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Communicating Temporary Brick-and-Mortar Store Closures During Covid-19 Lockdowns in the UK

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ABSTRACT

This research examines how retail businesses from central England's Midlands region communicated temporary closure of their brick-and-mortar stores via shop window messages during the first two Covid-19 lockdowns in 2020. These closure notices represent important forms of crisis communication for businesses, which display various levels of information, emotional language, or functional intent, and offer signposts for business continuity. 417 shop window closure notices were photographed - 167 and 250 from the first and second periods of lockdown respectively. In order to analyse the data, a multimodal social semiotic framework was employed, allowing the study to examine the language, design and function of each notice. Interviews were then conducted with selected businesses and customers to generate insights into the nature of messaging used by businesses. The findings detail how businesses adopt corporate/personal voices for their messaging, outline uncertain temporality about reopening, and help to amplify national public health messaging.

Keywords: *business discourse; shop closure messages; social semiotics.*

INTRODUCTION

This research explores how retail businesses operating non-essential brick-and-mortar stores communicated their temporary closure to customers through notices in their shop windows during the first two periods of Covid-19 lockdown in England in 2020.

On 23 March 2020 and 5 November 2020, the UK government announced that non-essential brick-and-mortar stores needed to comply with the emergency Health Protection Regulations 2020 and close their doors as part of the strict measures to combat the threat of the

coronavirus pandemic to public health. The stores informed their customers and the public about temporary closures through notices displayed in their shop windows. These notices appeared in different shapes and forms, used various tones of voice and some connected the physical reality of the store with online interfaces such as web shops and social media. They provide an important footprint of local firms' response to the Covid-19 crisis that is worthy of research attention from a sociocultural perspective, by applying a semiotic approach towards metalinguistic structuring and social interaction, but also from the customers' viewpoint on their effectiveness.

The research seeks to provide novel insights into how crisis communication was managed by these businesses during the Covid-19 pandemic and how the nature of this interaction developed from the first to the second lockdown. The study looks specifically at how language and design were utilized in the temporary closure notices to create either collective corporate or individualised personalised voices, how the uncertain temporality of the pandemic was approached by the businesses, as well as how business continuity and national public health messaging was communicated through the notices.

Using photographs of 417 temporary closure notices taken during the first two periods of lockdown, the study aims to investigate how the real-time and dynamic creation of these notices by businesses contributes to the established literature on crisis communication. Such notices range from informal handwritten "sorry we are closed" messages to professionally designed ones that portray businesses as being socially responsible in closing their physical stores. The findings form the basis of a communication toolkit for the small and medium-sized enterprise (SME) community, exploring the various forms and tones of messaging and their potential effect on readers. Also, the customer and managerial perspectives have been integrated to gain an in-depth understanding of the receivers' and senders' opinions and intentions.

The study is organized as follows. First, we present the theoretical background on crisis communication, focusing specifically on the SME perspective. Temporality and semiotics are discussed next, as well as the context of the study. The following section describes the methodology, after which the findings of the study are presented and discussed and the conclusions are elaborated on.

LITERATURE

A crisis, such as the Covid-19 pandemic, presents an unexpected and sudden event or series of events, which disrupts firms' everyday operations. They have harmful outcomes for the firms themselves, but also their stakeholders, including customers. As the literature on crisis response and ethical responsibilities of firms indicate: "The first priority in any crisis is to protect stakeholders from harm..." (Coombs 2007, p. 165). As a crisis forms a need for communication and information, the firm has to respond to the crisis in the best possible manner. For example, a response may include clear communication to customers by instructing them to avoid eating or drinking something, keeping a safe distance from others, and so forth.

However, so far, little attention has been paid to the impact of the Covid-19 pandemic on how companies around the world have responded to this crisis by using their marketing communication activities to overcome uncertainty and stay connected to their customers.

Some of the rare examples will be elaborated on next. For example, Ertimur and Coskuner-Balli (2021) argue that companies express compassion and care through advertising. Their findings indicate that solidarity, trust, and resilience are the main themes found in advertising messages. Findings of the study conducted by Hang et al. (2020) suggest that emphasizing shared emotions in crisis communication helps hotels to build an emotional attachment with customers (i.e., tourists) and increase post-crisis visit intentions. In contrast, the study conducted by He and Harris (2020) highlights that fostering a sense of genuine and authentic corporate social responsibility is likely to increase a firm's rapport with customers in the long-term. Even humor can enhance authentic communications and increase satisfaction (Eisand, 2018). In a similar vein, Sobande (2020) critically appraises ideas of companies invoking solidarity throughout the pandemic, as well as commodified notions of care and community as a response to the outbreak. Finally, McNeish's (2020) examination of retail signage during this crisis highlights the differences between companies that have dedicated communication teams and those that have not.

Social semiotics seeks different forms of meanings and acknowledges that meaning arises through social environments and interactions. Thus, the social context is the source and producer of meanings. An essential unit of semiotic analysis is the sign that combines form and content (meaning) and occurs in different modes (Kress, 2010). The active production of signs is labeled as semiosis – semiosis being a part of social interactions. Actors normally include the sender, receivers/readers, and at times, interpreters. In business settings, users and consumers can be considered as receivers/readers (Solomon, 1988).

The process of sign-making is influenced by personal and society-level histories, cultural influences, and different social environments. Meanings can shed light on, for instance, social positions (hierarchies), motivations, and social circumstances. The social reproduction of meanings explains the fit between organizational and individual actions in social environments (Halliday, 1976). Linguistic approaches can help the operationalization of multimodality that deals with modes and the relations between different modes, such as image, music, and gestures. De Saussure (2006) considers systemic stability of meanings in the form of conventions that developed as a result of collective social power. Meanings can, however, change over time, which is captured in the notion of temporality, and are shaped through the affordances of the modes as temporal sequence (Kress, 2010). Even within the same text, the temporal sequence of events/actions can result in different representations.

METHODOLOGY

The data for this study comprises 417 Covid-19 related signs photographed in a city in central England's Midlands region during two periods of nationally enforced lockdowns. All of the signs were displayed in the shop windows of city center businesses and visible to customers and the public at large. These signs demonstrate a novel aspect of crisis communication for city center brick-and-mortar businesses – illustrating their reaction to the first two lockdowns and subsequent amplification of national public health messaging. In order to understand and examine the various forms of closure messaging evident in the dataset, this study employs a multimodal social semiotics approach. This approach “draws attention to the multi-semiotic character of most texts in contemporary society and explores ways of analyzing visual images and the relationship between language and visual images” (Fairclough and Wodak, 1997: 164). Its main advantage is that it allows the researchers to examine how the constituent discursive and visual elements of a shop closure notice interact in the portrayal of a particular message. This methodology has already been employed in a business communication context,

e.g., in advertising and promotion (Koteyko & Nerlich, 2007; Harvey, 2013), business-to-business communications (Mehmet & Clarke, 2016), and as high street-based signage (Adami, 2020).

Building upon Kress and Van Leeuwen (2001: 4-8), the study delineated the areas of the data as the language, design, and function of each closure notice and used this categorization also as the basis of an initial iterative coding process. Herein, messages were coded for linguistic elements such as temporality, emotional or affective language, the use of ‘synthetic personalization’ (in other words, addressing the reader as an individual through mass communication) (Fairclough, 1992), and the conveyance of thanks or an apology to the reader. This approach resulted in an overview of general trends within the data alongside specific examples found at the granular level.

To enrich our understanding and interpretation of the closure notices, the semiotic analytical phase of the study was then augmented in a second phase, which involved managerial and customer interviews. Interviews were conducted with three directors of local SME businesses. The customer interviews took the form of two focus groups with four participants each and were mixed in terms of gender and age. For the analysis of managerial interviews, a combination of open codes (those that emerged from the data, e.g., tensions on the changing regulatory environment) and thematic codes (theoretically informed, e.g., on human touch) (Gibbs, 2002) were used, whereas codes that had emerged from the first phase of the study (i.e., focusing on the language, design, and function of selected closure messages) were used to code the customer interviews. This methodological pairing is in line with work such as Iedema (2003), Kress (2011), and Adami (2020), all of whom advocate for an additional layer of ethnographic data alongside a social semiotic approach, to provide a full and dynamic reading of the data. All data were coded independently, inter-coder differences were discussed iteratively within the research team, and codes were reassessed where it was necessary. The agreement was reached by settling the preliminary minor differences to ensure inter-coder reliability (Hayes & Krippendorff, 2007).

FINDINGS

The initial findings of this study demonstrate the wide variety of approaches taken by businesses to closure messaging in a dynamic and evolving period of crisis communication. In particular, they highlight the contrast between those businesses that adopted an authoritative corporate voice to communicate to their consumers versus those which took a personal, emotional tone of voice – factors that were often enhanced by the design and medium on which the notices appeared. Unsurprisingly, the findings showed that businesses utilized the language of uncertain temporality within their closure notices and how this temporal uncertainty evolved across the two periods of lockdown. Whilst foregrounding the pivot to online sales was an important area of closure messaging for brick-and-mortar businesses with a website presence, so too was communicating the general principle of business continuity in which online communities and social media were promoted as a means of maintaining a virtual footfall. Our data also demonstrated the importance of practical security concerns for some businesses during the pandemic, with some notices serving as ‘security implicatures’ by advising any reader of the removal of valuables and stock to curtail potential break-ins.

The findings of our analysis of the closure signs across both lockdowns indicate the following:

1) Language: In terms of the language used by the signs, the study first examined the overall modality the signs assumed. It was found that whilst the majority of signs took the form of conventional notices, in the first lockdown 14% of the signs adopted the format of a direct letter to the consumer explaining the store closure in a personalized manner. This appearance of a more intimate, letter format for the closure notices also coincided with more significant levels of affective language and synthetic personalization in the first lockdown, whereby the particular character of affective language often outlined the difficulty and emotion contained in the decision to have to close the business – in, for example, phrases such as ‘sadly’, ‘with a heavy heart’ and ‘with difficulty’. By the second lockdown, instances of letter-form signage had dropped to less than 2% of all signs, similarly, the use of affective language dropped by 70%, and instances of synthetic personalization by 71%. The use of temporal language was another significant aspect of language use that was particular to the signs in the first lockdown. Temporality often expressed the ambiguous, indefinite period of closure that characterized the beginning of the first lockdown or expressed the hope that business would be able to reopen ‘soon’. With much of this uncertainty removed by the Prime Minister’s roadmap for the second lockdown, the use of temporal language within the temporary closure signs dropped by 84%. Notably, the use of corporate voicing – in which the reader was addressed by the collective ‘we’ voice of the business – remained relatively consistent across both lockdowns. Also constant across both datasets was the use of warning language, forming what could be categorized as ‘security implicature’ signs, which will be discussed further.

2) Design: In terms of the design components and physical media of the signs, it was found that the signage of the first lockdown was primarily (62%) word processed, with the remaining signs being either handwritten or professionally designed. By the second lockdown, this trend had changed considerably, whereby the majority (67%) of signs were professionally designed, with the remainder word processed and less than 1% of signage being handwritten. The use of graphics (i.e., non-branding related illustrations within the sign) also saw a noticeable increase from the first to the second lockdown. This not only coincided with the increasing likelihood that signs would be professionally designed, but also that they were more likely to contain health-related advice pertaining to capacity restrictions and protocols for safe shopping in the second lockdown. Aside from Covid-related graphics, the use of business logos was consistent across both lockdowns, with approximately half of all businesses utilizing branding within their signage. This is comparable to similar percentages of businesses adopting a corporate voice within their notices, which remained constant across both datasets.

3) Function: Whilst the primary function of the signage analyzed was to provide Covid-related information to the reader, our findings demonstrated that the majority of the notices across both lockdowns were multi-functional. In the first lockdown, the most notable of these additional functions was the signposting of business continuity and pivots to online sales (where appropriate) for the reader. However, in the second lockdown, business-focused commentary such as this had fallen significantly by a 52% reduction in messages of business continuity and a 70% fall in foregrounding online sales. Instead, our findings demonstrate that the second lockdown was largely characterized by signs providing public health-related advice – primarily concerning the practical guidelines over entering the store, i.e., capacity restrictions, mask wearing, and maintaining social distancing. A further number of signs in

the second lockdown provided explicit verification within the text of the sign that they were adhering to government mandated rules over businesses re-opening and outlining how this was being achieved.

Whilst the absence of any formal retail rules prior to the first lockdown meant that this verification function did not appear in the first dataset, both datasets contained comparable evidence of businesses using the signs to show social responsibility. In the first lockdown, this was found in reference to the fact that closures were taking place to protect staff and customers, whilst in the second lockdown, it manifested in the acknowledgment that measures were being adhered to in order to mitigate the spread of Covid-19. Notably, whilst more government regulations on retail had been established by the second lockdown, the reiteration of official government advice within the signage remained consistent across the datasets. As noted earlier, a proportion of the signs contained warning language; for example, stating that cash or stock was not being kept on the premises for the duration of lockdown. Whilst these types of signs may appear as simple statements of fact, in the analysis, it was determined that these signs functioned as ‘security implicatures’; in that, they inherently discouraged any attempt at breaking into the premises during the period of lockdown.

In addition, the findings from the managerial and customer interviews conclude the importance of the length and location of messages. Unlike some managers, customers seem to prefer concise messages as opposed to longer ones. In an overall comparison between the first and second lockdown signs, customers shared that they found the first lockdown notices to be more emotional and the second lockdown more factual and effective. Interestingly, customers highlighted that it was important before reading the closure notices to know what the line of business was. For instance, they accepted the use of humor more from a greeting cards retailer or a public house (i.e., bar) compared to some other businesses.

DISCUSSION

The crisis communication of businesses and their closure messages often present multimodality (Kress, 2011) with varying combinations of printed text, signatures, pictures, and various signs. Signs in our research include signs ‘borrowed’ from the National Health Service to amplify national public health advice but also those created by the businesses themselves. The facilitation of governmental health advice became more prevalent with time and more and more businesses started to integrate it into their communications. Between the first and second lockdowns, we found a significant decrease in handwritten signs, while the ratio of professionally designed messages tripled, along with a significant decrease in the affective language (by 70%). Our study identifies a shift from a more affective-personal approach towards factual-professional over time in this crisis communication setting. These dynamics represent potential contributions to the role of personalization in communications (Vesonen, 2007), specific to such settings. Use of temporality (for instance, the emphasis that the restrictions would only impact a limited, yet uncertain time period) across the closure messages decreased by 84%. While in the first lockdown over half of the closure messages included elements of temporality, only 9% of the collected messages did so in the second lockdown.

The importance of sharing emotions in crisis communications, in the context of local SME businesses, has been identified in our study. In tourism research (Hang et al., 2020) it has been discovered that the emphasis on ‘shared emotions’ in communication with tourists

helped to build emotional attachment and strengthen future intentions to visit sites. Ertimur and Coskuner-Balli (2021) highlight brands' opportunity to express solidarity, build trust, and resilience in crisis situations. Our study extends Sobande's (2020) evaluation in that brands can invoke solidarity in crises, as we found that public health advice amplified by local shops was well-received by customers. Covid-related closure messages that had a humorous component shared by local stores had mixed feedback from customers in our study, despite the initial expectation that humor positively influences customer focused relational variables such as trust, loyalty, relationship quality, and satisfaction (Eisend, 2018). Messages with an emphasis on surveillance and no valuables being left on the premises also had a mixed reception. Customers seemed to consider the location of the store and were more forgiving with shops that operated in a less safe area, as perceived by them, which is a potential contribution to research on consumer forgiveness (e.g., Mogilner, 2008).

He and Harris (2020) highlighted that the pandemic is likely to change consumer habits in regard to shopping locally. Based on the reports from managers interviewed in our study, at the beginning of the pandemic there was indeed an expressed interest from customers to support a local business that seems to have faded over time. An important shift, however, experienced by local businesses appeared in acquiring online-only customers locally (i.e., those who had no in-store experiences prior to their purchase), instead of the pre-pandemic dynamics of converting in-person local purchases to online in the long run.

CONCLUSIONS

This study makes a number of unique contributions to the existing research on crisis communication for businesses. The present study rose to the challenge of applying social semiotic analysis, which is an area of emerging interest in marketing and communications, to shed light on our understanding and interpretation of one communication tool specific that most businesses have used: Covid-19 closure messages that are typically displayed in shop windows. The initial period of lockdown forced an uncertain time frame of reopening on businesses, meaning that this study is one of the first of its kind to outline how dynamic temporal uncertainty is enacted in business discourse. Although temporality has been examined from a business networks perspective (see, e.g., Easton & Araujo, 1999), this is often to explain change and evolution networks.

In terms of practical application, different approaches to closure messaging were explored, and several related challenges have been identified. While the findings indicate, ultimately, that there is no 'one size fits all' approach to public-facing crisis communication, they can help to build a communication toolkit for SMEs to highlight the multitude of context-sensitive approaches to messaging available.

A limitation of the study is that it focuses on the UK context, while other countries and regions may have different approaches to crisis communication. Furthermore, it focused on a specific city in the UK, instead of multiple cities. Nevertheless, feedback from the director of a business networking organization that spreads across multiple cities in the UK confirmed that they have observed similar temporary closure messages in the other cities as well during the lockdowns. Another limitation is that online communications were included in this research only to the extent they were communicated via physical shop closure messages, so for instance, no detailed analysis of social media activities or newsletters were incorporated. These digital interfaces could add another layer to examining crisis communication and

therefore, future research could study them, including electronic word of mouth during crises. Future research could also benefit from capturing a governmental perspective, whether at the local or national level, to contribute to strategy formulation under unforeseen circumstances from a regulatory perspective.

REFERENCES

Coombs, W.T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10, 163–176.

De Saussure, F. (2006). *Writings in general linguistics*. Oxford University Press.

Easton, G., & Araujo, L. (1999). Discontinuities in networks: Issues and initiatives as initiators, in P. Ghauri (Ed.), *International Marketing and Purchasing*, 9, JAI Press, Greenwich, 91-108.

Eisend, M. (2018). Explaining the use and effects of humour in advertising: an evolutionary perspective. *International Journal of Advertising*, 37(4), 526-547.

Ertimur, B., & Coskuner-Balli, G. (2021). Brands Expressing Compassion and Care through Advertising. *Journal of Advertising*, 1-10.

Fairclough, N. (1992). *Discourse and Social Change*. Polity Press.

Halliday, M.A.K. (1978). *Language as social semiotic: The social interpretation of language and meaning*. Hodder Education.

Hang, H., Aroean, L., & Chen, Z. (2020). Building emotional attachment during COVID-19. *Annals of Tourism Research*, 83, 103006.

Harvey, K. (2013). Medicalisation, pharmaceutical promotion and the Internet: a critical multimodal discourse analysis of hair loss websites. *Social Semiotics*, 23(5), 691-714.

Hayes, A.F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures*, 1(1), 77-89.

He, H., & Harris, L. (2020). The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. *Journal of Business Research*, 116, 176-182.

Iedema, R. (2003). Multimodality, resemiotization: extending the analysis of discourse as multi-semiotic practice. *Visual Communication*, 2(1), 29-57.

Kress, G. (2009). *Multimodality: A social semiotic approach to contemporary communication*. Routledge, London.

Kress, G. (2011). Partnerships in research: multimodality and ethnography. *Qualitative Research*, 11(3), 239–260.

Kress, G., & van Leeuwen, T. (2001). *Multimodal Discourse: The modes and media of contemporary communication*. Edward Arnold.

McNeish, J.E. (2020). Retail Signage During the Covid-19 Pandemic. *Interdisciplinary Journal of Signage and Wayfinding*, 4(2), 67-89.

Mogilner, C. (2008). To breakup or make up? The psychology of consumer forgiveness. *Advances in Consumer Research*, 35, 149-152.

Sobande, F. (2020). We're all in this together': Commodified notions of connection, care and community in brand responses to COVID-19. *European Journal of Cultural Studies*, 23(6), 1033-1037.

Solomon, O. (1988). Semiotics and marketing: New directions in industrial design applications. *International Journal of Research in Marketing*, 4(3), 201-215.

Vesänen, J. (2007). What is personalization? A conceptual framework. *European Journal of Marketing*, 41, 409-418.

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