as an individual, 'Do you have any tips for preventing a hypo whilst driving?'. Like the woman's gaze, this question solicits social interaction from the page's audience, inviting them to provide narratives and suggestions for successful self-management in the post's comments and follow the embedded link to the Diabetes.co.uk website. Both visually and verbally, the viewer is drawn into the representation of self-management and encouraged into social interaction with the woman as well as the page and its other subscribers.

There is a clear interplay between the text and image here, with the subordinate image reproducing the text's reference to being 'at the wheel' of a car (Martinec and Salway, 2005). The use of a smiling, assured-looking woman configures the generic, stock photograph as an exemplification of 'preventing a hypo whilst driving' rather than the more serious 'Having a hypo at the wheel'. Similarly, the post's text configures the otherwise decontextualised social actor as a representation of an individual with diabetes who engages in self-management while projecting confidence and sociability. This 'semiotic metaphor' (O'Halloran, 1999, 2008), in which functional elements are represented across different semiotic codes, is underscored by the text's overt reference to the 'glove box' as a place to store tablets for managing glucose levels. This explicit reference in the text parallels the relative brightness of the car's glove box in the image, which sits on a horizontal plane with the woman's face, suggesting a causal link between Diabetes.co.uk's recommendation on glucose management and the woman's outward display of wellness. Therefore, although the text of the post initially raises the prospect of medical and lifestyle difficulties associated with diabetes, the attendant image presents the resolution of these problems by depicting the diabetic individual in terms of agency, sociability and the self-management strategies advocated by the authors.

A comparable text-image dynamic is repeated across the sampled posts, in which text referring to diabetes health risks are juxtaposed against positive representations of isolated, agentive social actors and their bodies. Another Diabetes.co.uk post opens with a direct question to the reader – ‘Have you heard of Gastroparesis?’ – before describing the condition and inviting the reader to ‘Find out more’ by following a hyperlink to the organisation’s external website. Rather than an image showing someone who appears unwell – gastroparesis typically causes nausea and abdominal pain – this text is accompanied by a close-up stock image of a tanned and thin female midriff with a pierced navel. In this way, visual representations of bodily malfunction or suffering are thus excluded from the Facebook posts and replaced by idealised depictions of healthy individuals that symbolise the promise of wellness in return for the participation encouraged by their texts and hyperlinks (Thompson, 2012).

Professional photos are also occasionally used to represent individuals with diabetes as part of larger groups. Figure 2 is a Diabetes UK post promoting their ‘care events’ for young people with diabetes. While the image does not represent any items lexicalised in the accompanying text, the conjunction of text and image in the same post suggests the scene depicted in the image is an example activity on offer at a ‘care event’.



Figure 2 – Post to Diabetes UK

The image presents a scene of happy-looking participants playing outside on brightly coloured space hoppers. Like the image in Figure 1, Figure 2 positions the viewer relatively close to the represented social actors, simulating a social involvement that is reinforced by the face-on and approximately eye-level angle between the participants and the viewer and by the direct eye contact of the two people on the left. As with Figure 1, this combination of point of view and participant gaze serves to draw the viewer into the image's representation of cheerful play and promote the care event as an opportunity for enjoyable social interaction. In keeping with the visual branding apparent in many Diabetes UK posts, visually prominent participants are depicted wearing blue clothes, creating a visual rhyme that associates these

individuals with Diabetes UK's blue company logo and hence with the organisation itself (Kress and van Leeuwen, 2002). The participants dressed in blue are also positioned towards the centre of the image and above the peripheral participants. In terms of the grammar of visual space (Kress and van Leeuwen, 2006), this composition and the upwards bounce of the participants suggests a movement from the 'real' bottom of the image towards the 'ideal' top half of the image by the participants wearing Diabetes UK's brand colours. The use of visual-spatial codes in this representation of 'care events' therefore conveys that Diabetes UK's events are of benefit for their participants, who are represented as iconic embodiments of health moving upwards towards symbolically ideal space. As Thompson (2012, p. 404) observes, such images manufacture a 'realistic ideal' of wellness that blurs the boundary between health and illness, representing purportedly unwell individuals through images of happy, socially engaged yet 'normal' people.

Alongside stock photographs, posts published by Diabetes.co.uk also include links to specific pages on the discussion forum of their external and reproduce profile images of individuals who have posed questions to this forum. These images typically involve close up photos of Diabetes.co.uk forum members looking directly at the viewer and function, quite literally, to provide a face for the online community. Although Diabetes.co.uk has little influence over the precise composition and content of these user profile images, the decision of whether or not to include such images in posts on their Facebook page nevertheless rests with Diabetes.co.uk itself. In keeping with the use of stock photographs discussed above, these posts continue the trend of conveying diabetes-related content using images of people who meet the gaze of the viewer face on and appear free from physical illness or medical intervention. In combination with the images discussed above, these photos contribute to the 'virtual synthetic personalisation' (Fairclough, 1992; Thompson, 2012; Thurlow, 2013) of the Facebook pages, in which semiotic resources that communicate social affinity with the reader

become a dominant visual resource for representing diabetes-related content. In doing so, these images also offer partial representations of diabetes, eliding any suggestion of physical illness that is referred to in the posts' texts and defining the diabetic individual through iconic images of wellness and sociality (Thompson, 2012). This visual synthetic personalisation works in conjunction with the recurrent use of direct address, imperatives and questions throughout the text of the sampled posts to establish a persistent focus on page users as active participants in each page's discourse. These multimodal features of synthetic personalisation also serve to background the institutional nature of each organisation's Facebook content; the reader is positioned both verbally and visually as a close social relation who interacts on a social footing with an online community, rather than a potential donor or client of the organisations.

2) Representing charitable fundraising as enjoyable and worthwhile

As Figure 2 illustrates, posts to the Diabetes UK page serve as advertisements to promote organisational events to individuals with diabetes and their families. Mautner (2005b) argues that such marketing strategies are testimony to the influence of commercial business models on the non-profit sector; in the face of diminishing state funding, non-profits now operate on a competition-based model in which they must attract stakeholders and communicate an organisational brand that differentiates them from the organisations with which they compete for capital. Volunteers play an important role in the organisational operation of Diabetes UK and the money raised through volunteer fundraising and endowments account for a significant proportion of the its annual income (Diabetes UK, 2013). In a reflection of the relationship between the organisation's business structure and its discursive outputs (Fairclough, 1992; Mautner, 2005b), the importance of volunteers is mirrored in content

published on the Diabetes UK Facebook page, with a third of the sampled posts promoting volunteering and fundraising opportunities or celebrating previous successes.

Posts related to volunteering include images with participants positioned prominently in the foreground of the images. Whereas individuals with diabetes are largely represented as lone figures against generic backgrounds, images of volunteers involve larger groups of social actors either wearing blue clothing that displays the Diabetes UK logo or adjacent to Diabetes UK posters. This strategic use of images consistently construes volunteering in terms of group interaction and joint engagement in fundraising activities. While the precise visual configuration of these images varies from post to post, Diabetes UK volunteers are typically depicted running in marathons, dancing, jumping en masse into a blue swimming pool and holding buckets to collect money.

Figure 3 reproduces a representative post concerning a past fundraising event. The post combines both text and hypertext links with a complex image that is itself overlaid with text. The hyperlinks relate directly to the preceding text, with the first leading to a blog on the Diabetes UK website. In the case of the latter link, having been asked directly whether they have ‘signed up yet?’, the reader is immediately presented with a means of providing a desirable response to the question via a hyperlink to a page where they can agree to future volunteering.



Figure 3 – Post to the Diabetes UK page promoting fundraising

The social actor included in the text, ‘Rachel’ is nominated informally using only a first name, suggestive of an existing or familiar social relationship between the audience, organisation and volunteer (van Leeuwen, 2008). This is typical of posts referring to Diabetes UK bloggers and volunteers, in which lexical choices that index familiarity are used to personalise organisational representatives and simulate informal social relationships with the page audience. Similar verbal indicators of synthetic personalisation are apparent in the use of plural personal pronouns to refer to Diabetes UK as ‘us’ and the direct address to the page’s audience as individuals, ‘Have you signed up yet?’.

The image in Figure 3 presents the volunteers via an ‘offer’ image (Kress and van Leeuwen, 2006); in lieu of eye contact with the represented participants, the audience is provided with a visual invitation to examine the act of fundraising in a way that mirrors the discussion of volunteering promised in the hyperlinked blog post. While the photograph appears deliberately staged to frame the participants vertically under the logo of the supermarket sponsoring the ‘Big Collection’, the participants do not acknowledge the camera. Rather, they are presented in a transactive process of meeting each other’s gaze and smiling, denoting a strong social connection between them. This social affiliation is further encoded by the participants’ close proximity and physical connection to one another (Sunderland and McGlashan, 2012), as well as by the symmetrical positioning of the women’s branded collection buckets.

The overlaid text enters into a complex relationship with the other verbal content in the post and the visual elements of the image. The inclusion of quotation marks suggest that the overlaid text is a representation of direct speech from the blog by ‘Rachel’ mentioned in the post’s main text. Overlaid squarely on the image, the quotation marks also establish a relationship of projection (Martinec and Salway, 2005) between the text and the social actors in the image, with the quotation explaining why one of them ‘wanted to get involved’. The relationship between the overlaid text and the image is underscored by the text’s reference to ‘money raised’, which establishes a cohesive tie to the collection buckets that are being literally raised upwards in the photograph. The overlaid text also introduces a new participant, ‘future generations’, that situates the visual representation of fundraising in relation to future people with diabetes. Hence while the high modality image represents fundraising activities as inviting and socially rewarding for volunteers, the overlaid text also configures this concrete image as an act of altruism towards people with diabetes in the future who cannot be represented visually.

While only appearing on the Diabetes UK Facebook page, multimodal representations of charitable volunteering continue the enactment of synthetic personalisation that typifies both Diabetes UK and Diabetes.co.uk's Facebook pages. Volunteering is represented visually in terms of affable social interaction with likeminded others while attendant texts also present volunteering as an opportunity to help 'future generations' or 'people with diabetes'. With 'people with diabetes' specified as the explicit beneficiaries of fundraising activities, Diabetes UK's role in managing how fundraising money is spent is elided; volunteering becomes a charitable act between volunteers and people with diabetes, not the organisation to whom money is sent. Similarly, fundraising posts utilise the personalised forms of verbal address noted above and employ questions and imperatives in conjunction with hyperlinks to Diabetes UK's external website, guiding audience members towards webpages where they can read personal accounts of fundraising and secure their own participation in future events.

3) *Emphasising the emotional difficulty of diabetes*

As a means of explicating the specific social and emotional needs of people with diabetes, the pages also publish content that presents the negative implications of untreated diabetes. Although such posts appear infrequently relative to the more celebratory representations of volunteers and individuals with diabetes, they nevertheless constitute a distinctive representation of social actors in relation to diabetes on these two pages.

Whereas positive images of people with diabetes and volunteers draw on a mixture of demand and offer images and associate self-management and volunteering with social affinity, images of unsuccessful diabetes management consistently take the form of offers. Participants are depicted looking away from or with their backs to on the viewer, as if seeking to avoid the attribution of stigma from the viewer's gaze (Harvey, 2013). These

social actors appear by themselves or in pairs with one participant's arm around the other in an act of consolation.

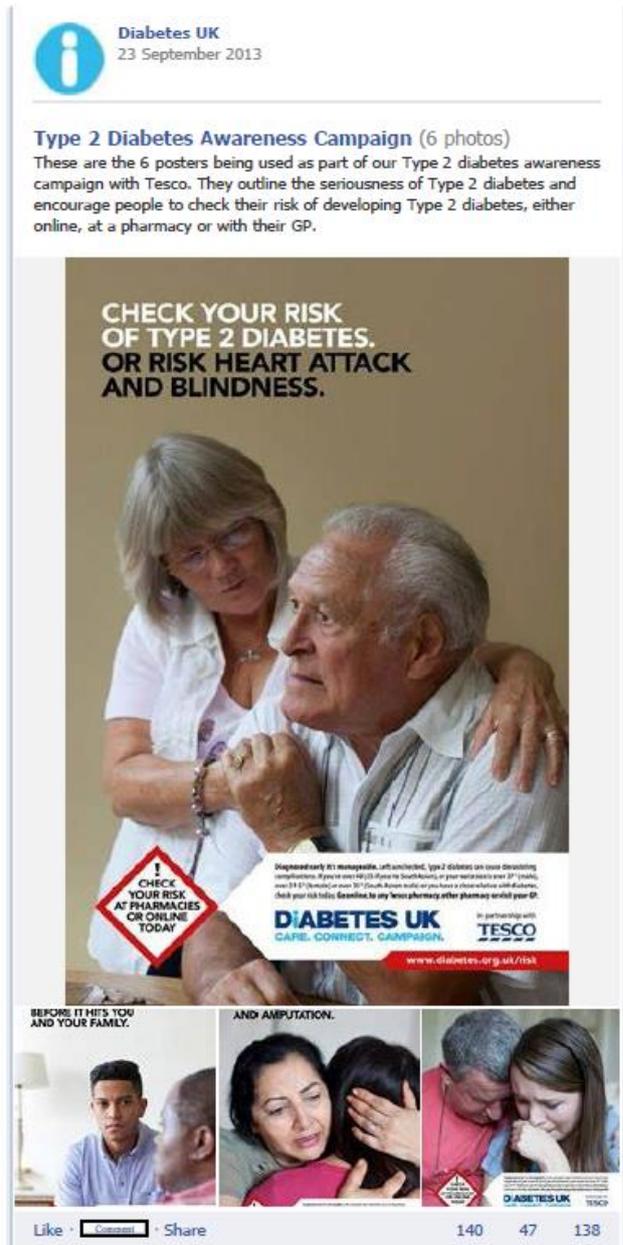


Figure 4 – Post to the Diabetes UK Facebook page

Figure 4 provides an exemplary post in this regard. In contrast to the personalised, informal register of the posts reproduced above, the text is informational, offering an exemplification (Martinez and Salway, 2005) of the attendant images, which are posters from a Diabetes UK

awareness campaign. In place of the interrogative and imperative structures that simulate interaction with the page audience, the text here draws solely on a string of declarative clauses to present factual information about the posters without seeking feedback from the page's subscribers.

In each image in Figure 4, participants are pictured in pairs in what appear to be family relationships and, where their faces are visible, they appear overtly upset. In the case of the largest image, the man's concerned expression is positioned in the centre of the image and framed by his and his wife's hands and their wedding rings, which are aligned horizontally. While the physical contact between the participants represents a reciprocal process of comforting, the absence of eye contact also suggests a social disconnection between the participants and between the participants and the viewer, who is similarly excluded from both participants' gazes.

Unlike other Diabetes UK images, these social actors are generally not dressed in the bright blue clothes that serve as a visual index of association with the organisation. The desaturated colours of the participants' clothes and the images' backgrounds contrast strongly with the text positioned at the top left of each image. Emphasised through its large size, capitalisation and bold font, the text exhorts the reader to 'CHECK YOUR RISK OF TYPE 2 DIABETES' followed by either 'BEFORE IT HITS YOU AND YOUR FAMILY', 'OR RISK HEART ATTACK AND BLINDNESS' or 'OR RISK STROKE AND AMPUTATION'. Visually, the contrast in white and black text between the first and second clauses draws upon a conventional means of encoding positive and negative evaluations of each clause to advocate diabetes risk management. Linguistically, the text's categorical modality presents type 2 diabetes and its potential comorbidities as an inexorable outcome of not checking one's diabetes risk, constructing the illness and its avoidable complications as inevitabilities. Rather than physical illness or medical intervention, the participants' isolation, saddened expressions

and the muted colours of the images construe untreated diabetes in terms of emotional difficulties and its impact upon family members. The depiction of family relations also frames the imperative to ‘check your risk of type 2 diabetes’ in terms of familial responsibility, with unchecked diabetes leading to both the individual illnesses in the text and the scenes of emotional and marital distress presented visually. At the bottom right of each image, text framed in a white box provides detailed information on diabetes risk factors and again exhorts readers to visit a healthcare professional or Tesco pharmacy. This text is framed below by Diabetes UK and Tesco logos whose rich blue colour stands out against the desaturated tones of the main image, perhaps implying a contrast between the unhappiness of the social actors and the professional help offered by these organisations.

Other posts to the Facebook pages employ similar visual configurations of ‘offer’ images involving isolated participants to represent the individual with diabetes as vulnerable. Against this visual background, overlaid text conveys short narratives that construct individuals with diabetes as socially isolated – ‘Most folk on the street have no idea what a complicated job their bodies do to control their own blood sugars’ – or in need of support from others – ‘Ever since Tom was born, Joe has been looking after him’. These posts, then, construct a connection between diabetes and emotional difficulties, familial distress and social exclusion. In constructing the individual with diabetes as a potential outcast, these posts also serve to validate the organisations and their respective Facebook pages; that is, by depicting the difficulties of living with diabetes, these also posts position the organisations as responding to the specific emotional needs of people with diabetes, not least through the online interactions facilitated by their Facebook pages.

Discussion and Conclusions

The analysis above identifies three heterogeneous multimodal representations of individuals with or related to diabetes that pervade the two Facebook pages. Through the visual resources of participant gaze and proximity, users of the pages are invited to identify with social actors who provide iconic representations of successful self-management, charitable volunteering and participating in offline ‘care events’, while being visually dissociated from participants who experience medical and emotional complications as a result of their unmanaged diabetes. This virtual visual synthetic personalisation (Thompson, 2012) is complemented by linguistic content that communicates social affinity and involvement with the pages’ audiences, including second-person address of page users as individuals, nominating online community members on first name terms, and the use of questions that invite page members to contribute their own experiences and opinions.

Taken as a whole, the Facebook pages and the different forms of participation they invite from their users reflect the agendas of their respective organisations. For Diabetes UK, the three themes discussed above establish a three part, multimodal narrative that cues user involvement with the organisation. Firstly, a minority of posts depict people with diabetes as emotionally vulnerable and in need of professional assistance and social support; secondly, fundraising for Diabetes UK is presented as directly benefiting people with diabetes and volunteers themselves; thirdly, people with diabetes who are involved with Diabetes UK are represented via iconic images of healthy, care-free individuals. Engagement with Diabetes UK events, funded by the work of their volunteers, thus provides a means to move from the scenes of domestic unhappiness in Figure 4 to the celebratory scenes of Figure 2. Within this narrative, the audience of Diabetes UK’s page are most commonly positioned as either potential fundraisers or individuals with diabetes who can participate in offline events, with hyperlinks directing them to relevant application forms where they can ‘sign up’.

As a commercial organisation that does not depend on voluntary activities, this narrative is shorter on the Diabetes.co.uk page and is realised through the problem-solution structure of many of its posts. Specifically, posts such as Figure 1 introduce medical risks or self-management dilemmas for people with diabetes before inviting further participation in the Diabetes.co.uk online community as a means to understand how to manage them. The page's audience, consistently addressed as 'you', are configured as people with diabetes who have the potential to live healthily through the combination of informed self-management and online participation. This potential is rendered tangible by the recurrent depiction of smiling, confident-looking people who serve as representatives of successful diabetes management while entreating social engagement from the audience. Reflecting the organisation's use of web traffic as a source of revenue, hyperlinks and questions embedded in post messages direct users towards further online participation on the external Diabetes.co.uk website and in the posts' comments.

In the weeks following data collection, the Diabetes.co.uk Facebook page published dozens of 'blood sugar selfies', photos submitted by page subscribers posed with glucose meters displaying a reading of their blood sugar. Much like the invitation to provide suggestions on managing hypoglycaemia in Figure 1, Diabetes.co.uk's decision to publish these photos functioned to encourage users to publicise their diabetes management online and make public previously personal aspects of their self-care (Lupton, 2012). While it involved the publication of non-professional images, this proliferation of close-distance demand images was consistent with the visual synthetic personalisation enacted by many of the page's existing posts. Images of 'ordinary' subscribers provided both a visual manifestation of the page's community that could attract new subscribers, while also underscoring the communication of sociality and mutual experiences as a key resource in the organisation's strategic representation of diabetes.

The absence of visual depictions of bodily malfunction or discomfort on these diabetes Facebook pages reflects trends towards positive representations of illness noted in some existing research (Thompson, 2012). This ‘utopian discourse of sickness’ (Scalvini, 2010, p. 223), in which social actors representing a condition are presented as ‘ordinary’ or even desirable through high modality stock images of healthy people, represents the prospect of living happily with diabetes. In contrast to Moran and Lee’s findings (2013), users of these Facebook pages are invited to identify with images of social actors who are purportedly medically unwell rather than only those who have had their physiological ‘problem’ alleviated. Rather than medicalising bodily diversity, therefore, these Facebook pages semiotically ameliorate long-term illness through their repeated representation of people with diabetes as confident and socially engaged. However, in keeping with Moran and Lee (2013) and Harvey (2013), it is the visual rhetoric of the smiling, confident social actor which acts as the prevailing face of diabetes and provides the visual appeal for social engagement to the pages’ viewers. This optimistic vision may well provide a motivation towards active self-management for the pages’ diabetic subscribers even while it elides the daily problems of self-care catalogued by many users in the comments they append to posts.

The priority given to verbal and visual indicators of sociality on these two Facebook pages is apt for health communication that takes place in this social media environment. Indeed, the emphasis on images of people and demotic, personalised language reflects the relatively informal register of interactions on Facebook more broadly. Nevertheless, the concept of synthetic personalisation serves as a reminder that this sociality can be contrived in the interests of the organisations who use Facebook (Thurlow, 2013). For Diabetes UK and Diabetes.co.uk, addressing page subscribers as equals invites them to invest in a personal relationship with the organisations and helps to foster participation on their Facebook pages and external websites. By posting comments, users are encouraged to publicise their personal

health experiences (Lupton, 2012) and to position themselves in relation to the information provided on each page, thereby extending their relationship with the organisation and the page's other subscribers. While this may result in increased feelings of support and enhanced quality of life for people with diabetes, it is simultaneously also a process designed to meet the organisational objectives of Diabetes UK and Diabetes.co.uk, such as by increasing their revenues from fundraising or advertising.

One consequence of the involving interactional style developed on these pages is that Facebook users with diabetes will increasingly receive information disseminated by organisations outside of the traditional state healthcare system in the UK (at the time of writing, the most popular Facebook page run by a UK state health organisation had only 0.35% of the number of subscribers of the Diabetes.co.uk page). Diabetes.co.uk and Diabetes UK's posts rarely represent people with diabetes in relation to their contact with healthcare providers, who are excluded from all but two of the 100 sampled posts. Instead, users are provided with Facebook posts and information on external websites that provide advice on individualised approaches to diabetes self-management. These visually engaging posts may therefore underplay the important roles that healthcare professionals, structural factors and wider social networks play in diabetes care in favour of situating the socially-engaged individual – whether a person with diabetes or a volunteer – as the locus of control over illness. In this regard, these pages both reflect and reiterate wider neoliberal discourses around health that advocate greater involvement from competing commercial and third-sector organisations in addressing healthcare needs (DoH, 2012; McGregor, 2001). By positioning individuals as consumers within the healthcare marketplace, these neoliberal discourses also emphasise the responsibility of the individual to accrue the information required to manage their own health needs, a notion that coheres with the active proliferation of health information afforded by social media. Beyond their immediate context of production,

therefore, the multimodal posts analysed above, published on a commercial SNS, contribute to the continual reshaping of UK users from state healthcare patients to health consumers who engage with organisations in new relationships that blend medical, social, commercial and charitable interests.

Many users of these pages may not be consciously aware of the social relations enacted through these pages and the emphasis on online participation, fundraising and personal risk management that underlie their posts. Successful strategies for engaging SNS users may also be adopted by other organisations whose messages have a detrimental influence on users' health. Given the growing popularity of illness-related pages in Facebook's discursive marketplace, it is increasingly important that research is able to shed light on the multi-semiotic health messages communicated to the site's users, the illness identities promoted by different organisations and the implications they may have (Lupton, 2014). This study of two pages has highlighted the appropriation of multimodal features of personalisation by institutional agents wishing to promote interaction with their organisation, as well as representations of people with diabetes as emotionally vulnerable. Future research accommodating multimodal approaches to discourse analysis could fruitfully consider whether such multimodal styles are prevalent across other diabetes pages and Facebook pages related to other conditions, included those which manifest outwardly and are therefore less amenable to depiction through stock images. Discourse analytic research tracking the uptake or resistance of these discourses by lay users would also provide empirical evidence of the outcomes of synthetically personal health communication on social media.

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