

Adverbial Clauses: Photography

READING
TEXT

The word photography means “writing with light”. The concept behind photography dates back to ancient Arab astronomers who observed the sun using a small hole in a darkened room to capture the sun’s light. Leonardo da Vinci used a similar system to project an image of his subject onto paper or canvas as a guide for his drawings. This idea evolved into the camera. The body of the camera provides a darkened chamber into which light is admitted through a small opening (the aperture), projecting an image on to a surface.

In the 18th century, early photography pioneers found that they could briefly capture an image using light-sensitive silver-nitrate. Unfortunately they could not make the image permanent. As soon as the picture was exposed to light, the whole image went black. In 1826, Joseph Niepce came up with the process of fixing, so that the photographic image did not disappear. After this process was discovered, photographs became popular, particularly for portraits. However, every-day people did not actually take the photographs themselves. The process of making photographs was still complicated, messy and expensive.

George Eastman produced the first photographic film in 1885. Before this time, photographic images were captured on metal and glass plates. Eastman’s next invention, in 1888, was a simple box camera containing a roll of film for 100 pictures. When the pictures were all taken, the owner returned the entire camera to the Kodak plant for development. In 1900, Eastman invented the Box Brownie. This was a simple camera that sold for \$1. The rolls of film cost only 15 cents. As soon as the Box Brownie was introduced, photography became a popular past time for every-day people.

While Eastman was inventing film and different cameras, other photographers were also trying to improve the quality of the image that the camera captured. Single lens reflex (SLR) cameras were invented by Thomas Sutton in 1861. These cameras used an angled mirror in front of the film to deflect light coming in through the aperture up to a viewfinder. The user can see exactly what the picture will look like. When the shutter button is pressed, the mirror moves out of the way, and the picture is captured on the film.

Intermediate 1 – Reading Exercise 1 – Adverbial Clauses: Photography

Consumers now had cameras and film. However, many people found it frustrating to wait for their pictures to be developed. Edwin Land was a pioneering optics scientist. When he took a picture of his three-year old daughter, she wanted to know why she had to wait to see a photograph. After his daughter asked this question, Land tried to make a film that would develop itself. In 1948 he succeeded with the Land Polaroid camera. In 1972, the process was improved with an entirely dry, light-activated process that could produce instant colour pictures.

The next revolution in photography after Polaroid cameras was the digital camera. Digital photography originated from television camera and video technology and the space industry. Photoelectric cells are used to change light into electrical current of varying voltage. This is then converted into digital form. The use of digital information to record photographs was further developed by NASA and the Pentagon. They used the technology to take pictures from space of the moon and the earth. In the 1990's Kodak and Apple brought the technology to the every-day consumer, with the first digital cameras. Before digital cameras were invented, we had wait for our film to be developed. Now we can see our pictures as soon as we take them. And, with camera phones, we can send the digital pictures around the world instantly.

Today, photography is used every day, by millions of people, to capture important moments and memories. It has also grown into an art. At first, photographs displayed in art galleries were nature photographs and series of pictures from photojournalists. However, with new ideas and new technologies more and more photographers are embracing digital photography, abstract photography, and photography as painting. When they started studying the sun, hundreds of years ago, the Arabs could not have imagined that it would lead to digital photography and a whole new art form!

Underline the ADVERBIAL CLAUSES used in the text. Why is each of them used?

Write a sentence with each of the following words and expressions.

1. **TO CAPTURE** _____
2. **A CONCEPT** _____
3. **AN ASTRONOMER** _____
4. **A CANVAS** _____

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- 5. **A CHAMBER** _____
- 6. **TO PROJECT** _____
- 7. **A PIONEER** _____
- 8. **TO BE EXPOSED**
TO _____
- 9. **AN IMAGE** _____
- 10. **A PORTRAIT** _____
- 11. **TO INVENT** _____
- 12. **TO DEFLECT** _____
- 13. **A REVOLUTION** _____
- 14. **TO CONVERT** _____
- 15. **A VIEWFINDER** _____
- 16. **ANGLED** _____

Answer the following questions.

- 1. Who were the first people to “capture” light? _____
- 2. How did these people capture light? _____
- 3. What problem did early photographers have? _____
- 4. What is the process of fixing for? _____
- 5. What three inventions did Eastman create? _____
- 6. How do SLR cameras work? _____
- 7. What kind of film/camera did Edwin Land
invent? _____
- 8. Why did he invent it? _____
- 9. Where did the technology for digital cameras
come from? _____
- 10. In the author’ opinion, is photography art? Do
you agree or disagree with the author? Why? _____