

Moving images

These types of image show reality through movement. The most common media are film, video and computer resources. The movement we see in these images is not real. It is the optical effect caused by a sequence of still images moving in front of our eyes. We perceive movement if there are at least 16 images per second, but to make it look real, 24 images per second are used in cinema and 25 in television and video.

5.1 Audiovisual narration

Still and moving images have certain narrative and expressive resources in common, as both of them work in two dimensions with different frames, points of view and viewing angles. However, moving images have the added dimension of time.

A. Montage

To tell a story we have to reduce it to a limited time. So, the real time in which events occur has to be manipulated, and events are accelerated or delayed. This is **filmic time**.

We can classify the different possible results by frames or by narration.

BASIC STRUCTURE OF CINEMATIC LANGUAGE		
ELEMENTS	FIXED SHOTS	MOVING SHOTS
<p>Sequence: Part of a film that contains the complete narration of a specific action. The duration varies according to the importance of the action in the script.</p> <p>Scene: Portrays the action that takes place in one place at one time.</p> <p>Take: The recording obtained from the moment the camera starts operating to the moment it stops. Several takes are usually made of each scene from different angles.</p> <p>Shot: The immediate image of each action.</p>	<p>Close-up: Used to record a detail, such as a flower or a person's face.</p> <p>Medium shot: Typically used to show people from the waist up, although there is a variant, known as the American shot, which shows people from the knees up.</p> <p>Long shot: Used to show people in their surroundings. It is usually used so that the audience knows where the scene is taking place.</p>	<p>Travelling: This describes shots where the camera follows a person or object as they move from one place to another.</p> <p>Panorama: Shows a general view of the scene. It is filmed by moving the camera from right to left.</p> <p>Crane: This shot is filmed by a camera on a crane that is lifted to record an aerial view showing the scene from above and in every direction.</p>

By the scale and duration of the frame:

- **Analytic.** Close-up, closed frames that emphasise expression and psychology. This creates a fast rhythm in the sequence. It is appropriate for representing action.
- **Synthetic.** Distant, open frames. This gives a more complete view of reality, the space and surroundings.

By the narration as a whole:

- **Linear.** A continuous chronological sequence of events.
- **Parallel.** Two or more separate scenes take place simultaneously.
- **Alternate time.** The narration goes to a time in the past or future to tell the story.



Analytic montage. Stills from *Battleship Potemkin*, 1925.



Alternate time montage. Still from *Back to the Future*.



10. Analyse the Odessa Steps sequence in the film *Battleship Potemkin*. What type of shots are used in each still?

These images represent a moment in reality. They show actions that are fixed in time and space and they use a set of resources that add expression to a narrative.

4.1 Expressive and narrative resources

The artist's intentions give images purpose and meaning.

Shots, or frames, are captures of images where we select the distance and angle from which we show a scene, using the human figure as a point of reference:

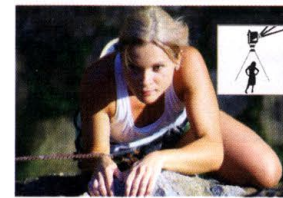
- **Descriptive.** These shots are distant and open, emphasising the landscape over the people. They can be extreme long shot (ELS), long shot (LS) and full shot (FS).
- **Narrative.** Here, the most important thing is what is happening. These shots are used for action and dialogue. They can be medium shot (MS) and American shot (AS).
- **Expressive.** These shots are from a short distance and they are used to highlight the expression and feeling of the person. They can be close-up (CU) and extreme close-up (ECU)



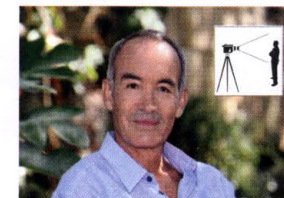
Different shots.

Point of view is the viewing angle from which you can draw, photograph or film a sequence or shot, depending on how high the subject is compared to the viewer:

- **Aerial.** Seen from above. The point of view is vertically above the subject. It creates a sense of space.
- **Eye-level.** The image is created roughly at the same height as the people.
- **Low-angle.** The action is observed from below. It creates a sense of power in the person.
- **Dutch angle.** The point of view is tilted to create an unbalanced or uneasy image. It creates a sensation of action and movement.
- **High-angle.** The action is seen from above at a slight angle. It may suggest submission or a subjective point of view.



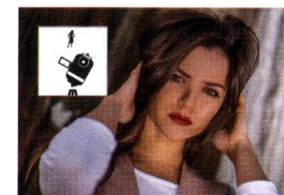
Aerial.



Eye-level.



Low-angle.



Dutch angle.



High-angle.



6. Select a few images from magazines and newspapers and classify them according to the point of view and the type of shot. Specify the artist or photographer's purpose in each case and explain if you agree with the choice of type of shot and point of view.

5.2 Cinema

Cinema is the projection of a continuous sequence of still images on a screen that appears to show moving characters, which audiences can watch without moving from their seats.

It uses audiovisual language which combines image and sound to convey a message.

A. Cinematic genres

Films can be classified according to subject and narrative style.

- **Adventure.** Dangerous situations in exotic places, often mixed with fantasy and romance. Subgenres include war adventure, comic book characters and car races.
- **Comedy.** Silent cinema was one of the first types of cinema. Comedies have happy endings and portray funny situations.
- **Drama.** It is a type of narration that presents a character's social or emotional conflict.
- **Action.** Spectacular images with impressive special effects give action films their dynamism. They often portray a moral conflict using stereotypes like heroes, villains and helpless females.



Filming cinema. *The 11th Hour*, USA 2007.

Other genres include: **suspense** (which aim to create tension), **horror** (which aim to provoke fear), **science fiction** (the action takes place in the future or in space), **Western** (with conflicts between law and order and corruption or violence), **noir** (shows crime in the suburbs), **documentary** (the images show reality), **animation** (using images drawn by hand or produced digitally) and **3D** (projected using 3D technology; it may be combined with any other genre).



Western: *Red river*, 1948.

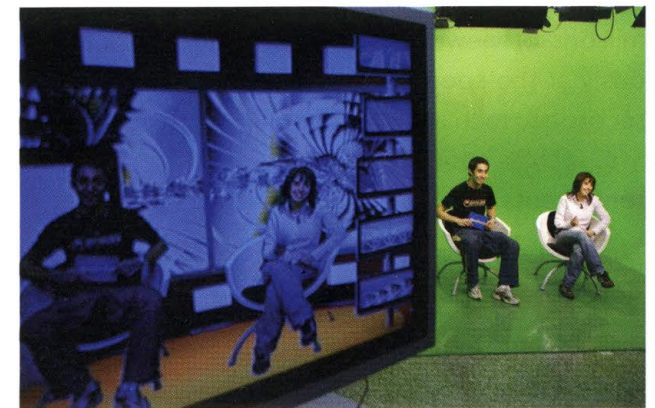


Drama: *Pride and Prejudice*, 2005.

5.3 Video

Video has several technical and expressive features that differentiate it from cinema:

- **Superimposition** of graphics or text over the images.
- **Manipulation** of images through two procedures: transition from one image to another and chroma-key. Transitions are a visual effect, also known as wipes, where one scene disappears while a new one appears. Chroma-key, also known as green screen, is the insertion of one image on top of another at the same time, so a figure appears with a different background.
- **Decomposing** the image into pixels, dividing the screen into subscreens or multiplication of images in a scene.
- **Re-recording** on a single magnetic tape, without too much deterioration of the image, as video is recorded by an electromagnetic process rather than a photochemical one. Today, videos are published on websites like YouTube and Vimeo with different reproduction formats.



Chroma-key.

5.4 Television

Along with radio, press and film, television is another mass medium that evolved during the 20th century. In 1929, the British Broadcasting Corporation (BBC) was the first to broadcast black and white images. Spain's Televisión Española (TVE) began in 1956.

Analogue television has gradually disappeared and been replaced by digital television, which encodes signal in binary form, and makes it possible for the consumer and the producer of television content to interact.



A. Narrative qualities

The greatest advantage of this medium is that millions of viewers can watch images simultaneously at the speed of light. These images can be recorded, such as reports or films, or transmitted live, such as sports, cultural programmes and current events.

The narrative qualities that are specific to television are:

- The viewing angle is narrower than in cinema, so wider shots need to be used to capture figures.

- Television is capable of **immediacy** in visual language: This is the only visual medium capable of recording and broadcasting what is happening straight away.
- The **rhythm of the sequences** is created by the changing shots, not by the montage in post-production.
- **Multi camera production** means it is possible to film in or out of the studio so as to have several points of view of a single action.
- Its language is **fragmented**, and arranged into blocks (advertising, topics, episodes). As we 'zap' between channels, and as adverts interrupt the programmes, we see reality broken into chunks.

B. Types of television

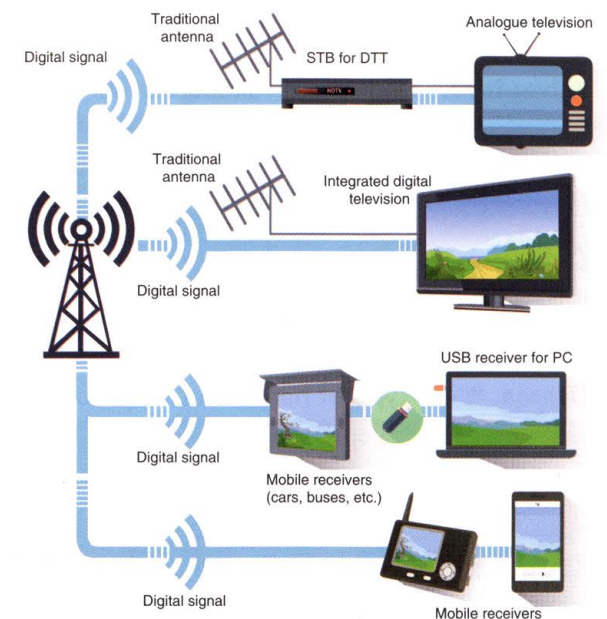
Television can be classified according to its means of transmission:

- **Terrestrial broadcast networks.** Digital terrestrial television (DTT) which broadcasts several programmes or channels at the same time in normal definition.
- **Satellite networks.** Digital television transmitted by geostationary satellites such as Intelsat, Eutelsat, Hispasat or Telecom. Satellite networks make it possible to broadcast events directly.
- **Fibre optic networks.** This is digital television which is transmitted through fibre optic cables into people's homes.
- **IP networks.** Internet Protocol networks do not need satellite dishes because viewers receive TV signals through their telephone wires.

ADSL is an example of an IP network that provides a faster connection as well as the transmission of hundreds of channels.

Digital television increases the signal compression system, improves image quality (16:9 format) and sound quality, and provides more channels and interactive services, including catch-up and on-demand TV, electronic TV guides, multi-language subtitles and connection to the Internet.

DIGITAL TERRESTRIAL TELEVISION



Types of television.

YOUR TURN

11. In groups, debate on the different types of television programmes and how audiences influence some of them. Prepare an outline in advance with your team summing up your ideas.

Advertising

Advertising aims to communicate an advertiser's message to a large number of people using the mass media; that is to say, using an impersonal form of communication. Since the first half of the 20th century, a massive amount of information has been transmitted to the public through the press, radio and television. Advertising is constantly present in today's society and uses the mass media to reach a large number of people.



Advertising.

6.1 Mass media

Advanced industrial societies have developed **means of communication** that can send messages to a large, heterogeneous public.

A. Graphic and visual media

These are media types with no sound support that communicate ideas through non-moving graphic images.

The press is a means of mass communication that has traditionally used the physical support of paper to send its message to its readers. Nowadays we can find it on the Internet through digital editions. It is cheaper than television.

- **Newspapers** are publications that are released to the market at fixed intervals of time, usually every day or weekly.
- In **magazines**, advertisements can use high quality photographs. These appear for a longer time than in newspapers because magazines are released weekly, twice-weekly or monthly.

Merchandising on products was originally used to give an element of surprise. These inserts are logos and brand names usually found on clothes and accessories, such as t-shirts, rucksacks, belts and sports shoes.

Direct advertising means personalised advertising directed at chosen groups of consumers, such as a neighbourhood or a group of professionals.

Outdoor advertising uses places like buildings, roadside billboards and street furniture as a means of communication



Merchandising.

B. Sound media

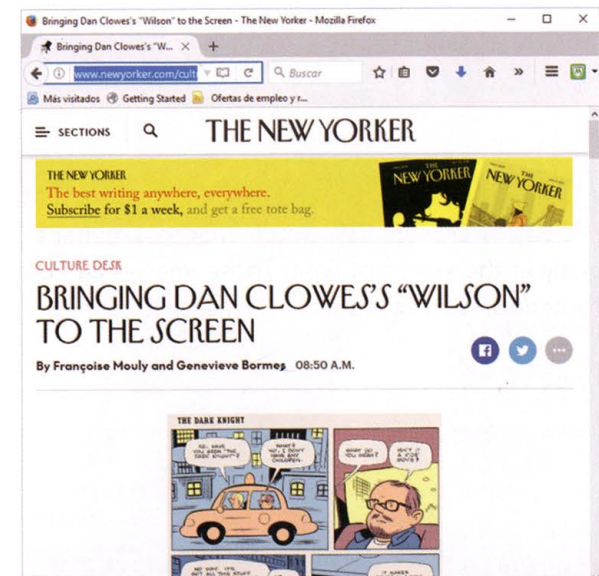
Radio is a quick medium to record and broadcast. Advertisers use it because it is cheaper than others. The main types of radio adverts are commercials and programme sponsorship.

C. Audiovisual media

These publicity announcements or spots are brief messages that give information about a product or service in twenty, thirty or sixty seconds. Advertisers mainly insert their adverts in television and film.

D. Internet and e-mail

New means of advertising have emerged which use the Internet as their means of distribution, including marketing e-mails, pop-ups and banner ads.



Banner.

Billboards

Companies need to communicate and attract attention, and billboards were invented to meet those needs.

Billboards are a special area within graphic design. The term includes any printed document bigger than A3 size which uses advertising techniques to make the viewer understand, and remember and act on a message.

The message should be quickly understood, with clear, concise and relevant information about the product or idea. The composition gives priority to the visual elements or texts that form part of it. They have an **informative and exhortative function**.



Visual metaphor.



Analogy.

A. Images

Depending on how and where they are used, images may be photographs with a high degree of symbolism. Alternatively, illustrations can be used for a more informal effect. Visual methods that may be applied are:

- **The visual metaphor.** This method replaces certain objects with other similar, more attractive ones.
- **Analogy.** Uses two elements together to establish a comparison.
- **Personification.** Attributes human qualities to objects and animals.
- **Hyperbole.** Exaggerates a product or an idea to make it stand out.



Personification.



Hyperbole.

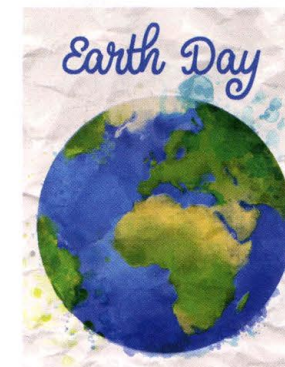
B. Text

The text and the image usually complement one another. Each one may have a different function with respect to the other:

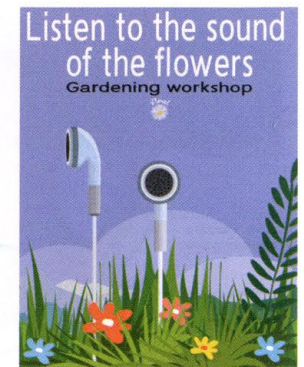
- **Anchorage function.** The text specifies the meaning of the image, and without it, the image would mean something else.
- **Relay function.** The text completes the meaning of the image and provides more information. The text can be organized in 3 parts:
 - **Headline.** A brief phrase which sums up the advertising message.
 - **Body of the text.** Explanatory text providing information about the product.
 - **Wrap-up.** The brand logo, slogan or claim.

These resources use different media to give relevant information about a product or idea, but they must obey the following principles:

- The information must maintain a logical reading order.
- The information must appear in small, independent blocks.



Relay function.



Anchorage function.

6.2 Expressive resources

Advertising aims to offer a product or service to a specific audience, that is, the target market, which includes both existing and potential consumers. The advertiser may be a company or an organisation.

The advertiser gives some basic information, known as a briefing, to the advertising agency to start working with. It explains what the client wants to achieve.

- The **size** of an advert or the physical space that it occupies sets its power position and creates a visual impact.



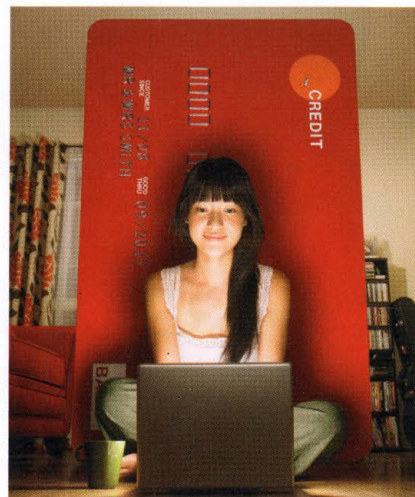
Outdoor advertising.

- **Colour** is used as a sign that may identify a brand, represent a concept, or express a feeling.



Colour as branding.

- **Advertising** rhetoric employs literary devices like **personification** (the attribution of human qualities to an object), **comparison** (two objects with similar or different qualities are presented), **metaphor** (an object appropriates the qualities of another), **metonymy** (an object is represented by one of its parts or attributes), **parallelism** (a comparison between two elements), **ellipsis** (an element is omitted because it is implied) and **hyperbole** (using exaggeration to indicate a product).



Advertising rhetoric.

A. Stereotypes

Stereotypes are images, ideas or representations that one social group has about another. They are based on unchecked generalisations. Advertising contributes to the creation of social, cultural, racial, sexist and ageist stereotypes.

Women are often represented in a sexist way: They are often given very strict roles as the target for cleaning or beauty products. Men are represented as having a dynamic, aggressive, dominant or capable character. Advertising shows the young as dynamic, happy and with a lot of purchasing power.



Female stereotype in advertising.

YOUR TURN

12. In pairs, critically evaluate the adverts on this page and present your evaluation to the class. Focus on the size, the colours and the rhetorical resources employed, and explain if they have been selected with any specific purpose or not. Do you think these adverts contribute to any stereotype?

Multimedia language

The word multimedia refers to systems that use several means of expression, combining text, images, animation, sound or video. This model enables interactive communication, which means the user becomes a participant.

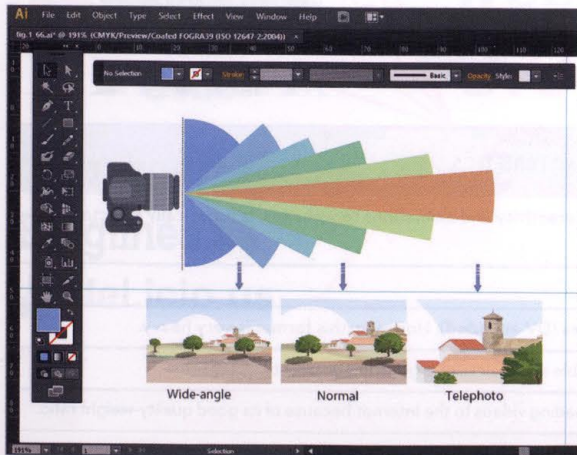
7.1 Digital image

Computer resources and digital cameras have made other types of photography popular. There are two basic types of computer programs that use digital images: vector programs and bitmap programs.

A. Vector programs

These are programs that work with objects that are defined by vectors to create high-quality drawings (rotating pictures, transforming them, flipping them, etc.).

Because they primarily use flat colours, it is difficult to achieve realistic gradation effects with these programs. The files made with these programs are usually very small.



Vector image.

B. Bitmap programs

Pixels are the smallest digital unit of an image. Pixels register the exact qualities of colour, tone and light. The amount of pixels determines the resolution of an image, which is measured in pixels per inch (PPI).



We choose different resolutions depending on how we are going to use the picture. If you want to upload it to the Internet or look at it on a screen, you can use a resolution of 72 PPI. If you want to print it, you need a higher resolution like 200 or 300 PPI.

Digital images can be stored as digital files in different formats. The most common ones are:

- **GIF.** This is an ideal format for small images with flat colours. It can be used online and it can have a transparent background.
- **PNG.** This is a bigger alternative to GIFs, which allows 24 bits of colour.
- **JPG.** This format allows up to 16 million colours. It is ideal for photos with continuous colour gradients. You can compress the image and reduce its digital size.
- **TIF.** Stores high quality images without losing detail. It can be used if you want to print the image.

Digital photography is encoded as binary digits or bits with a value of 0 or 1. We can define the colour depth depending on the number of bits that encode the colour of each pixel. These are some of the different colour formats:

- **Monochrome.** It has just 1 bit and the image is made up of pure black and white.
- **Greyscale.** It has 8 bits and 256 shades of black (grey).
- **Indexed colour.** It has 8 bits and the palette has 256 colour shades. It is often used in multimedia applications.
- **Duotone.** It uses greyscale images but with an added colour.
- **True colour.** It works with the three colour channels (RGB) and 24 bits, 8 per channel. This is the standard colour format for computer images.



Monochrome.

Greyscale.

Duotone.



Indexed colour.

True colour.

7.4 Multimedia and Web

The **World Wide Web** is based on hyperlinks that take us from one website to another or to another page on the same site. Tags let you format the text and combine it with other multimedia elements. This is **HTML** (Hypertext Markup Language).

Websites can store all kinds of information and may contain text, video, images and other applications. There are free platforms that let you design your own website using ready-made templates.

You can also find communicative spaces like social networks, blogs, wikis and interlinked multimedia services that aim to facilitate the exchange of information and collaboration between users.



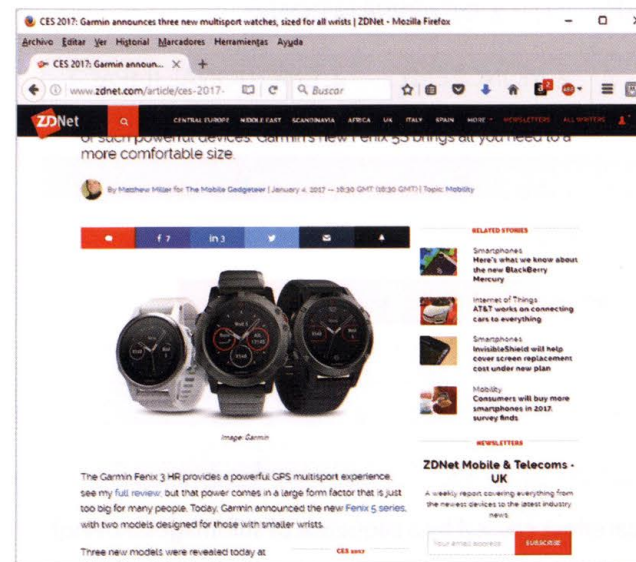
Web 2.0.

A. Blogs

Another form of communication that is widely used online is blogging. Bloggers can publish any kind of information, and readers can communicate with them through the comments function.

The most popular hosting sites for blogs are WordPress and Blogger. They have got some advantages. They are free, they offer templates for blog creation and design, you don't have to install any software, and you don't need any prior knowledge to start blogging with them.

In blogs, writers upload information in the form of posts that are displayed in reverse chronological order, with the last article uploaded in first place.

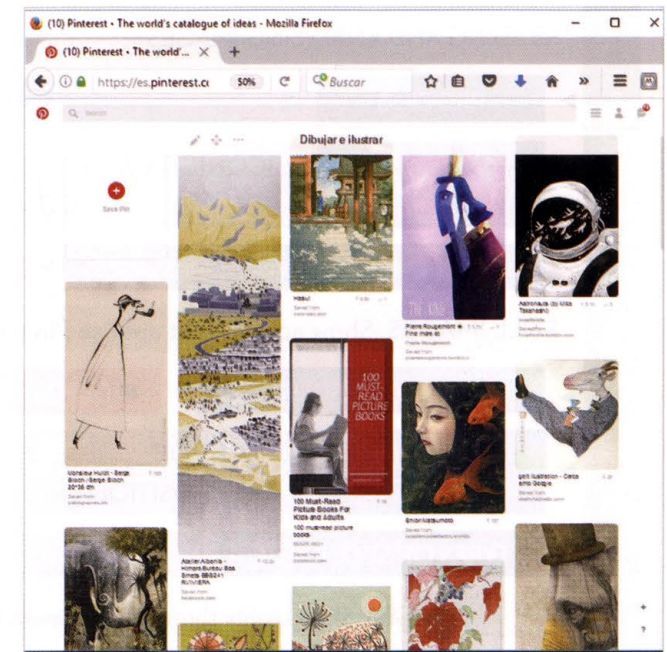


<http://www.zdnet.com..>

B. Social networks

In recent years, the Internet has led the way: Both with the publication and reproduction of videos and also with social networks as a way of sharing videos, contributing to the spread of multimedia content such as audios, photos and sounds.

Here too, links and hypertext connect pages with each other. Examples of how these resources are shared can be found on Pinterest and Instagram, where multiple communications can be made as several people are connected at the same time.



Pinterest.

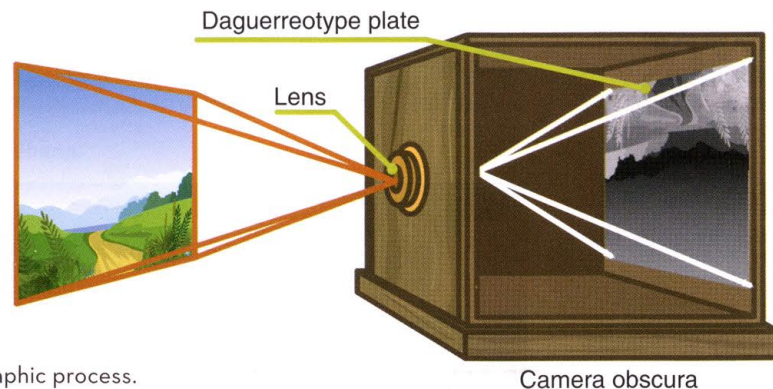
4.2 Photography

In 1826, Nicéphore Niépce was the first person to capture a still image. He used light-sensitive chemical products and a camera obscura, a lightproof box with a small hole that lets light pass through from the objects to its back wall. This camera has to stay still for a long time, which is the **exposure time**.

A set of lenses captures the light and directs it to a support with photosensitive emulsion that reacts by turning black. This is the **negative**.

Although photography allows us to capture reality, it also lets us interpret it creatively and freely. For this reason, photography has special characteristics that make it a valuable means of visual communication:

- Its ability to quickly capture something specific and unrepeatable.
- Its ability to act as graphic proof that an event took place.
- Its versatility when manipulated for artistic purposes.



Photographic process.

Camera obscura



YOUR TURN

8. Explain the main differences between the photographic process in the 19th and 21st centuries. Follow this structure:

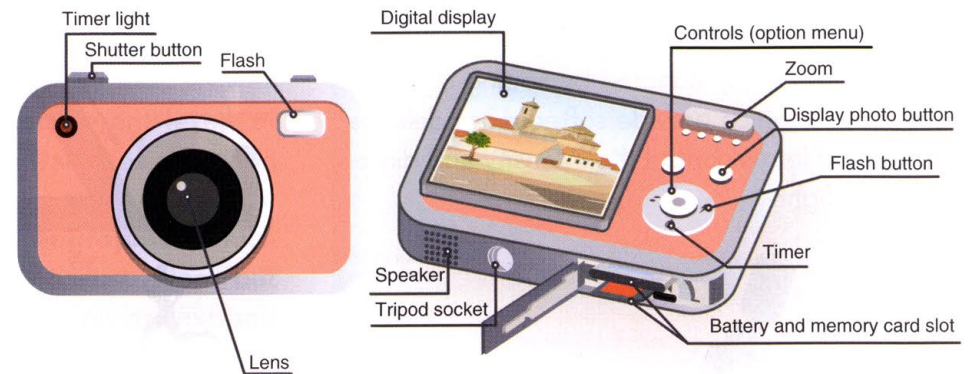
In the 19th century taking photographs was _____, but in the 21st century it is _____.

In the 19th century cameras were _____, but now you can take a photo with _____.

A. Cameras

Cameras are basically made up of a convergent lens, which the light passes through, and a closed chamber, where the image is collected, called the camera body.

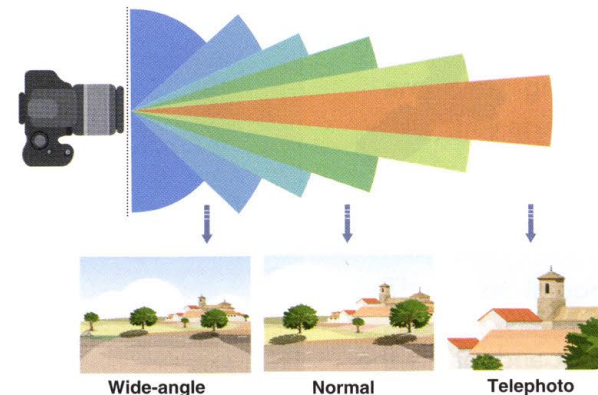
Cameras may be analogue, which means the image is formed on photo-sensitive film, or digital, which means the image is stored on a graphics card. We can also distinguish whether they are compact, which means the lens is fixed to the camera body, or they have interchangeable lenses.



Parts of a compact camera.

B. Lenses

Lenses vary in terms of their viewing angle. They may cover a wide space or focus on a small detail:



Viewing angle of lenses.

Wide-angle:

Covers angles greater than 60° and is used to take photographs of wide scenes. It distorts perspective.

Normal:

Covers between 50° and 60° and it is similar to human vision. It is the most common.

Telephoto:

It covers a view of 30° and is used to magnify a detail of the scene. It leaves the background out of focus.

In **composition**, we need to take certain rules into account in order to draw attention to the image's focal points:

- **Landscape or portrait.** We can choose a horizontal or vertical format, depending on the subject or the action. Landscape is best for showing the surroundings or a group of people, and portrait is best for people on their own.

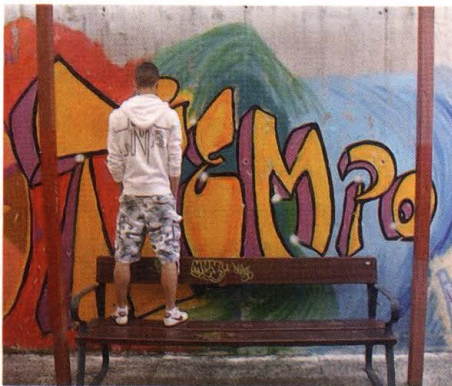


Landscape format.

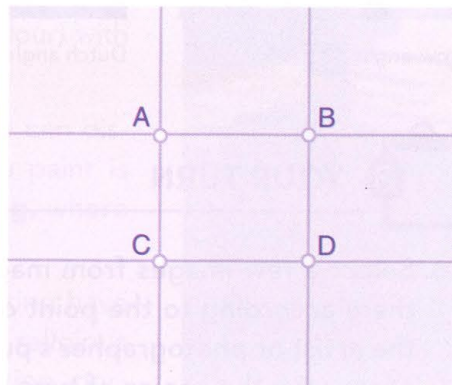


Portrait format.

- **Rule of thirds.** This means mentally dividing the image into 9 equal parts (2 vertical lines and 2 horizontal lines) and placing the subject at one of the points where those lines cross, which is where the visual attraction is greatest.



Rule of thirds.



- **Rule of the horizon line.** If we divide the image into three horizontal bands of equal height, the horizon line should match one of those dividing lines, depending on whether we want to emphasise the upper or lower part.

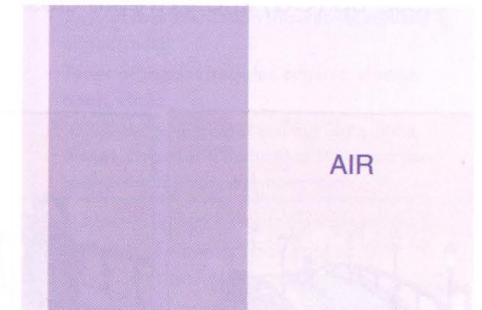


Rule of the horizon line.

- **Rule of space.** The empty space next to the subject of our image should be bigger than the space the subject occupies, so that the image has 'air'. If the space is behind the subject it links it with the past, and if the space is in front, it links with the future.



Rule of space.



YOUR TURN

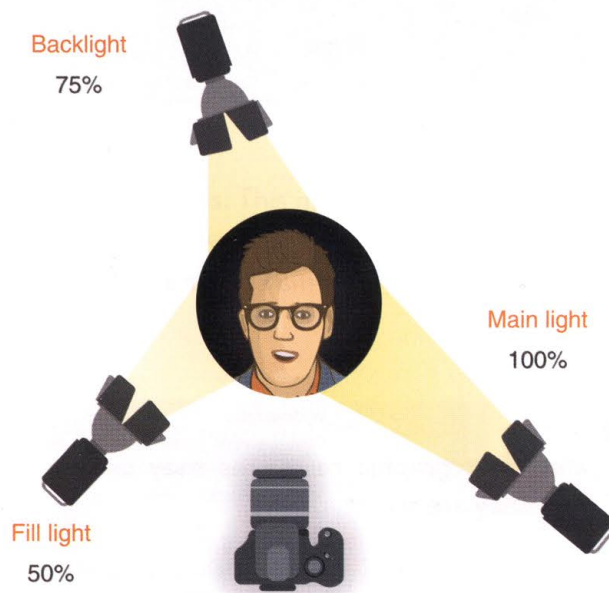
7. Find an image that doesn't follow the rules of composition and change its composition applying them. Do you think you have modified the reading of the image? Discuss it with your classmate.

C. Light

Portrait is one of the most expressive types of photography. Using light, its quality and direction, we can create different atmospheres and focus attention on part or the whole of the object.

One basic lighting method is **three-point lighting**. A key light is placed on one side of the subject to give depth, a fill light with less intensity is used on the other side to soften the shadows and a back-light separates the figure from the background.

This method can be adapted by adding diffusers or reflectors, which provide softer, more delicate lighting and let us control the intensity and direction of the light.

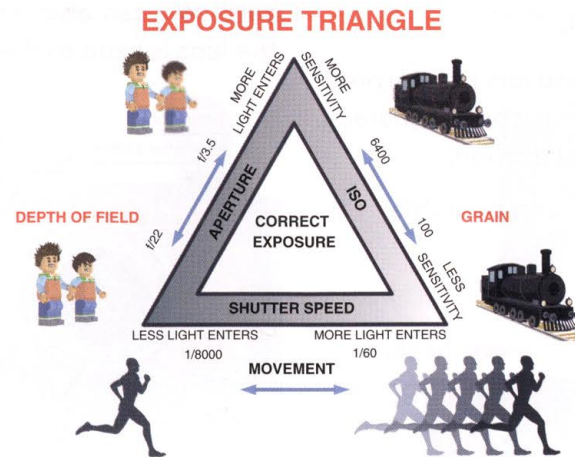


Three-point lighting.

Hard light increases the contrast and makes the subject seem closer, whereas diffused light reduces the detail and creates a sense of distance.

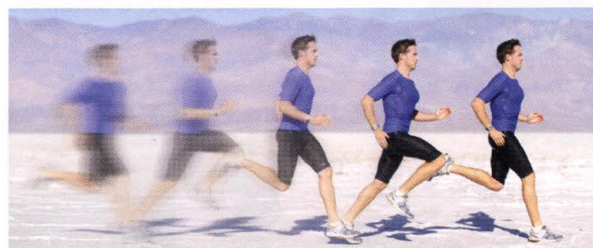
D. Movement

There are three things to control in a photograph: the **aperture**, the **ISO sensitivity** and the **shutter speed**. These factors let us adapt our technique to the light conditions and help us create a sense of movement.



Exposure triangle.

Slow shutter speed creates the effect of a figure in motion, while **fast shutter speed** freezes the movement.



Shutter speed scale											
2	1	2	4	8	15	30	60	125	250	500	
2Seg.	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	
A support is needed to fix the camera's position				Use a steady hand if you are not using a support				Safe speed			

Shutter speed.

We can photograph movement by making use of certain situations like, for example, taking pictures at traffic lights, or photographing objects moving at different speeds, or using the **panning technique** which involves following the subject with the camera so that the background of the photo is blurred but the figure is clear.

E. Photomontage

Information technology allows us to apply traditional techniques to digital photography and create impressive photomontages.

With photo editing programs like Adobe Photoshop® or Gimp® we can work using layers, change the mode and edit different elements of the image.

Here is an example of a composition with several images, layers, duplication, changes in size and elimination of some parts.



FRANCISCO ESQUINAS ROMERA, PHOTOMONTAGE.