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(Eridanus, 2017)

Addressing Accessibility in Design

A BRIEF INFORMATIVE PIECE
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Accessibility is an imperative part design that designers need to keep in mind when creating any sort of design. Some of these considerations include eyesight, hearing, cognitive and even physical impairments. All of these areas should be thought of as a part of the design process, rather than an add-on to a design that has already been created. However, considerations can differ depending on what platform the design is meant to reach, the do's and don'ts of a design piece that will be printed versus shared online only are similar but do also vary. The following few paragraphs will hopefully encourage and inspire designers to think about accessibility when it comes to design.

DESIGNING FOR THE VISUALLY IMPAIRED

Visual impairment can be defined as those who have any sort of vision loss, this can include but is not limited to those who are blind, low-vision, and colourblind (Salvin, 2016). According to a survey conducted in 2017, an estimated 1.5 million Canadians identify themselves as having sight loss, with an additional estimated 5.59 million people having an eye disease that can cause sight loss (CNIB, 2019). In addition to this, a large concern when it comes to visual impairments include those who are colourblind. In Canada alone 2.6 million Canadians are colourblind. Color blindness mainly affects men as they are more prone to a missing or mutated gene on their X-Chromosome (CTV News, 2015).

Some key areas of inclusive design when it comes to vision include page layout, the information, colour, size, and typography. Page layout can influence the readability of a design, a design which follows a linear, logical layout is much easier to read than one that has spread content all over a page (Pun, 2016). Consistency in grouping elements in a hierarchical format is an example of a linear and logical layout.

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In addition to this, when it comes to an online design, the information that a design wants to convey should be readily available to view. Having links hidden within text where you need to "Click Here" or select an underlined text element can be hard for visually impaired people to distinguish from regular text. Furthermore, the contrast in colour in a design doesn't only affect readability for those who are colourblind but many low-vision individuals. It can be hard to distinguish white text on a light yellow background or orange text on a red background. A recommended 70% difference in colour value is recommended for optimal viewing (Habekost, 2020). A combination of colour, text, and shape should also be used to convey meaning instead of being reliant on just colour to do so (Pun, 2016). For instance, if you were to indicate "Stop", an octagonal shape with the word "Stop" in white with a red background would be much better than just a red circle.

Lastly, typographic choices play a large part in accessible viewing. Look at the text below, which one is more legible to you?

The quick brown fox jumps over the lazy dog

The quick brown fox jumps over the lazy dog

The first font is a standard san-serif font with the recommended x-height, stroke contrast, width, counterforms and apertures. Generally this family of typeface with these components has increased legibility over the latter.

DESIGNING FOR THE AUTISM SPECTRUM

Autism is a complex developmental disability that can impact a person's social skills, communication, relationships, and self-regulation (Autism Society, 2020). In Canada, the 2018 National Autism Spectrum Disorder Surveillance System Report estimates 1 in 66 children in Canada are on the Autism spectrum (Autism Speaks, 2020). There are many ways in which design can be implemented to best suit the needs of those on the Autism Spectrum. Similar to those with visual disabilities, a simple and consistent layout is the easiest to read. The information should be sorted with bullets in simple sentences using plain english rather than large text blocks and figures of speech. Also, the use of simple colours is preferred over bright contrasting colours together.
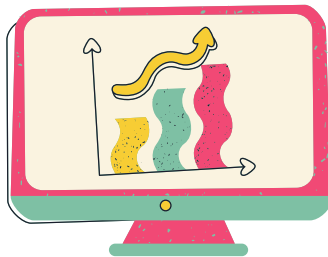
An example of using simple colours could include blue, yellow, and red whereas using magenta, cyan, and neon yellow would be bright colours which can be too overstimulating. Finally, if there are any instructions they should be descriptive (Pun, 2016). This applies more so to online platforms such as websites. This is because it is more easily understandable, designers should be specific in the message they are intending on getting across.

For example, if there was an area for the viewer to attach a file, a suitable button name would be "Attach files". This is better than some alternatives that are common such as "Click here" which then takes you to another page where you can attach files. Keep in mind that the more specific yet simple, the better. Functionality holds more value than a focus on visual appeal when it comes to accessibility.

DESIGNING FOR DYSELEXIA

Dyslexia is a lifelong learning disability which affects reading comprehension, writing, and spelling. In Canada, 15-20% of the population has dyslexia, these individuals can have a hard time decoding things, difficulty with depth perception, and experience illusions of light and colour. (Dyslexia Canada, 2020). Ways in which designers can accommodate dyslexia include using images and diagrams to support text. Visual elements such as these make it easier for people with dyslexia to process information.

Once again, there is an emphasis in consistency of page layout. More specifically, aligning text to the left and avoiding underlining words and using italics is also helpful.

Example

Thirdly, for online platforms use of different formats can be especially accommodating. Including audio components or videos rather than just text can help individuals properly retain and process information in an easier way (Pun, 2016).

And so...

While these are some major groups affected by design choices, these are not the only ones. Being a good graphic designer entails creating design pieces that are visually appealing and practical for all people. Generally, it has been found that page layout plays a large part in designing in an accessible way. A simple layout that isn't text heavy is more effective than lots of text that is chunked together. Ensuring the correct use of colour is also an important aspect, colour should not be too over stimulating or the sole focus of the piece. Instead it should work alongside other elements such as line, shape, and text. In next month's issue, we will be featuring submissions of the top three design pieces that showcase accesibile design. For submissions please email CYOC@magazine.com.

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Word Count: 1125