

# Graphic signage through the lens of COVID-19: The superhero in changing social behaviour

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## Abstract

Since the start of 2020, the world has undergone a series of drastic transformations – COVID-19 has forced us to make significant lifestyle changes and shift our social behaviour to ensure our safety and that of others. These transformations have been helped by developments in the signage industry; specifically, by giving a visual identity to COVID-19, new graphic signage has provided greater social awareness of coronavirus and helped governments and public agencies to disseminate and reinforce health-related messaging. In this article, we discuss the various transformations of graphic signage since the start of 2020 and explain how transformed creative visual signage elements are currently being used to encourage behavioural change and assist individuals to navigate through the pandemic. We conclude by discussing the role that these transformations can have in the post-pandemic world.

## Introduction

Dabner et al. (2013) defines graphic signage as the use of visual graphics, including signs and symbols, to convey a message. Taylor et al. (2005) notes that signs in communication are fundamental and that “next to the human voice, signage is the most available and ubiquitous form of speech” (p.15). Signage navigates the public through an environment by integrating graphic elements such as typography, colour, pictograms, and icons (Victionary, 2014). Oftentimes, graphic signage is a universal language that replaces words; for example, see Figure 1.

According to the International Sign Alliance (n.d.), as societies are becoming more diverse, universal symbol signage has become increasingly important. The inclusion of symbols on signage has the ability to cross language barriers; thus, graphic signs can successfully communicate basic messages and information to broad audiences in a more accessible and direct manner.

A study by Houts et al. (2006) demonstrated that visual communication is an important tool when communicating health messages, as images and symbols can be comprehended easily and thus increase individuals’ adherence to health instructions. The COVID-19 pandemic has exemplified this well. For example, through the use of visual communication in signage design – termed “visual corona communication” by Raff (2020) – COVID-19 has been transformed into a universal visual language.



**Figure 1.** Examples of broadly understood International symbols used to represent basic facilities, amenities, or instructions (International Sign Alliance, n.d.).

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Several researchers have examined the use of visual signage during the pandemic. For example, Saraiva and Ferreira (2020) conducted a content analysis of 264 visual and graphical materials related to COVID-19 prevention and risk mitigation. Their findings highlighted how specific graphic combinations in design materials (e.g., the use of engaging text styles and vibrant pictures) can improve the communication and comprehension of government health messaging, while also persuading individuals to act in a responsible and safe manner.

In our article, we explore the transformation of the graphic signage industry during the COVID-19 crisis. We do this by drawing on key examples of graphic signs and symbols that have been developed to help shift social behaviours and increase adherence to health instructions, as well as discussing recent advances in academic understanding pertaining to visual corona communication. In doing so, we aim to advance previous research focusing on the transformative effects of graphic signage by suggesting how recent evolutions in the industry can be used to promote more positive social and health behaviours in the future.

It is important to emphasise at this stage that, due to the novelty and ever-changing nature of COVID-19, there is very limited empirical data available on this subject. We endeavour, though, to draw on recent academic literature throughout our article to provide readers with a good overview of current academic understanding of visual corona communication.

## Signage at the Start of COVID-19

At the start of the pandemic, the visual language used on coronavirus signage assisted governments and public health authorities to build an emergency response to COVID-19; for example, by conveying to individuals the need for safer health-related behaviours (United Nations Office for the Coordination of Humanitarian Affairs, 2020). Figure 2 is an example of COVID-19 signage created in the early days of the pandemic by international wayfinding company, Applied, whose 'COVID-19 Design Toolkit' was created to give a visual identity to the virus (McDougall, 2020). The signs included as part of their toolkit incorporated well-understood elements from traditional warning signs (e.g., the yellow-black-white-red colour scheme, bold typefaces, black borders, and monochrome symbols) which, according to Creative Director, Tim Fendley, helped the public to navigate through the ever-changing landscape of COVID-19 (Fendley, 2020).



**Figure 2.** The COVID-19 Design Toolkit (Applied, 2021).

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Numerous other organisations, designers, and visual communicators also formed their own catalogue of COVID-19-related signage and symbols at the start of the pandemic. However, they soon started to recognise that behavioural change would not be possible unless they moved away from traditional design approaches (e.g., where signs were created to instruct people to act in a certain way) and instead developed new visuals that helped the public to navigate through the pandemic and made them feel more at ease (Bixler et al., 2020).

The Head of Wayfinding at CCD Design, Chris Girling, stated that a key issue with early visual corona communication was that designers used a mixture of styles, colours, text, and placement strategies when creating COVID-19 signage (Girling, 2020). This meant that every time a member of the public entered a different commercial or public space, they needed to reprocess graphic designs and learn context-specific rules. Moreover, designers tended to use abrupt wording – such as “stop” and “go” – in their designs, which are associated with hazards and prohibitive signage. These words create a tone of danger and can induce public fear – the opposite intention of visual corona communication.

Interestingly, the academic literature pertaining to the wording used on graphic signs provided mixed findings at the time. For example, in their assessment of the effectiveness of sign communication during COVID-19, Kellaris et al. (2020) found that framing health messages as ‘demands’ rather than ‘requests’ significantly increased the likelihood that individuals would display desired behaviours. Specifically, participants in their study were more likely to wear a facemask when they believed that they were required to do so (94.0% adherence) versus when they were invited to do so (86.7% adherence). Their findings highlighted that visual communicators had to find ways of presenting health-related messaging as demands for compliance, not requests, but in a non-hostile or provocative manner.

## **Signage During the Pandemic: The Transformation of Graphic Design Elements and Style on Visual Corona Communication**

Even though designers did not form a standard code of practice for the design of COVID-19 signage during the pandemic, they integrated creativity to emotionally engage with the public. This was particularly important during times of public uncertainty (e.g., following an increase in restrictions or new lockdowns), at which point signage needed to adjust to public mood. International design and architecture firm Gensler recommended that designers implement the following four design strategies when creating new signage communication and wayfinding graphics during these difficult periods (see Bixler et al., 2020):

1. Signs should convey messages in a friendly tone. Signs that are too demanding can induce stress, whilst those with red or yellow colour palettes and bold typography can make a space feel dangerous. Messaging should also be paraphrased so that it is more polite and inviting; for example, instead of “put on a mask”, text could be changed to “let’s wear mask”.
2. Signage often helps people to navigate through public, commercial, and social spaces; therefore, during periods of lockdown, it is particularly important to tailor designs to



those people who are leaving their safe spaces (e.g., their homes). Similarly, more posters and visual designs should be made available in public spaces (e.g., offices or travel hubs), which see high footfall and where specific rules are likely to be in place. Visuals should also incorporate words of encouragement, such as “Welcome back!”, to indicate positivity within a community and induce feelings of hope and inclusion.

3. New signage should be integrated as part of communication campaigns, as instructional signage, positive messages, and iconography can enhance user experience.
4. Businesses should reflect their brand in the design of their signs; for example, by integrating elements which align with their trademark ‘personality’. This may include brand colours, relevant creative illustrations, and impactful visuals that can boost morale.

Furthermore, Gensler created their own set of signs which demonstrates how these four approaches can be incorporated in graphic visual signage (see Tucker, 2020). According to Gensler, the standard design format for instructional graphics – which rely on red and yellow colour schemes and bold capital letters – are too hostile for visual corona communication and need to be transformed into a more friendly and communicative design (Bixler et al., 2020). Gensler’s Design Director, Beth Novitsky, stated that these traditional designs were appropriate only at the early stages of the pandemic and in spaces which attract large audiences (Tucker, 2020).

Figure 3 shows an applied example of Gensler’s four design strategies, as used in the Charlotte Douglas International Airport. Here, designers used a calming colour palette and gentle font styles to help minimise passengers’ anxiety whilst travelling through the airport, whilst also communicating in a simple, yet effective, way relevant pandemic protocols (see Ready & Osbaugh, 2020).



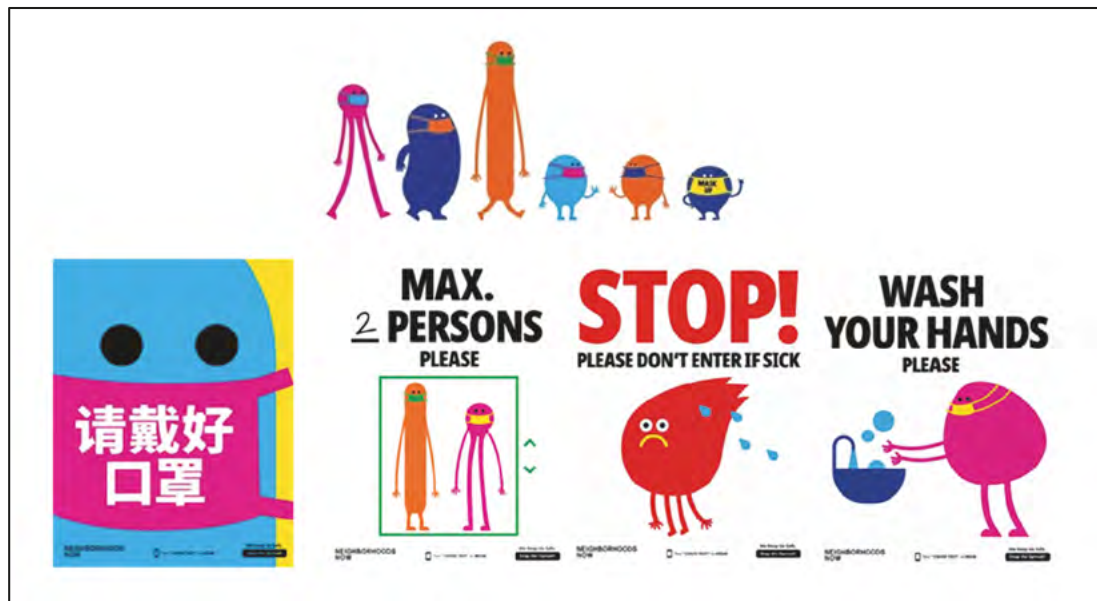
**Figure 3.** Floor signage at Charlotte Douglas International Airport (2020).

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Several US companies adopted Gensler's approach to visual graphic design during the pandemic to help navigate individuals through public spaces and comply with health-related rules. These include companies which attract international clients and service users. Figure 4 shows a multilingual poster campaign – called the Neighbors Now campaign – created by design firm Pentagram for local businesses in New York City. Their posters and graphic signs displayed COVID-19 requirements in a fun and inviting way by integrating colourful cartoon characters, bright graphics, and aesthetically-pleasing typography.



**Figure 4:** The Neighbors Now campaign created by design firm, Pentagram (2020).

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As more US companies and public health authorities began to adopt Gensler's creative approach to effective visual corona communication, a new graphic design system emerged. Subsequently, other nations adapted their visual messaging to include more colourful and friendly design elements and styles. Now, we can see examples of Gensler's design strategies worldwide, such as the floor sticker sign placed at the Emirates Mall in Dubai (see Reuters, 2020). The sign uses complementary language ("Hey there beautiful! Don't forget to keep a safe distance!") alongside a striking colour palette to engage audiences and remind them to adhere to social distancing regulations.

## The Future of COVID-19 Signage

COVID-19 has transformed the graphic signage industry in many ways, with researchers believing that recent changes in graphic design are likely to remain popular well beyond the pandemic (Cruise-McGrath, 2020). Designers and visual communicators continue to work collaboratively to help solve a range of accessibility issues, including print affordability, the problem of language barriers, and differences in cultural meanings of icons. There are also

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efforts to create a distinctive colour palette for COVID-19 signage internationally (Cruise-McGrath, 2020) – an indication that a universal code of graphic design practice may soon be developed. Some designers are also preempting the next stages of graphic design, in which pandemic behaviours are integrated as part of current graphic signs and symbols. For example, CannonDesign – a global architecture, engineering, and consulting firm – have started to embed modern-day behavioural practices into popular US street and pavement signs (see Smith, 2020).

According to Bloomberg CityLab (as cited in Poon, 2020), social norms and behaviours change routinely following large-scale events such as global pandemics. Subsequently, given predictions that the effects of COVID-19 will continue for several years (British Academy, 2021), many individuals in the future will likely continue to display behavioural patterns learnt during the pandemic. Graphic designers may find this a useful point to consider when developing visual communication campaigns going forward.

Given the novelty of COVID-19, we would also encourage more research into visual corona communication to help inform the development of graphic design practices. One key area that requires attention is digital signage; specifically, how individuals digest digital visual media and how it impacts behavioural change. Targeted research assessing graphic signage use across the retail, commercial, and healthcare industries would also be of value and help inform marketing and public health strategies. The current approaches to graphic design are likely to act as sources of public reassurance in the future, as they are now easily understood as part of a universal visual vocabulary; therefore, evaluations of their efficacy would also propel forward academic understanding.

## Conclusion

COVID-19 has reshaped graphic design and the design of visual signage. By helping governments and public agencies to communicate vital health and safety information, graphic design has formed an important part of infection management and control protocols internationally. At the start of the pandemic, designers relied on traditional design systems to deliver pandemic messaging and urge shifts in social and health-related behaviours. However, as the pandemic progressed and COVID-19 preventative measures became integrated within individuals' daily lives, signage transitioned towards a more creative and informative style, and multiple new examples of effective visual graphic designs emerged. The universal graphic designs created during the pandemic have brought about a new era of design across commercial and graphic industries, such to the extent that it is likely that a universal code of graphic design practice will soon be developed to help visual communicators respond to the fast-moving changes in society.

Academically, COVID-19 is still a novel topic and there is dearth of available empirical data on visual corona communication. However, emerging research seems to suggest that graphic design constitutes an effective mechanism for encouraging behavioural change and individual compliance to health regulations (e.g., Kellaris et al., 2020; Saraiva & Ferreira, 2020). We would encourage more targeted follow-up research to assess the micro and macro-level impact of visual graphic designs on individuals' health and social behaviours. This is

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particularly important given the effects of COVID-19 are likely to be felt for several decades (British Academy, 2021).

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