

Research in Context

Student Name: Ceri Thomas

Student Number: 1902083

Programme of Study: Graphic Design

Module: Research in Context ADAD5003

Word Count: 2,503 (297 – Bibliography)

Tutor Name: Donna Williams

Title: Why is Information Design Important?

Thesis Statement: The topic being discussed is Information Design and how impacts different areas of modern life by tracking its development over time.

Information Design is about designing clear, understandable communications by showing a variety of structure, context and presentation of data and layered information. This is done by showing the information as effective as possible so it can be easy to read. Information design started by Richard Saul Wurman in 1976, who graduated from University of Pennsylvania in 1959 and later developed the concept on information design (Lillie, 2014). Richard Saul Wurman has written, designed and published over 90 books on subjects of information architecture and information design, with a heavy focus on information mapping and infographics. He has also created TED conferences covering the same topics. Most information is being shown by via social media, news channels, information boards and signage. Modern Information design is associated with this technology; however, information design has historical roots. An early example of information design is William Playfair (1759-1823) who was a Scottish engineer who published information materials using numerical data including graphs and pie charts coloured by hand. Another example is Florence Nightingale's rose diagram which illustrated causes of the army of the East during the Crimean War (1853-1856). These examples show visual information has been designed for a long time, and these early designs paved the way for modern information design.

This essay will look into information design over the years, focusing on infographics. Information design can be seen anywhere in the world in different formats. This will then go into everyday visuals in different parts of the world and how messages are represented. The next part of the essay will focus on modern technology such as touch-screen maps, QR Codes, and the various functions of smartphones and tablets, before moving on to information design related to the recent Covid-19 pandemic. Covid-19 was the name of a coronavirus that had spread through the work from the start of 2020, causing a global pandemic. The essay will highlight how the pandemic caused a need for more information to be available to the public in different formats and at various locations.

When considering information design over the years, there have been many outstanding work pieces that have been created and designed since information

design began. It started with the Pre-cuneiform tablets (3000bc), then The Gutenberg Bible (1456), Charts + Graphs (1770-80s), The Rose Diagram (1838), Periodic Table (1871), The Bauhaus School (1919-1933) and the London Underground Diagram (1933) (Pontis, 2012).

Information Design had emerged as a multidisciplinary area of study in the 1970s. In 1979, graphic designers were solidified with the publication of the Information design journal. However, Information design refers to creating an information structure for a set of information aimed at specified audiences (Tomboc, 2019)

Edward Tufte (1942) is an American statistician and professor emeritus of political science, statistics and computer science at the University of Yale. Edward Tufte's writing is important in different fields as information design and visual literacy, which deal with the visual communication of information. He explained that "sometimes decoration can help editorialize about the substance of the graphic. (Tufte, 2022)

Infographic is a simplified visual representation of information and data by combining elements of text, image, chart, diagrams and videos. Infographics started 25,000 years ago. It began in the caves of Brazil; infographics have since then began documented in the history and then went from France to China. In the 1600s cartographers provided infographics in the form of maps.

William Playfair (1759-1823) was an engineer and political economist. He is associated with infographics due to his invention of bar graphs, pie charts and line graphs. He is also known for publishing 'The Commercial and Political Atlas' in 1786. It has been described as the first major work to contain statistical graphs. William Playfair's statistical breviary, published in London 1801, it contains what is generally credited as the first pie chart. These timelines directly inspired William Playfair's invention of the bar chart. He had collected data about the import and export from different countries over the years, which he presented as line graphs. (Sack, 2020)

The 1700s also saw one of the first intentionally created infographics by Joseph Priestly, who created a “chart of Biography” with timelines and details on historical figures. He claimed that this felt like the most efficient way to conveying the information “with more exactness, and in less time than it would be reading” (Hicks, 2019)

In 1972 Otl Aicher’s Pictogram was designed and 1982 Edward Tufte published a book on information design called ‘The Visual Display of Quantitively Information’.

This shows that information design is important because it has developed over time and has never gone away. As technology advances, information design is often presented in a digital format. Making modern Technology another major part of information design.

Modern technology produces and shows information design in other layouts such as on touch-screen maps, QR codes, smartphones, tablets, smart watches. A touchscreen is an electronic display that is also an input device, detecting the contact within the display area and then using the location of that contact as an individual input. Multiple types of touch screens have been developed over the years, which have provided more accurate touch sensitivity as well as introduced multitouch and gestures. (Swalih, 2021)

The first touchscreen was invented in 1965 by Eric A Johnson who worked at the Royal Radar Establishment in Malvern, England. Eric Johnson patented his design in 1966, which he then improved it in 1968 and wrote another article in the same year (Kunerth, 2021) Now that touchscreens are in the public consciousness, more and more business are using them to connect with customers.

As well as tablet being used commercially in shops, they are also personal items that people can use at home for a variety of uses. Tablets are hand-held devices that usually have touchscreen capabilities. They can be used as a portable entertainment system including watching films, listening to music and reading books.

They are also used for browsing the Internet and making video calls. Tablets are very popular with designers and artists as they are a very useful tool for creative design work. Although this is relatively new technology, Steve Jobs who is the founder of Apple, worked on the first truly mainstream tablet before designing the iPhone. (Levy, 2018)

Similarly to tablets, smart phones have a variety of different features and capabilities that can make them more than just a phone. As well as making and receiving phone calls and text messages, smart phones can now act as cameras, small computers that can browse the Internet, and have the entertainment functions that the tablet has. Smart phones can also be used as GPS navigation systems, games consoles, and a number of other functions.

One way to get information to people through their devices is through a quick response (QR) code. A QR code is a type of barcode that can be read easily by a digital device by scanning the code. The code stores information as a series of pixels in a square-shaped grid. (Gregersen, 2019)

Although this is seen as new technology, the first QR code system was invented in by Denso Wave in 1944. This was a subsidiary company of the Japanese car manufacturer Toyota, so they needed an accurate way to track vehicles and parts during the manufacturing process. (Schulfer, 2020)

Visuals are another way to show information design. They have a massive impact on how day to day signs can and have been used to get the message across, especially when it comes to health and safety signs that you must follow. They can lead to making sure that you do not hurt yourself and can keep yourself safe. Health and safety signs are classified based on a set of colours which will never change. Signs that are red usually is represented by an action which is not allowed. Blue signs are usually located outside of the industrial site which is made to inform staff and guests who are walking around the site what they are told and need to know before entering a specific area. Signs that are coloured yellow often warn of danger. Green signs are

to direct people in case of an emergency. These signs are made to be bold, simple and eye-catching. Colour codes are used to make people aware of the sign type.

There are a wide range and variety of recognisable major landmark visual signs around the world. For instance, the 7.6 meter 'Welcome to famous Las Vegas' sign was installed in 1959. Nullarbor Plain crossing sign in southern Australia comes in various sizes. London Underground Signs were first installed in 1908. The famous 'Route 66' Road signs were installed in 1927. Finally, the gigantic Hollywood Sign in Los was installed in 1923 the size of the sign is 14 meters tall and 110 meters long.

Traffic signs are equally recognisable so that drivers can follow instructions and avoid traffic accidents. Signs in different countries vary. For instance, the stop sign in countries like Ethiopia, Israel and Pakistan is displayed by a hand indicating to stop.

Usually stop signs are octagonal in shape, but in some countries it is a circle with an upside down triangle inside of it. Even though most countries use the international language for their safety signs, there are countries that use only their language for sign making.

Most countries have animal crossing signs, but there are different depending on the animals that are seen in that location. In Australia, it is common to see kangaroos on the street. Bears can be common for USA and Russia. In Africa you can see camels crossing the road warning signs. In Japan, there are a road signs for crabs. Pedestrian crossings also vary in different countries. Australia is probably one of the only countries where the pedestrian crossing sign does not have a person on it but has an illustration of walking legs. Laos is unique it is one of the only places where the places where the person coming is a female. The sign in Qatar is in the clothes of the person crossing the street. In Israel and Japan, the pedestrians on the signs all wearing hats (Signs, 2019)

Some countries have unique road signs. There are signs in the US that are used to warn the driver to be more careful as there are immigrants crossing the street. The UK and Peru have Pegasus crossing signs is used for horse riders. Another unusual sign is in Finland, which warns; "Beware of Finnish Zombies". (Ainsworth, 2019)

Signs were particularly important during the Coronavirus pandemic. This began in March 2019 and still affects us to the present day. Since it began, it had a massive impact on information designers. As such, it became essential to clearly present the information. David McCandless is an Information designer who works on a variety of infographics that present up to date information and statistics on the spread of Covid-19, clearly helping people understand the current state of it. David McCandless is known for his talks about data, information and knowledge, creativity, design- thinking, the art & utility of data visualisation and how he tells stories by using data to show this. (Phillips, 2019)

One of McCandless' designs on Covid information is the riskiest activities to do during the pandemic. The information was gained from 500+ epidemiologists and health professionals. He then took this information to make his own design in a visually interesting way.

Throughout the pandemic there were other ways that information design was used, including social distancing floor vinyl stickers. These were decals cut with a cutting plotter and are used for decoration, commercial use or signage (Staff, 2020)

This was an excellent idea to show how information design can be presented in a simple way. The purpose of the floor stickers was to remind people to keep 2 meters apart when in shops as part of the social distancing mandate during the pandemic. The floor vinyl stickers are easily noticeable and make an immediate impact, as it does more than just remind people to socially distance; it also shows them how far 2 meters is and shows them where to stand when waiting in line at supermarkets and other shops. Many supermarkets also used arrows on the floor during lockdown to make sure people went around the isles in the same direction to avoid people running into each other. Perspex screens made from plexiglass or transparent plastic were also used to limit the spread of infection and to protect customers and staff. (Willton, 2017) The covid related designs in shops are simple, bold, and minimalistic. The information is not overcrowded, so it is a good example of how information design can be used to present important information.

The government messages were another major part during the covid pandemic. This was a vital reason that information design made another huge impact as the

government wanted to get these important messages across to the public in an easily accessible way. The messages that were made for the government were designed differently for different government departments as each had their own graphic designers. This meant that there were variations in the colour, font, style and layout of the messages. “Messaging needs to be simple, consistent, targeted and it also needs to be delivered on what is promised” (Dibb cited in ITV News, 2021). This shows that although each design was appropriate for its purpose, it would have been better to have consistency across all government information design.

In March 2020, the slogans messages started out with a white and blue colour scheme, that of the NHS brand, which is then directing the public to the health services. Within two weeks, as the scale of the virus and crisis became more apparent, the branding had a dramatic shakeup and the first of the three point slogans started. The directive was: “Stay home, Protect the NHS, Save lives” in yellow, blue and red. This then changed to another colour scheme, in red, yellow and black.

“This was a communications problem and the government would do really well to follow the basic rules that marketing people and branding people use when they are trying to convey and show messages and branding to the public.” (Evans, 2021)

This changed again, with pandemic messages staying the same but using a bolder, heavier font. Prime Minister Boris Johnson admitted that over time, the rules have been “complicated and confusing” for the public (Johnson cited in ITV, 2021).

Overall, the exploration of information design shows how it has made an impact and what it has been like over the years. Information design made an impact in a variety of different areas such as: Covid-19, Visual Signs, Technology and Information and Infographics. This essay has provided evidence for how information design has impacted daily life and where information design is seen in the modern day. There is much more to investigate when it comes to signs, infographics and other information design, but this essay has touched upon some essential areas that effect people daily.

References

- Pontis, S. (2012) *20 Information Design Milestones*. Retrieved from 29 June 2022
<https://sheilapontis.com/2012/01/16/20-information-design-milestones/>
- Tombson, K. (2019) *What is Information Design and Why It Matters Now More Than Ever*. Retrieved from 28 June 2022, <https://www.easel.ly/blog/what-is-information-design/>
- Ainsworth, C. (2019). *13 Unusual Road Signs from Around the World*. Retrieved from 26 June 2022
<https://www.mentalfloss.com/article/574570/road-signs-and-their-meanings-around-the-world>
- Evans, J. (2021). *From Stay at Home, Stay Alert and back to Stay at Home: How government's lockdown messaging changed over the last year*. Retrieved from 24 June
<https://www.itv.com/news/2021-03-21/from-stay-at-home-stay-alert-and-back-to-stay-at-home-how-governments-lockdown-messaging-changed-over-the-last-year>
- Gregersen, E. (2019). *QR Code*. Retrieved from 23 June 2022
<https://www.britannica.com/technology/QR-Code>
- Hicks, E. (2019). *10 visualisations that changed the world of information design*. Retrieved from
<https://longitude.ft.com/10-data-visualisations-that-changed-the-world-of-information-design/>
- Kunerth. (2021). *The history of touchscreen technology development*. Retrieved from
<https://www.accentectechnologies.com/post/the-history-of-touchscreen-technology-development>
- Levy, S. (2018). *Steve Jobs*. Retrieved from <https://www.britannica.com/biography/Steve-Jobs>
- Lillie, B. (2014). *The 30th birthday of TED: Richard Saul Wurman at TED2014*. Retrieved June 30, 2022, from <https://blog.ted.com/the-30th-birthday-of-ted-richard-saul-wurman-at-ted2014/>
- Phillips, M. (2019). *COVID-19: The Ultimate Design Thinking Use Case*. Retrieved from 30 June 2022
<https://www.toptal.com/designers/experience/design-thinking-use-case>
- Sack. (2020). *William Playfair and the Beginnings of Infographics*. Retrieved from 5 June 2022
<http://scihi.org/william-playfair-and-the-beginnings-of-infographics/>
- Schulfer, S. (2020). *Who Invented the QR Code? QR Code History & Creator*. Retrieved from 6 June 2022
<https://www.sproutqr.com/blog/qr-code-history>
- Signs, F. (2019). *The Difference of Traffic Signs around the World*. Retrieved from 9 June 2022
<https://medium.com/@FrontSigns/the-difference-of-traffic-signs-around-the-world-41825fac1205>
- Staff, R. (2020). *Social distancing signs around the world show the new normal*. Retrieved from 10 June 2022
<https://www.reuters.com/article/health-coronavirus-socialdistancing-idINKBN22K168>
- Swalih. (2021). *Modern Technology: Definition, Examples, and Applications*. Retrieved from 11 June 2022
<https://www.techquintal.com/modern-technology/>

Tomboc, K. (2017) *What is Information Design and Why It Matters Now More Than Ever*. Retrieved from 12 June 2022 <https://www.easel.ly/blog/what-is-information-design/>

Tufte, E. (2017). *THE WORK OF EDWARD TUFTE AND GRAPHICS PRESS*. Retrieved from 29 June 2022 <https://www.edwardtufte.com/tufte/>

Wilton, J. (2017). *THE HISTORY OF PERSPEX AND ITS ADVANTAGES*. Retrieved from 30 June 2022 <https://liveinformationblog.wordpress.com/2017/05/01/the-history-of-perspex-and-its-advantages/>