
UNIT 9 MULTIMEDIA AND HYPERMEDIA AS TOOLS OF RESEARCH

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- 9.5 Multimedia and Hypermedia as Research Tools
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9.0 OBJECTIVES

After reading this unit, you should be able to:

- Know how to use multimedia and hypermedia as research tools through specific examples
- Explain the usage of multimedia and hypermedia in both collection and presentation of data
- Discuss the role of multimedia and hypermedia in building visual research method.

9.0 INTRODUCTION

In this unit we will discuss how multimedia and hypermedia are increasingly being used to facilitate research. In particular we will look at its usage in sociology and social anthropological research. As much as these mediums are used for research they can also be used as learning tools, not only for the researchers but also their interlocutors and informers in the field.

We begin our discussion by getting an understanding of what multimedia and hypermedia are all about. Internet and digital technologies have become part of everyday life and even without realising we use a variety of media to navigate through everyday life. It is only natural that various media technologies make their way in to aiding research.

We will get a basic understanding on the use of multimedia and hypermedia in data collection and also in presentation of research findings.

9.2 MULTIMEDA AND HYPERMEDIA IN RESEARCH

When we use the term research in a discipline like Sociology, we immediately think of the written word. We think of writing in the form of dissertations, research articles, essays, reports and books. These are different ways of presenting one's findings from the research. Similarly, when we think of research tools, we imagine methods like survey, interview, observation, case study, etc., which involves conversations and discussions.

But today, research – be it collection or presentation – is not just about writing and talking. It also includes visuals, sounds and graphics. Visual ways of both gathering and showing data have become popular in sociology, particularly in recent years. These visual methods are grounded in the idea that society can be studied by observing, analysing and theorising visual manifestations of people's behaviour and their relationship with society. They help in improving conceptual and theoretical insights. Visual Sociology is mostly interested in studying material culture and human behaviour and their depictions.

Both multimedia and hypermedia are visual tools that have become prevalent in research activities and thus deserve special attention. Technological innovations have made them particularly significant. Digital environments and extensive use of computers make it possible for data and research to be seen and conducted in new and exciting ways.

It is this usage of visual tools like multimedia and hypermedia that will be discussed in detail in this unit. While multimedia and hypermedia are interdependent, it is not that they cannot be discussed differently. However, we prefer to talk about them together as it is the hyperlinks that make multimedia more fruitful and engaging. One can say that hypermedia is multimedia that can be clicked. We will pay particular attention to how they are used as tools in the process of research.

The potentials given by multimedia and hypermedia offer visual anthropologists the capacity to develop new practices and increase the use of visual methods of research and representation in Anthropology and Sociology.

9.3 TOOLS OF RESEARCH

Before going into how multimedia and hypermedia are used as research tools, let us shed some little light on what research tools are. Research is work undertaken creatively and systematically to increase knowledge. It can be done based on both primary and secondary resources. Apart from sources, research is also dependent on tools or methods which can be both qualitative or quantitative in nature.

Some of the most common forms of research tools include survey, questionnaire, interview, observation, experiment, case study, focus group discussion, content analysis, discourse analysis, review of existing works, observational trials, etc. Anything that facilitates the collection of information can be seen as a research method or a tool.

It is in this context that one can also understand multimedia and hypermedia as research tools.

Activity 1

Think of a small research project that you can do in your neighbourhood. Make a research design and the tools that you can use in your study. Also explore if you can use any form of multimedia and/or hypermedia in the project.

They can help in the process of information gathering and its analysis. However, both multimedia and hypermedia have various uses which will be briefly discussed in the next section.

Check Your Progress 1

1) What is research?

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2) What are research tools?

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3) How has technological innovations changed social research?

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9.4 USES OF MULTIMEDIA AND HYPERMEDIA

Hypermedia can be used in multiple ways in different activities. One of its most common uses is in maintaining online records and manuals. It is also used to sustain online dictionaries, reference books and databases.

Hypermedia can be utilised in the auditing sector too. It has the ability to relate information from multiple sources and check for consistency. Auditors deal with a large number of data files which can be connected to one another using links.

Use of hypermedia makes gathering and sharing such big files easier. It is also less time-consuming. This also makes it possible for one to track information over time.

Apart from auditing, hypermedia is also used in the legal processes, particularly by professional lawyers. Legal texts contain a lot of cross-references, and using links can simplify them. Similar to auditing, use of hypermedia makes it easier to access files and less time-consuming.

Another sector that makes extensive use of hypermedia is communication and online shopping. It can be used to provide information about different products and help people find customers that would be interested in purchasing them. Hypermedia also can provide access to large amounts of information and show the user only those small parts that interest him or her.

Hypermedia projects can help in decision-making in commercial and public-sector contexts. Personnel of large organisations can be invited to experience multimedia texts that report on consumers' everyday experiences through online project reports. This property of hypermedia is used in making product catalogues by companies and brands, particularly by online shopping sites. Online newspapers and websites too use hypermedia. Old news can be archived as links in their websites.

In fact, educational applications, too, can be designed using hypermedia. Recognising this potential of multimedia and hypermedia, many universities today invest in building their own websites and blogs where important information is circulated.

Many museums and art galleries also use hypermedia to catalogue their products like sculptures and paintings and make it easier for their viewers and the audience. The internet has made it easier for them also to organise guided tours online and display of products. In fact, storytelling has also become very fashionable as an online mode of communication, and it makes use of audio books. Online storytelling has made it possible for stories from multiple languages to be translated and disseminated through audio recordings.

Hypermedia is interactive, multilinear, multivocal and multimodal. Hypermedia narratives can be constructed to be meaningfully interlinked with other descriptions composed of different and mixed media (Pink 2006).

9.5 MULTIMEDIA AND HYPEDRMEDIA AS RESEARCH TOOLS

Research consists of both idea generation and writing. The researcher, herself/himself, is also part of the research process. Thus, the use of multimedia and hypermedia can make it easier for researchers to collect and present their data. They are neither just methods nor technology, but a combination of both.

Visual social research can be the study of existing visual data of a variety of sources. For instance, it can be discovered/found visual materials, visual data production -photographs and videos, drawings by the research team, and visual materials in interviews and discussions. The results of these methods and techniques can be presented in multiple modes – articles, films or other multimedia.

Social scientists and sociologists can make use of the already existing visual sources of data in society. Images, videos and visual artefacts are found everywhere today, and it becomes essential to use them in the research process. These visuals can be advertisements, news reels, CCTV footage, cartoons, graphics, illustrations, murals, maps, chats, graffiti, etc. They become easily accessible through the internet and can be used for social research. One can call these visuals secondary sources. However, the images, videos and other forms of multimedia that are generated during the process of both data collection and presentation are primary sources. We will discuss the use of these secondary sources in the next unit.

9.5.1 Uses of Multimedia and Hypermedia in the Collection of Data

The use of multimedia forms like videos, films, and images can make the data collection process easier and exciting. These are different from 'discovered' or 'found' visuals. There are times when researchers find it easier to communicate their questions to the respondents by using audio visual material. For instance, using methods like photo elicitation and photo voice offers researchers a possibility to converse with diverse participants. While photo elicitation is a 'researcher generated' visual method, photo voice is a 'respondent generated' mode of multimedia. They are both produced within the context of the research.

Photo elicitation as a method is useful in situations where the researcher is interested in tracing kinship relations, and photos of the past can help in remembering names and linkages. It can also be used to talk about otherwise uncomfortable topics as even if respondents may not answer certain questions, their body language might reveal a lot.

However, photo voice being a primarily participant heavy multimedia method is also used to depict circumstances, emotions and feelings of the marginalised. It becomes important to use methods like photo voice to record the historically marginalised experiences as it allows them to be a direct part of the research. Photo voice also becomes a way to record practices of everyday life as well as rituals.

Similarly, today one cannot think about conducting interviews and focus group discussions without recording them in voice recorders. Both independent researchers and organisations invest a lot of time and energy in transcribing, translating and analysing these recorded interviews and discussions. Multimedia has made this possible as earlier, researchers were mostly dependent on taking field notes and maintaining field diaries or logs.

While carrying out ethnographic research, there is a possibility to use hypermedia. This has been demonstrated by the Cardiff University School of Social Sciences which has constructed an Ethnographic Hypermedia Environment (EHE). In this project, researchers use hyperlinks to present their methods, data sets and findings to the audience. It links data with its analysis and gives the reader the chance to view them together. It is a transparent and interactive form of engagement (Dicks and Mason, 2008).

Ethnography based on hypermedia contains interview transcripts, fieldnotes, photographs, video footage, written articles, ethnographic films, books, and other works. Online, these may be linked to further materials (Pink 2006).

Box 1. Digital Ethnography

Ethnography, as we discussed in our earlier units, literally means to write about people and their culture in which they are relocated. Ethnographic details and data are generated, in the traditional way of Malinowski, through long immersive field work in actual setting, by using research techniques of observations, participation, interviews, focus group discussion etc. However, much has changed since Malinowski's time, technological innovations have come to play a role in the various methods used for gathering information and understanding about a society. The use of digital devices and the existence of a virtual space on the internet allows us to look at the idea of space and community differently but also interactions with people through digital devices. The use of smart phones for instance transforms the in person presence of a person in field setting. The modes of research now can be done through devices, smart phones, computers, film etc. It is possible to remotely generate rich, contextual insights into peoples' behaviours, journeys and experiences etc.

Digital ethnography is growing in popularity in a significant number of research projects.

From marketing to healthcare services, besides the conventional anthropologist or sociologist. In the recent past, there is an accelerated use of digital technologies and online presence, particularly due to COVID situation. But even after the COVID situation digital ethnography or research may continue to be popular because of some of the advantages they offer.

Self Video or voice elicitation or narration without the presence of the researcher or others may actually be liberating for the subject. The respondents can be in their own familiar setting, could be away from others. The private nature of the medium of the methodology is particularly well suited to researching sensitive topics. This remote research also allows us to gather repetitive everyday behaviours without having to be there by asking respondents to generate video recordings, for instance.

The remote nature of the research can be cost effective. Saving the cost of travel, lodging and that money can be utilised to gather more details through larger number of respondents.

(Watch Sarah Pink on digital ethnography by accessing the link:https://www.youtube.com/watch?v=z__t7WkQ2c4)

Visual methods as a form of social intervention can be used in various forms of cultural activism and applied anthropology. Anthropologists take account of anthropologically informed visual work in processes of social change, empowerment and identity construction. Visual anthropology is about visual communication, even if it is asserted as an association between visual and other elements of experience, practice, material culture, fieldwork and representation.

Visual media lets informants and anthropologists to represent aspects of experience and commonalities in human experience that are not accessible in written texts. But to make them anthropologically meaningful, one needs to

contextualise them theoretically and culturally in ways that are established in written anthropology (Pink 2006).

Visual anthropology and use of multimedia and hypermedia can also contribute towards methodology building in the social sciences. The academic study and provision of training in methodology have been a key concern of research councils, and visual methods of research can influence these developments. There has been broad interdisciplinary interest in visual anthropology as a methodology because anthropologists have made most use of visual materials in the course of their research.

Visual Anthropology

Visual Anthropology is a sub field in the discipline of social anthropology which tries to understand all kinds of visual representations, be it symbols, paintings, design, museums, including art forms like dance, ritual performances etc. In essence visual anthropology includes all kinds of visual representation in a cultural context and settings. The visual anthropologist is also interested in the production of ethnographic film, and new media formats that have come about with the expansion and innovations in digital technologies. The history of visual anthropology in fact is closely tied with the making of anthropological film and photography. The colonial administrators and ethnologists were not only interested in trying to understand the so-called 'primitive' culture of the natives but also realised that their cultural practices need to be captured in a visual format to document cultures that were rapidly changing due to the impact of industrialisation and colonialism.

Félix Louis Regnault, a French physician, is credited with making the first ethnographic film. In 1895 he used chronophotography to demonstrate the pottery making technique in West Africa, he combined the film with written explanation and speculation on the origins of pottery.

As early as 1912, Regnault was arguing for the formations of anthropological film archives. As you have already read sociologists and social anthropologists in particular started to use ethnographic film to supplement their written texts.

However, some of the films made of explorers were heavily criticised for being inauthentic and staged, scripted and heavily edited. Anthropologists in post World War society were aware of the problems of these earlier films and realised that they can not be a reliable source for research. Anthropologists were conscious that their presence and the use of cameras can alter their subjects' behaviour and accordingly

Thus, visual anthropologists not only use film as a way to understand societies but also are self-conscious how visuality is produced and represented.

For more details on visual anthropology see the video on <https://www.youtube.com/watch?v=p8slkC1RpGQ&t=304s>

9.5.2 Presentation of data – uses of multimedia and hypermedia

At one point in time, the writing was the only way to present one's findings. Today, however, it is not the only possibility. Texts are interspersed with audio

visual material to communicate research findings. Visual anthropology is not just about the ‘visual’. Ethnographic films and photographs also focus on substantive themes, representing ethnographic subjects living in specific cultures, and informed by anthropological theory (Pink 2006).

Use of hypermedia and multimedia opens up new ways of exploring data generation and analysis as well as representation. Hypermedia provides the opportunity of opening a researcher’s data-set for browsing, analysis, and feedback. It offers the readers a more interactive means of engaging with the text. As the number of electronic journals is increasing, there is also a better possibility of including forms of multimedia like images, videos and sounds along with words.

In fact, many publishing houses and journals are using short videos that describe an abstract of their paper by the authors to promote their work. Many journals are also concentrating on their articles’ social media engagement, and the use of multimedia helps in it. More and more readers and viewers are today interested in engaging with content that appeals to all their senses. This is also getting reflected in the mushrooming of websites and blogs which can use multimodal modes.

Ethnographic film is another tool that is now frequently used to present research. It has become popular as both a source of observation and interpretation. In fact, ethnographic films are used to record rituals of different communities as well as everyday practices. They provide the researcher with an opportunity to give visual shape to his/her insights. Ethnographic films also make it possible for more people to access the research findings because of its multimedia format. Compared to other non-camera-based visual depictions, films have a stronger mimetic and expressive potential because of their time-based (enabling development over time) and multimodal appeal (sound, image, text).

Hypermedia has the ability to reflect, imitate and deconstruct aspects of anthropological film and writing. We can explore the potential of hypermedia to ‘converse’ with both films and written anthropological texts. It can combine theoretical, applied, descriptive and pedagogical narratives with audio-visual materials. Hypermedia invites anthropologists to plan new ways of presenting and framing research. It can reference and link more than one genre of representation.

Check Your Progress 2

- 1) Discuss how one can use hypermedia and multimedia in social research
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- 2)a French physician, is credited with making the first ethnographic film.

3) What were the problems with some of the early films made by explorers?

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9.6 LET US SUM UP

Use of multimedia and hypermedia enables us to experience our social world in a multi-sensorial way. Data and research are not just what we see or read, but also what we feel and hear. Multimedia and hypermedia enhance the sensorial experience. Multimedia and hypermedia are seen as very significant sources of cultural information and as bases to improve scholarly communication. They take different modes into account and have a strong focus on the effects of their interplay. Technological innovations have meant that researchers have more opportunity to not miss out on anything in their field. As such, it has become imperative to understand the usage of multimedia and hypermedia as research tools.

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- 4) Pink, Sarah. (2006). *The Future of Visual Anthropology: Engaging the Senses*. Routledge.

9.8 SPECIMEN ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

1. Research is work undertaken creatively and systematically to increase knowledge. It can be done based on both primary and secondary resources. Apart from sources, research is also dependent on tools or methods that can be qualitative or quantitative.
2. Some of the most common forms of research tools include survey, questionnaire, interview, observation, experiment, case study, focus group discussion, content analysis, discourse analysis, review of existing works, observational trials, etc. Anything that facilitates the collection of information can be seen as a research method or a tool.

- 3) Visual ways of both gathering and showing data have become popular in Sociology, particularly in recent years. These visual methods are grounded in the idea that society can be studied by observing, analysing and theorising visual manifestations of people's behaviour and their relationship with society. They help in improving conceptual and theoretical insights. Visual Sociology is mostly interested in studying material culture and human behaviour and their depictions. Both multimedia and hypermedia are visual tools that have become prevalent in research activities and thus deserve special attention. Technological innovations have made them particularly significant. Digital environments and extensive use of computers make it possible for data and research to be seen and conducted in new and exciting ways.

Check Your Progress 2

- 1) Research consists of both idea generation and writing. The researcher, herself/himself, is also part of the research process. Thus, the use of multimedia and hypermedia can make it easier for researchers to collect and present their data. They are neither just methods nor technology, but a combination of both. Visual social research can be the study of existing visual data of a variety of sources. For instance, it can be discovered/found visual materials, visual data production - photographs and videos, drawings by the research team, and visual materials in interviews and discussions. The results of these methods and techniques can be presented in multiple modes – articles, films or other multimedia.
- 2) Felix reFélix Louis Regnault
- 3) Some of the early ethnographic films made of explorers were heavily criticised for being inauthentic and staged, scripted and heavily edited. And therefore not viable source for research.

GLOSSARY

'Fly on the wall' Approach: Fly-on-the-wall documentary-making, the camera crew works as unobtrusively as possible.

Archive is a collection of documents, photographs and records about a place, group or community kept in place for retrieval

Epistemology: The theory of knowledge, especially with regard to its methods and scope.

Ethnography is method by which detailed study of a group, community or a culture is undertaken. The word 'ethnos' in Greek means people 'graphein' in Greek stands for writing, So, ethnography is in essence writing on culture. In sociology and anthropology it is a research technique that makes a detailed description and analysis of human behavior over a long period of time.

Gaze; The term has been used most notably by Michael Foucault, among other scholars, to explain how authoritarian structures view their subjects. For instance, the word gaze is used in the colonial context where the natives are viewed from the colonisers as subjects who needed to be civilised, hence many non-European cultures were seen as primitive and the 'other'.

Gender Binary: A system of gender classification in which all people are categorised as either male or female.

Heteronormativity: The belief that heterosexuality is a normal and preferred mode of sexual orientation. It assumes a gender binary.

Method: A particular tool that is used in research. For example, the interview method or the questionnaire method or film making as a method.

Methodology: This is the justification for using a particular research method.

Ontology: Has to do with the nature of being and existence.

Para ethnography refers to collaborative ethnography where the subject or organisation become producers of knowledge and analysis, instead of being the source of raw data

Photomontage: Refers to composition where two or more photographic images are used to make a single image. Typically this technique is used to combine elements which do not come together naturally.

Photovoice is qualitative method often used in participatory manner for community development work. Participant use photo images to voice their thoughts, concerns, feelings etc.

Positivist Approach: The earliest approach to visual anthropology was a positivist approach. It was assumed that the camera portrayed reality as it is.

Reflexivity is the ability to examine one's own feelings, reactions, reasons, and background and identity and reflect on how these influence the situation or research

Serendipity : finding interesting things by accident or chance

Spatial: Refers to the social and physical space around us.

Subjectivity: The influence of personal beliefs, feelings, motives etc. that come into play rather than external objective facts.

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