



Media and Technology:

A History of Mass Communication Through Photography

Why study it?

As a Social Studies 9 student learning and building new literacy skills, it is important to understand the history of media and technology, the difference between the two, and how they work together in order to understand the present relationship between our technology and the ways we communicate today.

Exploring photography as media and the way images are used as tools to share information, influence public opinion, or fight social injustice will help us understand how we can safely and responsibly engage with media and how we can efficiently use technological tools to communicate in an ever-changing online landscape.

Learning outcomes:

Examine how technology can both offer opportunities and restrict possibilities

Develop fact-checking skills as well as skills for examining primary sources

Understand how audiences negotiate meaning

Consider the role BIPOC play in using photography and images for social change

Key historical concepts:

Cause and Consequence

- Photography is a significant factor in causing social change

Continuity and Change

- Change occurs through a series of conflicts and negotiations and is not necessarily positive

Historical significance

- Photographic technologies such as the digital image have caused major historical changes.

Timeline of events:

550 BC -The first known media is theatre, and is produced for a large audience

1000AD-The invention of the camera obscura kickstarts photography as a new media form

1826-1827-the first known photograph is produced

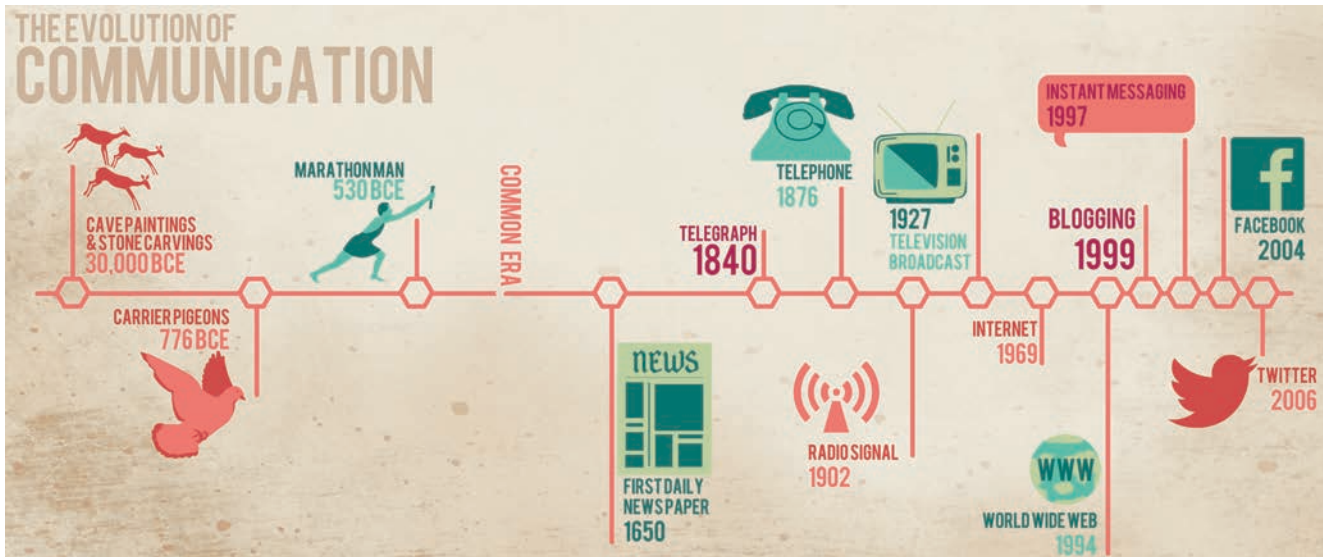
1925- the 35 mm camera is invented and drastically changes photojournalism

19302-1970S-the golden age of photography where photojournalism flourishes as one of the leading forms of news media

1990S-2000S-the 35 mm digital image allows for the immediate sharing of photographs

2004-the advent of social media changes how images are shared and by who

Media and Technology: What's the Difference?



Essential Question

What can we learn from studying media and technology?

Communication. Information. Technology.

Since the beginning of time, humans have been telling stories and sharing information with one another. What may have started as small-scale communication using drawings on cave walls, has transformed into mass communication, with information being shared around the world faster than the blink of an eye.

In order to communicate, tools have been invented to make the process more effective. It is easy to look at the new iPhone that uses face recognition and think that technology is only recently a part of our world. But as long as humans have been alive, technology has also been around. Chances are, in 30 years when your children ask you to buy the latest cellphone, it will look completely different than the one you are using, and may even seem archaic to them.

In today's age, the terms **media** and **technology** are constantly being used together, and sometimes, interchangeably. The words are thrown around when we talk about social media and cellphones, but what is the connection? Is a photograph considered media or technology? And does something as old as a printing press even count as technology?

Glossary

Media:

Organized forms of sharing information, including fact, opinion, and entertainment. Media can include print, digital, and electronic forms of communication.

Technology:

Inventions that address the problems of everyday life using science. In the context of communication, this includes inventions that gather, store, and disperse information.

A Brief History of Media

Imagine waking up in Ancient Greece, taking a nice long stretch, and getting ready to start your morning. No cellphone to scroll through, no social media apps to check, and no internet to get your news. How would you stay connected to your friends? How would you know the latest events happening in your community? And how would you share important ideas?

Believe it or not, humans have been connecting and sharing ideas with one another long before TikTok and Instagram were invented. **Mass media**, a form of media meant to be shared with large audiences, has existed for thousands of years.

In Ancient Greece and other ancient civilizations, dramas were performed for people gathered at amphitheatres and town squares. This is the first known form of media to be broadcast to an audience. Around 868 AD, the first dated book was printed in China. However, due to the low number of people being able to read, the earliest printed mass media was around 1400 AD. That's because, in 1453 the printing press was invented and allowed for large-scale distribution of books.



Ancient Greek theatre masks



Inventor Philo T. Farnsworth with the first T.V.

In the early 1900s, due in part to technological advancements, other forms of media, such as radio, television, and film were introduced. These forms of media became very popular because they provided people both information and entertainment, and it was relatively easier to watch T.V. or listen to the radio than to sit down and read a book.

Toward the end of the 1900s, the World Wide Web was invented, and for the first time, anyone with a website could instantly reach a global audience. The invention of the internet also allowed for breaking news and world events to be shared around the globe in minutes.

Today, the internet is the most widely used form of media. While other forms of media are restricted with the type of information they can offer, or how fast they can provide that information, the internet has no such restrictions. Unfortunately, because of the ease with which anyone can create and share information, there have been challenges with authenticity and reliability of information.



Social media apps from left to right, top to bottom: Skype, TikTok, Snapchat, Youtube, Whatsapp, Instagram

Summary Activities

With a partner...

1. In your own words, define media and technology using the information you have read.
2. Based on your definitions, decide which category each of the following terms belongs to:
 1. Book
 2. iPad/iPhone
 3. Digital image
 4. Instagram
 5. Newspaper
 6. Television set
 7. Youtube
 8. Cable news
 9. Photography
 10. TikTok
3. Oftentimes, technology is painted as positive, constantly improving humanity by making life easier. However, technology does not necessarily equal advancement, and offers both opportunities and restricts possibilities. Take a look at the list above and choose 1 form of media as well as 1 form of technology to consider the following questions: *In what ways is each one restricted when it comes to gathering and sharing information? In what ways does each one provide unique opportunities for communication?*

On your own...

Media is all around us and has a profound influence on what we know, what we think, and how we form our opinions. Because of this, it is important that we have basic media literacy skills. In other words, it is important to understand how to read, write, and think about the information we receive through different forms of media. While media literacy might seem like something you have to “learn” in school, everyone has experience with media literacy in a variety of ways.

1. Brainstorm a list of the different kinds of technology you have personally engaged with throughout your life, both in school and outside of school. Think about when you were a toddler, to kindergarten, and now. Some of this technology will be the same and some will be a great throwback.
2. Brainstorm a list of the different ways you have engaged with media throughout the years. Make sure to think about both digital and print forms.
3. Using your brainstorming, create a media literacy biography using a digital collage format.



Example media literacy biography

The Evolution of Photography as Media

“From the initial stages of the Camera Obscura and its invention in the 1800’s all the way through to the conception of Instagram – photography as we know it today has grown so vastly that it has become a universal medium that is shareable and speaks a thousand words.”

-Antonio Leanza
London School of Photography



Photography is one of the most versatile mediums of our time, and has been an ever-changing form of communication as new technologies have been invented, such as camera phones, and as new platforms have been created, such as social media sites. Photography has the power to document significant events, convey and shape opinions, and cause social change.

Essential Question

Continuity and Change: How has photography changed the way we receive information and news?

Where did it all begin?



Iraqi scientist Ibn al-Haytham developed the camera obscura in the **11th century**



The earliest surviving photograph is by Joseph Nicephore Niepce and was taken between **1826-1827**



The first known colour photograph was taken in **1861** by James Clerk Maxwell



In **1888**, George Eastman invented the first box Kodak camera, which used film with 100 exposures



The Invention of the 35 mm Camera

Prior to the invention of the 35 mm camera, photographers were restricted by the weight and size of their equipment, with some cameras using heavy metal plates and taking up entire rooms. Such factors made it difficult to travel to different locations, limiting photography to mostly indoors.

In the 1910s, German Engineer Oscar Barnack began experimenting with splicing cinematographic 70 mm film into 35 mm film that could be used in still cameras to produce photographs. These experiments would lead to the invention of the first 35 mm camera in 1925, the Leica camera.

Small and relatively light compared to its predecessors, the Leica 1 revolutionized the next generation of photography. The camera made it possible to take pictures of life as it happened and photographers could easily take pictures anywhere in the world. These photographs could be shared with people around the globe, allowing viewers to see foreign lands in print for the first time ever.



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A micro-history of Oscar Barnack

A focus on micro-history is important to help add context to a significant historical event. It provides an opportunity to critically look at social and cultural factors that may have influenced the moment.

Oscar Barnack's experiments did not occur in a vacuum, and included many different elements that eventually led to his invention of the Leica 1.

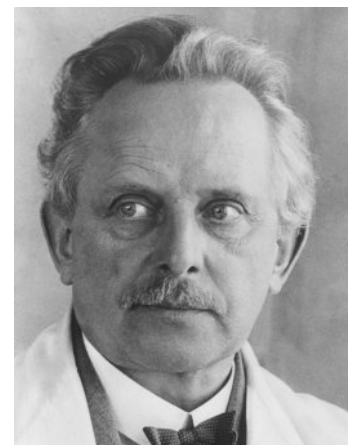
3-2-1 video reflection

Scan the QR code above to watch "Oskar Barnack - A portrait about the inventor of the Ur-Leica". Then, complete the 3-2-1 video reflection below.

3 notable facts that you think were important for the success of his camera:

2 social, cultural, or historical factors that influenced the invention of the Leica 1:

1 thought-provoking question you have after watching the video:



The Rise of Photojournalism

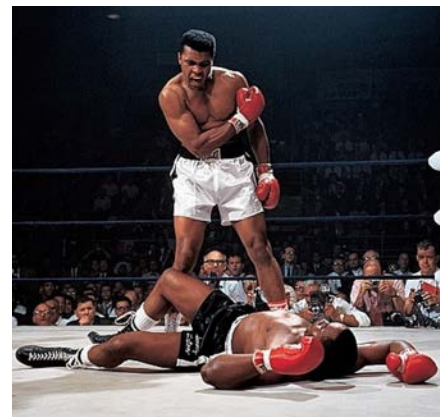
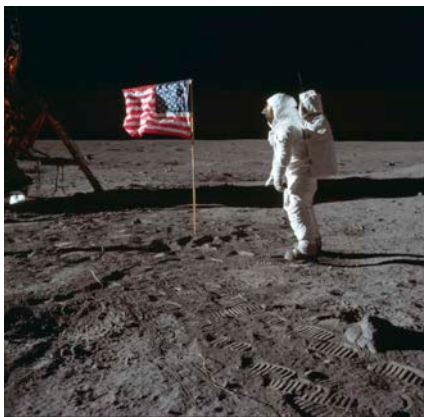
Photojournalism has its roots in war photography, with Roger Fenton first capturing the Crimean War in 1855 and for the first time, bringing the images of the effects of war to a mass audience.

Shortly after, during the American Civil War, photographer Mathew Brady began photographing camp life scenes, with the intention of capturing portraits that could be given to family, if the soldiers did not return home. Because of technological limitations, Brady was not able to shoot photos of his subjects moving, however, he is still recognized as one of the pioneers of war photojournalism for capturing the experiences of soldiers in battle.



1800s war photography was the first example of photojournalism

It wasn't until the invention of the infamous Leica 1 that photojournalism really took off. Between the 1930s through the 1970s, it experienced its "golden age" thanks in part to the compact nature of the camera, making it more portable than ever before. Magazines began using images, rather than words, as the dominant form of storytelling and photo-essays became the most popular means of sharing news on a mass scale. Before televisions were in homes, magazines such as *LIFE* heavily influenced how many people understood the world.



From left to right: A Man on the Moon (Buzz Aldrin), Tank Man (Jeff Widener), Muhammad Ali vs. Sonny Liston (Neil Leifer)

Photographs we consider "iconic" today are those that shaped the way we think, changed the way we live, or simply because they were the first of their kind.

Skill Building: Analyzing Photographs

Essential Question

How can you learn about history through a photograph?

Photojournalism has contributed greatly to the documentation of world events and the human experience since the 1900s, and has produced many important **primary sources**.

Glossary

Primary Sources:

Working with primary sources is essential to the study of history. Primary sources are items created during the time period being studied and include both official documents (government records, newspaper articles, photographs, etc.) and personal items (letters, diaries, photographs, etc.)

Photographs as Primary Sources

Strengths:

- Quickly and concisely inform about people, places, objects, and events
- Provide information that is difficult to convey through written formats (fashion, decor, art, etc.)
- Sometimes record details of everyday life of people that are not captured in written records

Weaknesses:

- People, place, date, and the name of the photographer are often not identified
- May reflect the bias or perspective of the photographer
- Photographs must be studied in conjunction with other evidence. Without context, a photo may not be informative

Photos can be rich primary sources, but they require more than a passive glance. To get the most out of a photograph, the researcher needs to engage with the image and "read" it in a critical way.

5 Steps for Analyzing Images

The 5Ws

- Question the source. Who created it? When and where was it created? What is the source about? Why was the source created?

Context

- Situate the source in space and time, placing it in the wider picture of history. What else was happening at the time?

Exploring

- Examine the details of the image. What is it about? What parts of the image stand out to you?

Reaching conclusions

- Use evidence and observations to develop conclusions. What can the source reveal?

Finding proof

- Compare your conclusions with other primary and secondary sources. Do other sources confirm or challenge your conclusions?

Case Study 1: Why Context Matters

Essential Question

How can you learn about history from a photograph?
Why is context important for meaning-making?

The facts about an image that are found through analysis are important, such as the time the photograph was taken or who the photographer was. Once the basic facts have been established about an image as a primary source, context building and interpretation can begin. A set of facts about an image take on much more meaning and accuracy, when the researcher is able to determine the context of the event.

A Look at LIFE's Famous Kiss

LIFE magazine's V-J Day in Times Square by Alfred Eisenstaedt (1945) is the most famous picture of the 20th century and has become a collective memory of war for many.

In 2016, TIME Magazine named this photo one of the 100 most influential images of all time.

On your own:

Complete the 5Ws for analyzing an image. Make sure to gather the "facts" of the image using the QR code



With a partner:

1. Write a list of hypotheses about the photo. Use these questions to guide you: Who is the young woman and young man? Why does the crowd behind them seem happy? What do you think is happening in this photo?
2. Now learn about the real origins of this photograph.
3. As you read, take notes to answer these questions: Who are the subjects of the photo? What do you think the photographer was thinking when he took this photo? Why do you think that? What major events in the United States were taking place when this photo was taken?
4. Now compare your prediction list with your notes. Discuss any similarities and differences with your partner.



"People tell me that when I'm in heaven, they will remember this picture" - Alfred Eisenstaedt

Case Study 2: How Audiences Negotiate Meaning

Essential Questions

How do images produce meaning? How do audiences negotiate meaning?



"Youngsters just don't understand the exuberance of the end of WW II. That may be the most celebrated kiss in history. Sorry that your lens is so distorted on this moment." -Bernhardt Moore

"Stop glorifying the 'taking' of women against their will. I used to love this statue until I learned the history." -Bonnie Gustow



Obviously you wouldn't do those things today, but it was a different time back then" -Joshua Horne

When it comes to the true message of an image, it is important to remember that audiences negotiate meaning. That means that different people will find different meaning when exposed to the same image because our perspective and how we understand the world depends on who we are- our age, our sex, our gender, our cultural background, and the social environment we were raised in.

The famous kiss—reconsidered

Eisenstaedt's image has been heavily circulated, celebrated, and critiqued. Some view it as a triumph of photojournalism, with the picture capturing genuine celebrations of wartime victory. For many, it incapsulates a monumental moment in history. While still others view the image as evidence of a time where sexual assault went unchecked.

In 2019, a Florida statue of the famous V-J Day kiss was found graffitied with the words #metoo. In 2017, two years earlier, the #metoo movement brought to light a history of sexual assault in Hollywood that had gone unchecked. It quickly grew to include supporters and survivors of sexual assault from all walks of life and came to represent a new era of intolerance toward sexual misconduct and abuse. The graffiti spray-painted on the statue once again brought up questions about what the famous image meant: was it an innocent display of happiness over a war ending, or an unacceptable act of sexual assault?

Reflect

One thing that both photos have in common is that they capture moments in history.

- What significance do historical photographs play in the present?
- Why is it important to understand the context surrounding a photograph?
- How does knowing about a photo's time period and location help you to figure out what is going on?

How the Digital Image has Changed Photojournalism

Essential Question

How does understanding the history of photography help us to understand present uses and misuses of digital photography?



Continuity and Change: Photojournalism Now

Photojournalism has been drastically changed by emerging technologies. In the mid 1990's to the early 2000's, the world of image-making was turned upside down by the invention of the 35 mm digital image. The 35 mm digital image allowed for immediacy, giving photojournalists the ability to share high-quality photographs in seconds.

As social media platforms such as Facebook began to spring up, they allowed digital images to be shared by everyday people on a large scale, changing the role of photojournalists. Many media outlets simply began picking up photo and video footage from social media users, and a tide of content quantity over quality began to build.

Staff photographers began to disappear, and freelance photographers became more common. Some even began to use social media to get their work out and shine a light on topics often ignored by mainstream media. Photojournalists such as Benjamin Lowy began embracing, rather than shunning, the capability of cellphone photography.

In a field where there are strict codes around photo ethics, the digital image has created a challenge for rules around manipulation and editing. While war photography has a history of staged photos, especially due to historic limitations in technology, photojournalists adhere to the rule that scenes must not be staged or manipulated. With digital manipulation technology more common than ever, accuracy is a serious consideration.



The first TIME cover to use an iPhone photograph via Instagram by Benjamin Lowy (2012)

Case Study 3: Fox News' Use of Manipulated Image

In June 2020, as part of their coverage of the Black Lives Matter protests happening in Washington, Fox News published a digitally altered and misleading image of what appeared to be a man standing with a military style rifle in front of a smashed retail store window.

Fox News had no disclaimers that the photograph had been digitally manipulated to combine two photographs taken on separate days in different locations, making it appear as if the scene was playing out at the same time, in the same location.

Photojournalism experts called the image a clear violation of ethical standards for news organizations, which expressly forbids the use of altered photos for news accounts, and states that photos must present events in the moment.

“I think it’s disgraceful propaganda and terribly misrepresentative of documentary journalism in times like this, when truth-telling and accountability is so important. There is no attribution. There is no acknowledgment of the montage, and it’s terribly misleading”
—Kenny Irby, a photojournalism ethics educator



Digitally manipulated image published on the Fox News homepage (2020)

Fact-Checking Guide

Identifying the source of an image

- Can you determine the type of image it is? (An Instagram post? A tweet? An image from a book?)
- Can you determine who created the image?

Assessing the source of the image

- Once you do a quick Google or Wikipedia search, what do you learn about the reputation of the source?

If the image is from social media, there is a second layer of fact-checking that must be done, and includes:

Considering where the image came from

- Is the news source listed? Is the person who posted it or shared it a reliable source?

Evaluating the image based on it's accuracy

- Once you perform a reverse image search, what do you learn about the image's history? Has the image been manipulated or modified in any way? Has the image been remixed or used in a different context?

Why is this important?

In order to be informed citizens, we must develop strong habits when it comes to what images we see on the internet. Fact-checking and questioning images are two habits that develop critical thinking skills.

Images on Social Media

Essential Question

How can we engage with images in a thoughtful and socially responsible way?

In 2004, Facebook launched as the first widespread social media site. This platform allowed people to share digital images, but more importantly, it allowed people to react and have dialogue surrounding digital images. For the first time, individuals had the power to co-create stories and share events from person-to-person, rather than having a select few organizations, companies, or magazines defining, framing, and giving context to events and moments in history.

While social media can be a powerful tool used to share photographs and communicate on a large scale, it can also be used to misinform, manipulate, and spread violent ideas. When engaging with images on social media, it is important to consider the purpose of the image as well as **bias** before you click like, comment, or share.

Glossary

Bias: The favouring of one side, person, or idea over another. People create documents and photographs for a purpose, which means that all photographs, in a way, are biased.

Check your bias!

Ask yourself two important questions:

1. Who created this image? How might their position in society (e.g. gender, race, job) influence what they recorded?
2. How might your position in society influence your reaction to the image? Is it trying to evoke a strong emotion in you?

A Guide to Questioning the Purpose of a Photograph

Think about the image within a broader social and cultural context

- Does it intend to inform, harm, mislead, influence, or entertain?

Consider other possible interpretations of the image

- Check to see what other information is being shared about this image. What other perspectives does it hold?

If the image is from social media, there is a second layer of questioning that must be done:

Imagine why different people or groups might share the image.

- What might people be trying to communicate about themselves or their beliefs by sharing it?

With a partner:

Scan the QR code to watch a video on the power of the digital image and social media. Discuss what images hold the most influence. Why?

On your own:

Create a poster using Canva that others can use to educate themselves on what clues to look for when deciding if an image is reliable to engage with. Include 4 fact-checking and purpose questioning tools. Include icons and a title.



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Case Study 4: Fighting Social Injustice with an Image

Essential Questions

How have BIPOC historically used photography as a tool for social change? How can images be used today to influence change?

Photography as evidence of injustice

During the early stages of The Black Civil Rights Movement in the 1950s, civil rights activists faced a major challenge: How best to persuade black people into activism and inspire white people to support the cause of racial equality? Although there were various approaches, it was clear to many that images could be powerful in convincing the public of the severity of the problem of racism in America.

Photographs were used to report news, document significant events, or offer proof of violence. Images helped shed light on the reality of racism in America, by offering a new narrative and sharing stories that would not otherwise be shared. Leaders of the movement understood the power of photographs, far more than words alone, to influence public opinion by exposing the ugly, brutal, and deadly side of racism and segregation.

The Picture of Emmett Till

In September 1955, fourteen-year-old Emmett Till, who was on summer break and visiting family in Mississippi, was brutally murdered by white supremacists. His body was so badly mutilated, he was unrecognizable. His grieving mother, Mamie Till Bradley, put in the hard work of reaching out and distributing to newspapers and magazines a gruesome black-and-white photograph of her son's mutilated corpse. The mainstream media rejected the photograph as inappropriate for publication, but Bradley was able to turn to African American magazines to share the image.

Bradley's brave and selfless gesture represents a key turning point in the civil rights movement. The publication of the photograph in Jet and other black magazines helped transform the modern movement, inspiring a new generation of African American activists to join the cause. It also emphasized the power of images to jolt Americans, both black and white, out of their state of denial or complacency.



Jet Magazine 1955 story on Till's murder

"I couldn't bear the thought of people being horrified by the sight of my son. But on the other hand, I felt the alternative was even worse. After all, we had averted our eyes for far too long, turning away from the ugly reality facing us as a nation.

Let the world see what I've seen."

-Mamie Till Bradley

Summary

“The best photography is a form of bearing witness, a way of bringing a single vision to the larger world.

-TIME Magazine

In Summary

Throughout history, humans have been striving to communicate with one another, and by doing so, have invented powerful technologies and forms of media. In the last 250 years, photography as a medium and the camera/image as technological tools have greatly shaped how we receive information and how we understand the world because of this information. It is important to consider the history of these two forces in order to comprehend key historical concepts such as:

Cause and Consequence:

New technologies have been both the cause and the consequence of change. The field of photojournalism has shifted, grown, and adapted to inventions such as the digital image. Both media and technology rely on one another, and are shaped by one another.

Continuity and Change:

Communication through photography has seen gradual as well as drastic changes, that have not always been positive. Technology has also experienced major changes as digital inventions have caused major upheavals to photojournalism.

Historical Significance:

Both photography and photographic technologies have significantly altered the course of human history. Yet, they have also allowed for many of history's significant events to be documented for analysis, recording, and studying.

Media and technology as tools for change

As social media continues to dominate the ways in which we communicate, now more than ever, it is important to understand the power media and technology hold in causing social change in the world. As our lives are filled with more and more screen time, and more and more images, it is pertinent to build skills around engaging with photography. Understanding how to gain context, and how to use primary sources is key. In a world where fake news dominates, fact-checking skills and questioning skills are more important than ever before. Above all else, it is important to remember that every individual has the power to use images for positive or negative change, by making responsible choices about clicking, liking, and sharing.