

Images

A brief guide

WINWOOD+HAINES

Contents

Why use images?	3
Types of visuals in graphic design	4
Design tips for using images	10
Sourcing images and copyright	12
File types and resolution	13
Accessibility	14
Resources	15

Why use images?

In graphic design, images play a vital role in conveying emotions and expressing ideas quickly. When you only have a few seconds to get an idea across, an arresting image can speak volumes. When your content is complex, a diagram can visualise the process far more simply than a text-heavy explanation. When your audience is international, universal symbols and pictograms can help with way-finding.

The numbers behind the visuals

About 90% of the information transmitted to the brain is visual and, according to leading MIT neuroscientists, the brain can process images in as little as 13 milliseconds¹. In fact, the brain can process images 60,000 times faster than text².

If illustrations are added to a set of directions, the capacity to follow them increases by 323% compared with

text-only directions. Adding visuals to data also increases resonance. Cornell University found that 68% of people will believe the accuracy of a scientific claim, but if that data is accompanied by a graph, this increases to 97%³.

Therefore, using images increases impact, heightens the audience's attention span and recollection, reinforces information, and guides the audience to where you want them to go.

Jonne - <https://unsplash.com/@jijiu>



- ¹ <https://news.mit.edu/2014/in-the-blink-of-an-eye-0116>
- ² <https://oit.williams.edu/files/2010/02/using-images-effectively.pdf>
- ³ <https://link.springer.com/article/10.1007/BF02765184>

Types of visuals in graphic design

There are several types of visuals used in graphic design. For the purposes of this guide, we'll concentrate on those that are static rather than those that use motion (such as film making and motion design). Visuals can be divided into categories of photography, illustration, data visualisation (diagrams, graphs, maps) and iconography.

Photography

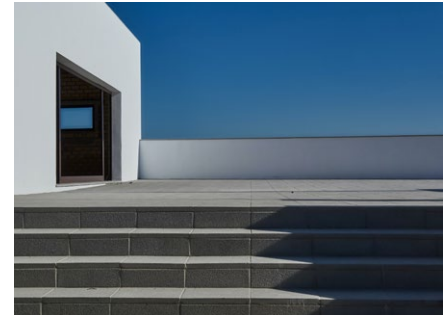
Photography is ubiquitous. From the first image captured in 1826 by Joseph Nicéphore Niépce using a camera obscura, to the estimated 1.81 trillion photos taken each year⁴, the ability to 'capture the moment' retains its enormous appeal.

Photography can be divided into three main genres: nature, people and man-made. Each of these can be further divided into categories including advertising, editorial, documentary, event, portrait, wedding, fashion, sports, landscape, travel, wildlife, macro, aerial, astro, fine art and food.

Techniques

Although many things can be altered post-production, there is no substitute for a well-crafted image. A photographer will consider the following visual components:

- **Composition** – this is a key element to every image. A photographer will consider the subject framing, angles, lines, symmetry, negative space, repetition and pattern.
- **Depth of field** – this is the distance between the nearest and the furthest objects and the overall focus. In a shallow depth of field, one part of the image will be in focus, while the rest of the image is blurred. In a deep depth of field, a larger area will be in focus.



Vidar Nordli-Mathisen
<https://unsplash.com/@vidarmm>



Akin Cakiner - <https://unsplash.com/@akin>

⁴ <https://photutorial.com/photos-statistics/>



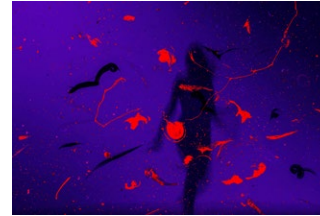
- **Intentional blur** – often a photographer will use motion blur to indicate speed, or take images at night that show car light trails.
- **Lighting** – a photographer can use natural light or studio lights (i.e. key light, fill and background lights) to play with tone, contrast, brightness and colour.
- **Exposure** – this is one control the photographer will adjust according to light levels and subject speed. A long exposure is necessary for night shots.
- **Colour** – with digital photography almost all images are taken in colour and then converted to black and white in post-production. A photographer can also use filters on the camera lens to provide a certain colour cast.

Post-production

There are countless ways to alter an image post-production. You can adjust brightness, contrast, colour balance, create directional blur, select and crop sections, touch up imperfections or even remove unwanted objects. In addition, you can experiment with different artistic techniques that replicate artist tools or styles, such as pencil, charcoal, watercolour, pointillism (made up of

dots) or pixelation (made up of squares). With increased skill you can combine images, as a photo-montage or double exposure. And, being digital, you can save as many versions as you like.

Adobe Photoshop is the industry-standard but there are many affordable photo-editing software options, such as Affinity Photo, PhotoDirector, Luminar and Pixlr X. Some are even browser-based⁵.



⁵ <https://www.creativeblog.com/features/photo-editing-software>

Illustration

People have been telling stories through drawings and illustrations from the earliest cave paintings. As a commercial profession, illustration dates back to the mid-1700s when the printing press really took hold and publishers saw the benefits of adding illustrations to their books. Fast forward to the 20th Century where illustrators were no longer restricted to just printed publications but could also create for cartoons, animated films and video game design. Illustrationhistory.org is a great resource for discovering more about illustration.

In terms of genres, illustration encompasses editorial, commercial, fashion, technical, scientific and packaging. Styles include vintage and retro, realism, fantasy, concept, cartoon and comic book, line art, flat illustration, children's book and 3D rendering.

Traditional techniques

An illustrator can use traditional materials and hand-drawn techniques, such as pencil, gouache, pen and ink, watercolour and acrylic; use print techniques such as screen printing, etching, woodcut and lithography; or combine a mix of materials like collage and mixed media.



Charlotte Ablunarova - <https://unsplash.com/@charlotablunarova>



The New York Public Library - <https://unsplash.com/@nypl>



McGill Library - <https://unsplash.com/@mcgilllibrary>

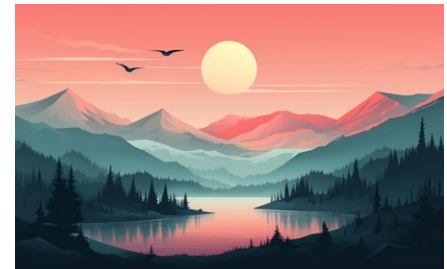
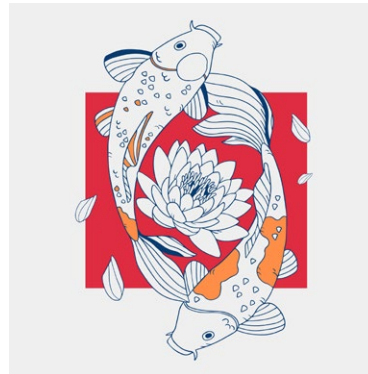
Digital techniques

The late 1980s saw the release of Adobe Illustrator (1987) and Photoshop (1990) marking the emergence of digital tools to create illustration. Today, about 70% of UK illustrators use digital tools, or a combination of traditional and digital⁶.

Adobe remains the most popular software with Photoshop, Illustrator and Fresco. Other common software tools are Procreate and CorelDraw. Illustrators use a graphics tablet (such as Wacom/ iPad) and stylus.

Digital illustration falls into two broad areas – freehand and vector. Freehand illustrations are closer to traditional techniques using brushes and blends. These are raster images and can only be scaled by a limited degree before losing quality. Vector images are based on mathematical equations and can be scaled to any size without any reduction in quality. See [page 13](#) for more details. Vector illustrations are flatter, more stylised, and are often used for websites.

⁶ <https://www.celsys.com/en/topic/20230120>



Data visualisation

Representing data through a visual means is one of the best ways to communicate complex information. Data visualisation can include tables, charts and graphs, histograms, heat maps, tree maps and scatter plots.

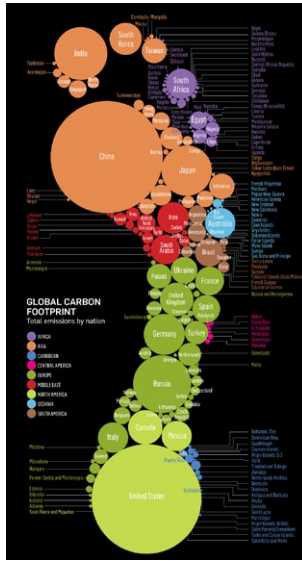
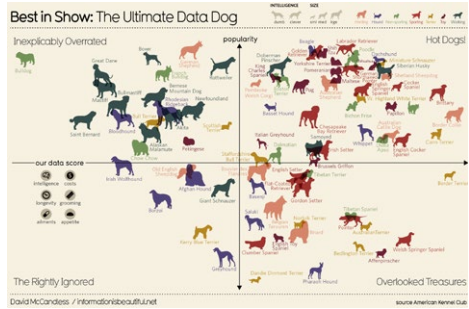
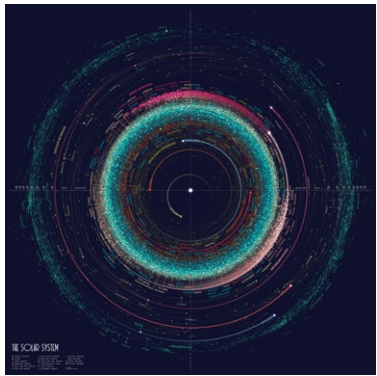
The key point to remember with any data visualisation is simplicity. The data might be complex but the execution needs to be understood effectively. Be consistent with labelling and colour coding, follow a clear ordering structure and remove any superfluous fonts, graphics and backgrounds that detract from the overall legibility.

Infographics often contain multiple sets of data visualisation. They can be a design discipline in themselves that might incorporate images and illustrations in a complete layout. See the websites of [NASA](https://www.jpl.nasa.gov/infographics/), [the Guardian](https://www.theguardian.com), [Dorothy, Creative Bloq](http://Dorothy.CreativeBloq.com) and makeawebsitehub.com for some award-winning and inspiring examples.

<https://www.freepik.com>



[NASA - https://www.jpl.nasa.gov/infographics/an-orbit-map-of-the-solar-system](https://www.jpl.nasa.gov/infographics/an-orbit-map-of-the-solar-system)



[Stanford Key - https://mapdesign.icaei.org/2014/08/mapcarte-238365-tracking-carbon-emissions-by-standford-key-2011/](https://mapdesign.icaei.org/2014/08/mapcarte-238365-tracking-carbon-emissions-by-standford-key-2011/)

David McCandless - <https://informationisbeautiful.net/visualizations/best-in-show-what-is-the-top-data-dog/>

Iconography

Iconography in design refers to the use of symbols to represent meaning. Symbols communicate messages without spoken or written words. The most common types of symbols include:

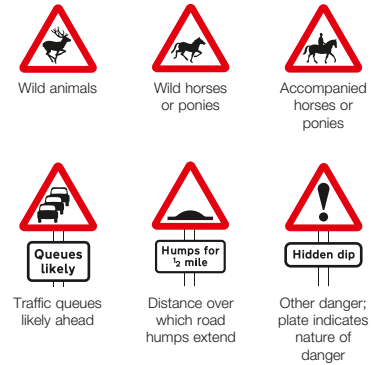
- **pictograms** – these represent objects and places (i.e. Olympic Games icons, toilets, access).
- **ideograms** – these represent actions, ideas or concepts (i.e. road signs, warning signs).
- **icons** – these represent objects and/or their functions (i.e. WIFI, shopping basket, search).
- **logos** – these are used as a company's trademark.

Like all visual styles, there are changes in trends and usage, however, some main principles apply. A symbol has to be recognisable, it has to be understood by the audience, and it has to be simple and clear enough to be seen at small sizes. For this reason, symbols are vector images (see [page 13](#))

<https://www.freepik.com>



		NAME
		PHONE
		LOCATION
		ADDRESS
		WEBSITE
		MAIL



<https://www.gov.uk/guidance/the-highway-code/traffic-signs>

<https://medium.com/@lunanddotminimalist/logo-research-a-case-study-of-2024s-top-brands-d678c7522831>

Design tips for using images

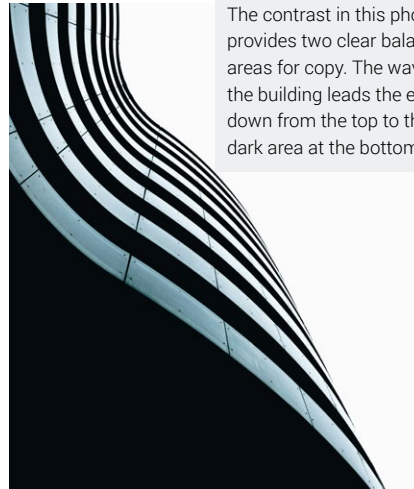
Concept

- Images support the content. A single, strong image can provide a powerful visual summary of the content.
 - You can play with the size of an image, its cropping or its colour to capture the viewer's attention.
- Use the composition and features of the image to lead the viewer through the design. Think about using perspective, shapes, contrast and colour to point to or highlight key information such as headlines, call to action or logo.

Davis Talley
<https://unsplash.com/@davidtalley>



The weighting of this image is at the bottom. The viewer's eye is led along the curvature of the road



The contrast in this photo provides two clear balanced areas for copy. The wave of the building leads the eye down from the top to the dark area at the bottom

Akira Holo
<https://unsplash.com/@joephography>

For example, if this was promoting trainers, the background mirrors the colour of the trainer. The model's pose, clothing and accessories also creates an impression of confidence.



Godisable Jacob
<https://www.pexels.com/@godisable-jacob-226636/>

Brand

- Images need to reflect a brand's values so always consider the possible interpretations. Which styles of imagery reflect your brand? Which styles don't?
- A subtle way of reinforcing brand association in the viewer's mind is by using brand colours in the images. This can be through using a coloured background, props or clothes.

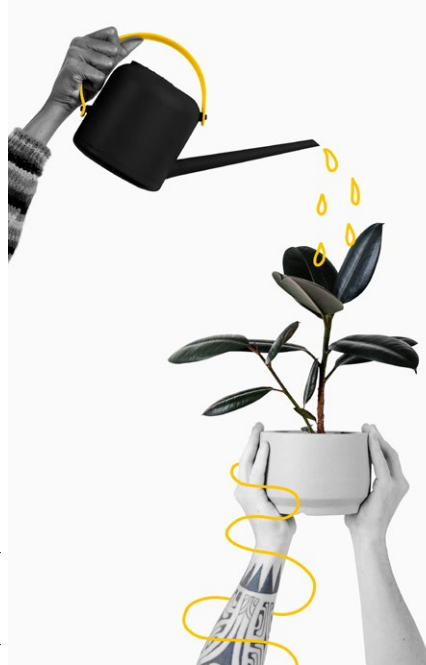
Consistency

- Be consistent in your image choice. If following a concept, choose images that follow the same theme.
- Use similar styles for all your images. So, if you're using line icons, keep to the same style throughout. An inconsistent use of styles looks untidy and unprofessional.
- Mixing photography and illustration is possible but tie these together with a common thread – such as colour, graphics or subject matter. They can work together quite successfully if composed as a collage or overlaid graphics.

<https://www.freepik.com>



<https://www.freepik.com>



These images use a combination of photography and illustration either as collage or additional graphics. This allows for greater conceptual or fantastical visuals.

Storytelling

- Images tell a story – whether that's a moment in time, an emotion or a narrative. Using a series of images, either grouped or placed sequentially, can help to communicate that narrative if a single image is not sufficient.
- Sometimes it's not possible to use photography for subjects that are fantastical or conceptual, or for situations where it's difficult to use real people. In these cases, illustration or AI-generated images (see [page 12](#)) can be a useful alternative.

Quality

- Always use the best quality images at the appropriate size. If quality is an issue, a designer can apply a few techniques (such as limited adjustment of resolution), or change the image to black and white, colourise it or apply a stylised effect. These are not ideal so try and aim for the best resolution where possible. (See [page 13](#)).

Sourcing images and copyright

Commissioning a professional

Commissioning a photographer or illustrator allows for unique and specific images for your brand. The benefits include more freedom over the content, and how and where the images are used. Using a professional is more expensive but many photographers have tiered pricing packages. Before commissioning a professional, always view their portfolios and customer reviews. Check that they have the right specialism and the style of their work is suitable for your needs.

Other things to consider

- Decide how many images you need. Consider the format – landscape/ portrait, whether you require detailed shots or space to add copy.
- Create a list of subject matter, locations and scenarios. Do you need props?
- Check the availability of those involved and timescales for work and delivery
- How will the final files will be supplied?
- Confirm budget, contracts and copyright

Image libraries

There are many online image libraries available (see [page 15](#)). The benefits of using a stock library are cost, choice and convenience. However, there may be restrictions or conditions placed on usage – known as an image licence.

Rights-managed images are often more specialist, technical or artistic. The image licence will be granted for certain publication criteria and timescales.

Royalty-free images have few restrictions. Once the image has been purchased, you are free to use as you wish. However, others can do the same, so you may find the same image used elsewhere.

Free libraries such as [pexels.com](#), [pixabay.com](#) and [unsplash.com](#) will allow both personal and commercial use for images. These issue a creative commons licence, provided credit is attributed to the author. See [creativecommons.org](#) for more information.

Copyright

When using images created by others, it's imperative to know if you have a permission to use the image. It is the *creator* of the image that holds copyright, although in some cases, the creator may sign over copyright to another party. Using images without permission will infringe copyright law and may initiate a legal challenge. Never use images from the internet without checking permissions.

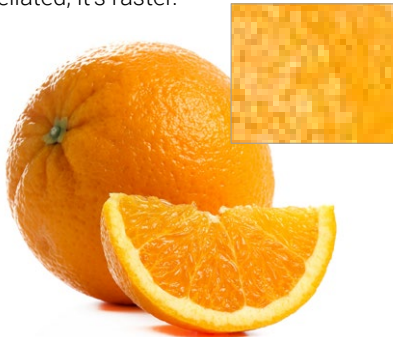
A note about AI

AI image websites, such as Midjourney or Dall-e, offer limitless possibilities to create images. AI is still in its infancy but it will become a growing area of image creation. A word of warning: the way AI sources its content can potentially infringe copyright. Many stock libraries are now including AI generators on their sites which might be a better option.

File types and resolution

Raster and vector images

Raster images are digital files composed of thousands of tiny pixels, measured by 'pixels per inch' (PPI). More commonly (but wrongly) this is referred to as 'dots per inch' (DPI) which is actually a reference to the ink dots created by printers. The larger the number of pixels, the better the image quality or resolution. All digital photographs and some illustrations will be raster images. One way to tell if an image is raster is to enlarge it. If it becomes blurred or pixellated, it's raster.



Vector images are formed using mathematical paths, such as lines, curves and fixed points, with a flat fill or outline. Logos, complex graphics and digital illustrations are often vector files. These can be scaled to any size without a loss of quality.

File types

JPG (or JPEG): This is a compressed raster file that offers a good file size to image quality ratio. High quality JPGs can be used in print.

TIFF: This is an uncompressed raster file. It retains a high quality but it can result in a large file size. These are often used for print.

PNG: This is a type of raster file with a lossless compression (it keeps its data when compressed). PNG files are only useful for screen applications but they have the advantage of being transparent.

EPS: This is a vector file that retains quality at any size. The format has been superseded by PDF but is still used by printers and designers.

SVG: This is a vector file often used for websites. SVGs are written in XML code, meaning they store any text information as text rather than shapes.

Resolution

The required resolution of an image will depend on its usage and the balance between quality and file size.

For print, images need to be 300dpi at 100% of the final printed size. So a small image, even if it is 300dpi, cannot be scaled up and printed at A4 without a loss of quality.

Web images are often standardised at 72dpi, even though screen resolutions vary. This keeps file size low which improves a website's load time and overall carbon footprint.

Accessibility

Earlier, we discussed the capacity of images to communicate concepts and emotions and how they can translate complex data into a simpler visual form. However, for those with visual impairments who depend on digital assistive screen-reading technology to access websites and documents, this information can be lost. To ensure maximum accessibility, it's recommended that alternative text descriptions (alt text) are assigned to visual content.

Broadly speaking, images fall into two main categories – informative or decorative. To decide whether an image needs an alt description, the emphasis here is on 'why'. Is the image essential to the understanding of the page? If so, explain the image accurately, concisely, and in context. If not, mark as decorative by leaving the alt tag description as blank (alt="").

Informative visual content

Examples include:

- **Pictures, photos and illustrations** – these can contain information, express concepts or emotions. The text should accurately describe the image.
- **Links and buttons** – alt text should indicate the destination of the link or the function of the button.
- **Graphs and diagrams** – these are often complex images where simple alt text might not be sufficient. Within the written page content, there should be a full description of the graph or diagram – for example, as bullet points.
- **Image maps** – this is an image divided into selectable areas with links to elsewhere. Alt text is needed for both the image tag and the link destinations.
- **Videos** – descriptive transcripts should be provided if the video content contains visual information.

Top tips

- Use punctuation and keep alt text short. Aim for no more than two sentences or 100 characters.
- There's no need to use 'image of' or 'graphic of' as the screen reader will indicate it's an image. The same applies to 'link to'.
- Don't include extra information within the alt text that's not available elsewhere on the page.
- Avoid images of text. If this is not possible, full copy should be available in the alt description.
- With frequently repeated images, such as logos, only include the information once on the page, then mark further instances as decorative.

The Worldwide Web Consortium (W3C) has further guidance and a decision tree that can help with best practice. <https://www.w3.org/WAI/tutorials/images/>

Resources

Commissioning professionals

British Institute of Professional Photography
<https://www.bipp.com>

The Artworks
<https://www.theartworksinc.com>

Central Illustration Agency
<https://centralillustration.com>

Behance
<https://www.behance.net>

Image libraries

Getty Images
<https://www.gettyimages.co.uk>

Alamy
<https://www.alamy.com>

Shutterstock
<https://www.shutterstock.com>

Adobe Stock
<https://stock.adobe.com>

istock
<https://www.istockphoto.com>

Free or Creative Commons

Unsplash
<https://unsplash.com>

Pexels
<https://www.pexels.com>

FlickrR
<https://www.flickr.com>

Freepik
<https://www.freepik.com>

Pixabay
<https://pixabay.com>

Free images
<https://www.freeimages.com>

Nappy
<https://nappy.co>

Age without limits
<https://www.agewithoutlimits.org/image-library>

The Noun Project
<https://thenounproject.com>

Humaaans
<https://www.humaaans.com>

A brief guide

Other guides in the series:

Colour

Typography

Design

Accessibility

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