Chapter 1
Origin and Evolution of Press in British India

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1.1 What is press?

The Press means published sheets containing news and features of general interest, usually printed and distributed regularly. A newspaper is a lightweight and disposable periodical, usually printed on low-cost paper called newsprint, containing a journal of current news in a variety of topics such as political events, crime, sports, opinion, and weather. Newspapers have also been developed around narrow topics areas, such as news for merchants in a fan of particular sports, fans of arts or of specific artists, and participants in the same sort of activities. The general variety is issued every day, often with the exception of Sundays and some general holidays newspapers, printed once a week, are also common.

1.1.1 History of Newspapers:

The regular publications have been created and distributed by governments for millennia, including Acta Durna wherein event ordered by Julius Caesar in ancient Rome in 59 B.C, and mixed news, were published in China in 713. The History of newspaper is an often-dramatic chapter of the human experience going back some five centuries. In renaissance Europe handwritten newsletters circulated privately among merchants, passing along information about everything from wars and economic conditions to social customs and

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2 ibid.
3 ibid
4 ibid
Human Interest features. The first printed forerunners of the newspapers appeared in Germany in the late 1400s in the form of news pamphlets or broadsheets, often highly sensationalized in contents. Some of the most famous of these reports—the atrocities against Germans in Transylvania perpetrated by a sadistic Voivod named Vlad Tepes Drakul, who became the Count Dracula in the later folklore. In the English speaking world, the first titled English language private newspaper, Courante, was first published in London in 1621, the first French newspaper, The Gazette, was founded in 1631. It is still in circulation. In 1690, Public Occurrences in Boston became the first newspaper published in America. New South Wales Advertiser, the first Australian newspaper was started in 1803 there in Australia.

Modern newspapers began with the development of printing and the growth of literacy among the middle class in Europe during the 17th century. It was British Government to introduce Licensing Regulations. The political tension of the period which led to the eventual discussion in Newspapers of public concern became the main cause for the growth of newspapers. The invention of Printing and Telegraphy brought a rapid revolution in the quick collection of news and its cheap publication.

Newspaper is an indispensable instrument for exchange of views, information and opinion in a democratic country. The press is usually identified with Newspapers. According to the general concept: a newspaper means any printed periodical work catering public news, comments or public views. It may relate to any subject for the information of general readers such as political,

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5 ibid
6 ibid
7 ibid
scientific, social moral, religious or other matter of public interest local or foreign.9

The press activities are activated by the process of Printing.10 The technology used for applying under pressure in such a way that a certain quantity of colouring agent on to a specified surface forms a body of text or an illustration. Published sheets contain news and features of general interest, usually printed and distributed regularly to inform the public. The functions of press:11

a. To educate
b. To entertain
c. To build the opinion
d. To aware

The Role of Press is of special importance. It serves both the Govt. and the People. A free press is indispensable to a parliamentary Democracy. People got right to know what their representatives are doing in the affairs of government. The largest numbers of newspapers are circulated in U.S.A.: the Federal Republic of Germany comes next; the third being China and the fourth is India.. India being the biggest democratic country in the world got low circulation of newspapers in relation to the population. The Indian vernacular language newspapers are growing rapidly. Yet, freedom of the Press is not absolute or unfettered right.12

When men are no longer united among themselves by firm and lasting ties, it is impossible to obtain the co-operation of any great number of them unless they find reason to get united voluntarily to the exertions of all the others.

9 ibid
11 ibid
12 ibid
This can habitually and conveniently effected only by means of a newspaper; nothing but a newspaper can drop the same thought into a thousand minds at the same moment\textsuperscript{13}. A newspaper is an adviser that doesn't require to be thought, but that comes of its own accord that talks to you briefly every day of the common read, without dishonouring from anyone's private affairs\textsuperscript{14}.

The mass media have helped to make mass man newspapers; the big magazine, radio, television, films and even the flood of books have humanized the human beings. The press has crammed us all into the same mould, even though as individuals we are not alike\textsuperscript{15}.

Too many, the publishing world appears to be an independent, autonomous power that doesn't reproduce public opinions framed elsewhere, but manufactures them. The press was once regarded as the decisive instrument for the liberation of the individual from absolute government; and now a days we are more inclined to ask ourselves how we can liberate the individual from the spirited despotism of mass communication media\textsuperscript{16}.

The Press Establishment was the property of the King. As such, requisite permission was required, to print the books failing of which the person who was responsible for printing the book was made subject to the punishment. In 1641, the right to conduct enquiry of the King was shifted to the Parliament. In 1643, the British parliament passed Legislation for the conduct of printing activities subject to the conditions in the interest of the State\textsuperscript{17}.

\textsuperscript{13} Herbert Brucker, \textit{Communication Is Power}, 1973, p.225
\textsuperscript{14} ibid
\textsuperscript{15} Herbert Brucker, \textit{Communication Is Power}, 1973, p.211
\textsuperscript{16} ibid
\textsuperscript{17} D.V.G,\textit{Vritta Patrike},1988, p.14
John Dillingham, who started *Parliament Scout*, was the first person to start the practice of writing Leading articles in 1641. The editor and his editorial page acts as the mind and heart and soul of the paper. The editor of the editorial page is a creator of the twentieth century.

The minimum goal of the Press is to continue the report to the individual citizen on his world that is so free, full and varied that nothing significant can long be ignored or suppressed. Beyond question this world is infinitely more complex and more changeable, than it ever was before. This is the fact that modern mass communications not only report the world, but also change the world in the process.

One of the earliest forms of writing communication in India is traced back to the beginning of organized society. In ancient India, the ruling of the King known to be propagated through his elders to the people through edicts and proclamations. Later on, machinery was developed to keep the rulers informed of the main currents of the life of the people. The agencies that collected taxes for example provided information on condition in the prosperous and backward classes. Messenger who committed it to money transmitted information verbally and in later stages it was reduced to writing. During the period of Ashok, the emperor had many sources of information ranging from the spies who reported on the subversive activities, the secret overseers attached to every department. The newsletter was an early institution that kept the ruler informed.

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19 Herbert Brucker; *Communication Is Power*; 1973, pp 211-229
20 ibid
21 ibid
22 Dr. Nadig Krishna Murthy; *Indian Journalism*; Published by University of Mysore, p.7
23 ibid
24 ibid
of developments in various parts of the country and among different classes of
the people.
During the Mughal Period, News writers were appointed to the various
administrative units in the territory and were charged with the function of sending
reports to the headquarters of the administration. Those manuscript reports were
submitted exclusively for official use and there are early indications of news
writers working with in collusion with a Government or a local administrative
official\textsuperscript{25}. Later the various administrations in the Indian peninsula kept
themselves informed of events and doing in one another territories through the
medium of these manuscript newspapers. There are conflicting reports about the
state of the press in the time of Aurangzeb; for while one historian records that
the emperor allowed great liberty in the matter of news another ascribes the
failure of Aurangzeb in the Deccan to the false news reports and to him by his
news writers\textsuperscript{26}.

1.2 The Fourth Estate\textsuperscript{27}:

The press is called the ‘Fourth Estate’ the soul of democracy does play a vital
role in reshaping the mankind in the civilized world. The Fourth Estate is a name
given to the Newspaper profession in England. Among the member of the fourth
Estate are those who gather write and edit the Newspaper for the press. The
phrase Fourth Estate is believed to have first been used by the English Historian
Thomas Abington Macaulay\textsuperscript{28}. In 1828 he wrote with reference to the House of
Commons. The gallery in which the reporters sit has become a fourth estate of the

\textsuperscript{25} ibid
\textsuperscript{26} ibid
\textsuperscript{27} World Book; Inc. 525, W. Monroe, Chicago, 1999.
\textsuperscript{28} ibid
realm. The Fourth Estate is the guardian of Democracy and serves as the protector of public interest, often being strengthened by mass media.

Carlyle, the nineteenth century Historian, in his account on Press, states that Press is a new fourth estate added to the three existing estates running the Country:

- Priesthood,
- Aristocracy and
- Commons.

The modern commentators seem to interpret the term Fourth Estate as meaning fourth power which checks and counterbalances the three state powers of:

- Executive,
- Legislative and
- Judiciary.

Edmund Burke believed the Forth Estate writes Carlyle:

Burke said there were Three Estates in Parliament; but, in the reporters' Gallery yonder, there sat a Fourth Estate more important than they all. It is not a figure of speech, or witty saying; it is a literal fact. Printing, which comes necessarily out of writing, Democracy is inevitable. Whoever can speak, speaking now to the whole nation, becomes a power, a branch of government, with inalienable weight in law making, in all acts of authority. It matters not what rank he has, what revenue or garnitures: the requisite thing is that he has a tongue that other will listen to, this and nothing more is requisite.

Jorgen Habermas argues that in eighteenth century England there was the emergence of public sphere. This mediates society and state, in which the public organizes it as the bearer of public opinion. With the growth of urban culture, there was drastic change in public life.

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29 ibid
30 ibid
31 ibid (1905); pp 349-350
32 ibid
33 ibid
1.3 Views on Press:

- Literature is our Parliament too. Printing, which comes necessarily out of writing I say often, is equivalent to Democracy. Invent writing, Democracy is inevitable." - Thomas Carlyle.

- Press- that huge engine for keeping discussion on a low level- Morley.


- Illiteracy was main barrier between the news paper or Publisher and his Public.

- The more readers; the lower the cost; the lower the cost, the more readers.

- The collective agitator, propagandist and political organizer- Lenin.

- The freedom of press is not just a slogan. It is an essential attribute of the democratic process. I have no doubt that even if the Govt. dislikes the liberties taken by Press and considered them dangerous, it is wrong to interfere with the freedom of press. By imposing restrictions you do not change anything. You are merely suppressing thoughts underlying them, to spread further. Therefore, I would rather have completely free press with all danger involved in the wrong use of that freedom, than a suppressed or regulated press. — Pt. Jawaharlal Nehru.

- Read not to contradict and confute nor to believe and take for granted not to find talk and discourse but to weigh and consider- Francis Bacon.

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• Give me the Liberty to know, to utter and argue freely according to conscience, above all liberties. - John Milton.

• Newspaper contains; news + views + advertisements

• Press is the Instrument, effectively used in the process of multiplication and dissemination of news and views, comments of the public.

• Press is one of the Instruments of Mass media.

• Press is vanguard & Watch dog (Indian Press influenced by British legacy)

• Press is the Guardian angle of Democracy, safety valve of Popular Rights maker of Democracy.

• It is the newspaper press that has made Democracy possible. - John Bryce.

• A grammar of Politics - Harold Laski.

1.4 News and Bulletin

• News is whatever your readers what to know about.

• Anything that enough people wants to read is news provided it does not violate the canons of good taste and the laws of libel.

• News is anything that happens in which people are interested.

• News is anything that people will talk about. The more it will excite comment, the greater its value

• News is accurate and timely intelligence of happenings, discoveries, opinions, and matters of any sort, which affect or interest the readers.

• Whatever concerns public welfare, whatever interests or instructs the individual in any of his relations, activities, opinions, properties or personal conduct is news.

• News is everything that happens, the inspiration of happenings and the result of such happenings.

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35 Dr. Nadig Krishnamurthy; Indian Journalism: (Origin, Growth and development of Indian Journalism) from Ashoka to Nehru Published by University of Mysore, pp.1-10
• News is the essential facts concerning any happening, event or idea that possesses human interest: that affects or has an influence on human life or happiness.

• News is based on people, and is to be gauged entirely on how it interests other people.

• News comprises all current activities, which are of general human interest, and the best news is that which interests the most readers.

• News is anything that interests a number of people; and the best news is that which has the greatest interest for the greatest number.

• Newspaper - The individual

• News is unexpected: it serves to gratify idle curiosity; tidings are expected - they serve to allay anxiety.

Print technology created the public. Electric technology created the mass. The public consists of separate individuals walking around with separate, fixed points of view. The new technology demands that we abandon the luxury of this posture, this fragmentary outlook.

News was exchanged long before in the society there was even the most primitive form of newspaper; there was the opportunity to exchange gossip and information. It is said, News papers did not create news, news created newspapers the newspaper was the most significant contribution of the printing press. There were extensive Libraries of Books long before there was printing press.

The newspaper, on the other hand, was something new; and most novel product of the printing press. Edwin Emery, rightly said, apart from the

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37 Ramanatha Aiyar, *The law of Lexicon*, 1992, pp.870-871  
publication, there was some incentive for gathering and processing information of interest to the general public—news. News thereupon becomes a commodity, like food or merchandise\textsuperscript{39}. The word news has become different as deliberate attempt to gather and process information than the casual dissemination of information\textsuperscript{40}. Making news more easily available to masses—the press exerted a tremendous impact upon society—movable type make a change in thinking; printing lowered the cost of education and the knowledge was no longer the exclusive property of the privileged classes; only the illiteracy was main barrier between newspaper or publisher and his public\textsuperscript{41}.

- The more readers
- The Lower the cost
- The lower the cost
- The more readers.

1.4.1 The Functions of Press in Society:

Press has to perform the following important functions in developing countries like India.

- To inform
- To educate
- To entertain
- To build the opinion
- To aware
- To make them participate.

Newspaper contains: news + views + Advertisement.

\textsuperscript{39} ibid
\textsuperscript{40} vide foot note No. 38
\textsuperscript{41} ibid
Journalism means: News gathering; News writing, editing and printing.

News has:

- Heading
- Intro or Lead
- Body

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<tr>
<th>Elements of lead</th>
<th>Truth</th>
<th>Accuracy</th>
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<td>Who?</td>
<td>Completeness + both side = all side</td>
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<td>What?</td>
<td>Controversy-both good &amp; bad</td>
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Press is vanguard & watchdog. Indian Press influenced by British Legacy.

Pre -Independence Indian Press- Every National Leader was with a newspaper.

Post Independence Indian press- Watchdog and committed on development.

**Bulletin: Flash of News.** Some time news will be curtailed by the state in the interest of communal harmony as well as maintenance of law and order – is called bulletin.

The scope of News is vast. Whatever exerts on the public is News. It is boundless vehicle of information irrespective of its impact on the public. As

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42 vide foot note No. 38
43 ibid
44 Ramanatha Aiyar; *The Law of lexicon*; 1992, p.161
such, in the interest of the country, in the interest of the public good, news will be curtailed. Only the good part will be disseminated— it is called Bulletin.\textsuperscript{45}

1.5 Journalism:

Giving the public what it wants is the main motto of Newspaper. As a matter of fact a question is being asked— what news is? The newspapers do not print the news in true sense of the term. The text of newspaper cannot constitute theme of news for the fact that the real news never gets into the papers - a generic definition of news may be given in this regard. This means that there are criteria to determine which of the billions of events occurring simultaneously at any given moment is news and which are not. Such an attitude is, in fact, held and fostered by newspapermen themselves and by teachers of Journalism.\textsuperscript{46} The study Journalism has been understood as follows:\textsuperscript{47}:

- Journalist: One who writes for or conducts newspaper or magazine.
- Newsgathering, news writing, editing and printing is called Journalism.
- Journalism; is the systematic and reliable dissemination of public information, public opinion and public entertainment by modern mass media of communication— More so it is a medium of advertising and publicity. Ronald E. Wolsely.
- The profession of conducting or writing for public Journal; Writing of fleeting interest or hasty character.
- Journalism is a medium of advertising and publicity.

\textsuperscript{45} ibid
\textsuperscript{46} ibid
\textsuperscript{47} ibid
• Napoleon Bonaparte: "A Journalist is a grumble a concern, a piece of advice, a regent of sovereign. A tutor of Nation."

• You can crush a man with journalism. - William Randolph Hearst

• Journalism consists largely in saying Lord Jones died to people who never knew Lord Jones was alive. - G. K. Chesterton

• I still believe that if your aim is to change the world, journalism is a more immediate short-term weapon - Tom Stoppard.

• The secret of successful journalism is to make your readers so angry that they will write half your paper for you - C.E.M. Joad.

• I launched the phrase The War to end war - and that was not the least of my crimes - H.G. Wells

• Journalists should not be so distant that all they can hear are shouts, nor so close that they become more conspirators than critics. Walter Lippmann

• Journalism is literature in a hurry. - Matthew Arnold

• Once a newspaper touches a story, the facts are lost forever, even to the protagonists. - Norman Mailer.

• "The writer's very attempt to portray reality often leads him to a distorted view of it. In trying to transpose reality he can end up losing contact with it, in an ivory tower... Journalism is a very good guard against that." - Gabriel Garcia Marquez.

Bagdikian's Observation 48:

48 Bagdikian Observations on Journalism: Internet Sources
Trying to determine what is going on in the world by reading newspapers is like trying to tell the time by watching the second hand of a clock.

Ben Hecht (1893 - 1964)

Literature is the art of writing something that will be read twice; journalism what will be read once.

In Indian context, during the British regime newspapers were not beautiful in appearance. The text of the newspapers usually contained - gossips regarding the important people, their personal life, and stolen news of the foreign newspapers-no norm, no code of conduct on the part of the editors of the newspapers. In short the earliest newspaper in India did not observe any norms of modern newspapers. Newspaper was an instrument to defame the reputation of important personalities for personal reasons. There were varieties of press functioned during the freedom struggle of India such as:

- The Press on corruption
- Press on the position of women/dowry system
- The Press on law and order
- Press on European dress
- The press on reforms
- The press on communal Riots/ Communal Harmony
- The press on Early marriage
- The press on inter-caste marriage
- The press on sharada Bill (Child marriage restraint Bill)
- The press on removal of untouchables
- The press and the Economic condition.

1.6 Some technical words used with regard to the Press.

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49 Ben Hecht's Observation on Journalism: Internet Sources.  
50 K.V. Nagaraj; Patrika VrM, 1996, p  
51 Ibid
• **Communication**\(^{52}\): Is the process of transmitting information from one individual or group to another.

• **Editor-in-Chief**\(^{53}\): One who is sole responsible the contents of the newspaper.

• **Mass Communication**\(^{54}\): Is the process by which individuals or groups transmit information to large, heterogeneous, and widely dispersed audiences, such as nations.

• **Mass Media**\(^{55}\): Play important role in communications between the people and government.

• **Newspapers circulation**\(^{56}\): The number of copies sold on an average day.

• **News Media**\(^{57}\): Both assist and complicate the government process. Freedom of the press is essential to the democratic process, but, like other freedoms, it must be balanced with the need to main order.

  ➢ Reporting the news
  ➢ Interpreting the news
  ➢ Influencing citizens' attitude and behaviour.
  ➢ Setting the agenda for the government action
  ➢ Socializing citizens about politics

• **News monger**\(^{58}\): Gossip

• **News Print**\(^{59}\): Low cost paper used to print news

• **News; Tidings**\(^{60}\): News implies anything New that is related or circulated; but Tidings signifies that which flows in periodically like the tide.

• **Orthography**\(^{61}\): Means an art of correct writing in general.

• **Print Media**\(^{62}\): Communicate information through the publication of the written word.

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\(^{52}\) Internet Sources: Some Technical Words used in Press and Mass Media.

\(^{53}\) ibid

\(^{54}\) ibid

\(^{55}\) ibid

\(^{56}\) ibid

\(^{57}\) ibid

\(^{58}\) ibid

\(^{59}\) ibid

\(^{60}\) ibid

\(^{61}\) ibid

\(^{62}\) ibid

\(^{58}\) Ramanatha Aiyar; *The Law of Lexicon*; 1992, pp 870-875.
• Press-Campaign ⁶³: Newspapers propaganda.

• Gallery ⁶⁴: Place for newspapers in a meeting of legislative assembly etc.

• Press Gang ⁶⁵: Body of men employed to Press men for the navy.

• Print ⁶⁶: The general meaning of the term ‘print’ is a piece of paper on which a design has been imprinted from a matrix made of some selected medium, usually stone, wood or metal. In original print the matrix is made by hand. Any print issued prior to 1900 is considered to be an antique print, though non-mechanically made prints published before World war II are sometimes considered to be antique. (Internet Source-Print.)

• Publisher ⁶⁷: The person or company who owns the newspaper is the publisher.

• Tabloid ⁶⁸: Is both a paper size and a term for the style of the newspapers that- especially in the United Kingdom-tend to use that format. Tabloid is the smaller of the two standard newspaper sizes; the larger newspapers are called broad sheets. The Name derived from a pharmaceutical trademark meaning compressed tablet, and has been applied to other things. For example- The Sun, Daily Mirror, Daily Mail, Daily Record, Daily Star, etc. of United Kingdom.

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⁶³ ibid
⁶⁴ Ramanatha Aiyar; Legal Lexicon, 1992, pp. 870-71
⁶⁵ ibid
⁶⁶ D’Souza Y.K (Ed); Encyclopedia of Communication Media, Vol I, pp.1-15
⁶⁷ ibid
⁶⁸ ibid
• **Typography**\(^{69}\): Is the Art of creatively arranging letterforms on a page to be using a recognized typeface, in order to achieve a combination of both aesthetic and functional goals. Typography includes:

> Layout of blocks of text on the page, and throughout a publication;
> Thoughtful selection and use of typefaces (fonts);
> Correct use of emphasis;
> Optional decoration such as initials;
> Adhering to rules of typographical syntax, such as when to use a hyphen vs. a dash, or what graphic marks, which varies greatly among different languages.

• **Yellow Journalism**\(^{70}\): *Yellow journalism* is a type of journalism where sensationalism triumphs over factual reporting. This may take such forms as the use of colourful adjectives, exaggeration, a careless lack of fact checking for the sake of a quick "breaking news" story, or even deliberate falsification of entire incidents.

1.6.1 Some Terms used in the Evolution of Books\(^4\):

- **Book of hours**: a medieval prayer book containing prayers, hymns, and psalms that the owner was supposed to read at eight hours during each day. Because extant examples show few markings, modern experts believe these books were primarily status symbols rather than frequently used tools of worship.

- **Codex**: a form of book in which sheets of parchment or paper are bound together. Among the Romans, the codex began to replace the papyrus roll as the dominant form of book in the 4th century.

- **Cuneiform**: the first form of writing, used by people in the Middle East between 5000 and 1000 B.C.

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\(^{70}\) ibid
• **Folio**: a book whose pages are created by folding a large sheet of paper once, resulting in two leaves.

• **Font**: "A complete set of type characters in a particular face, style, size, and weight" (Pickens 495).

• **Gothic typefaces**: dense typefaces used by early printers such as Johann Gutenberg. By about 1500, they had been largely replaced by Roman typeface, which are much easier to read.

• **Hieroglyphic**: a form of writing used by the Egyptians between 3100 B.C. and A.D. 400. In 1822, Jean-Francois Champollion of France used the recently discovered Rosetta Stone—which features a message in Egyptian hieroglyphics, Egyptian demotic, and Greek—to decipher hieroglyphics for the first time in the modern age.

• **Illumination**: painted designs added as decoration to medieval manuscripts and later printed books.

• **Incunabula**: books published before 1500; the term comes from a Latin word meaning "swaddling clothes."

• **Leaves**: sheets of paper in a book; each leaf, if printed on both sides, has two pages.

• **Manuscript**: derived from the Latin words *manu* (hand) and *scripts* (writing), the word *manuscript* refers to a piece of papyrus, parchment, or paper with writing on it. Before the 15th century, when Johann Gutenberg developed movable type, virtually all written literature—including the Bible, Beowulf, and Geoffrey Chaucer's *Canterbury Tales*—were in manuscript form. Because it was difficult for many people to read a work available only in a single manuscript, people called scribes—often monks—made copies of manuscripts.

• **Octavo**: a book whose pages are created by folding a large sheet of paper four times, resulting in eight leaves.
• **Paper**: writing material made from wood pulp, hemp, and other plant fibers. Invented in China around A.D. 105 and introduced to the Arab world in 751, paper did not replace parchment in Europe until the age of the printing press, beginning in the 1450s.

• **Papyrus**: a plant that grows in the Nile valley in Egypt or the writing material made from the pith of this plant.

• **Parchment**: a cured sheepskin or goatskin used as the pages in medieval manuscripts. Parchment and vellum replaced papyrus as the favorite writing materials in Europe around the 4th century.

• **Pictograph**: a picture meant to represent an idea. Instead of using letters to spell words, early written languages communicated information through pictographs.

• **Quarto**: a book whose pages are created by folding a large sheet of paper twice, resulting in four leaves.

• **Rubrication**: an ornate initial letter added by artists, or rubricators, to pages of medieval manuscripts and later printed books.

• **Roman typefaces**: clean, easy-to-read typefaces developed in the late 15th century by Germans Conrad Sweynheym and Arnold Pannartz and perfected by Frenchman Nicolaus Jenson in the same century. Roman typefaces largely replaced the denser Gothic faces by about 1500 and continue to be the typefaces of choice today.

• **Rune**: any one of the 24 characters in the runic alphabet, an alphabet in use in England, Scandinavia, and other parts of Northern Europe between A.D. 200 and 1200. Perhaps because they usually were carved into stone, wood, and other materials, runes consist primarily of straight lines. Messages recorded in runes were associated with mystery and the supernatural.

• **Sans serif**: literally, in Latin, "without serif." Some popular sans serif typefaces are Helvetica and Geneva.
• **Scriptorium**: a space set aside for the copying of manuscripts in medieval monasteries.

• **Serif**: an extra line, usually small and light in Roman typefaces, that appears on the corners of letters. A holdover from the days when scribes wrote out manuscripts, serifs facilitate reading by guiding the eye from letter to letter. Some of the most popular typefaces—including Times New Roman, Bembo, and Garamond—are serif fonts.

• **Signature**: a collection of leaves, created by folding a large sheet of paper one or more times. In a quarto, for example, each signature has four leaves, eight pages. The signatures are bound together to form a book.

• **Syllabary**: a set of characters, each of which represents a syllable. Early written languages, such as ones used by the Mayas and early Mesopotamians, used syllabaries instead of alphabets, which consist of a character for each individual sound. Example: `<! (syllabary) = carpet (alphabet).

• **Typeface**: a particular set of letters, a through z, along with punctuation marks, designed to be used together in printing a body of text. Examples: Bembo, Garamond, Helvetica, Palatino, Times New Roman, Zapf Chancery.

• **Type high**: .918 inch, the height of a block of type from base to the top of the letter.

• **Vellum**: cured calfskin used as the pages in medieval manuscripts.

• **Web**: a roll of paper used in offset printing.

• **Woodblock**: a plate of wood in which letters, pictures, or both are carved. A printer then inks this woodblock and presses it against paper to print a page. This oldest form of printing, in use in China as early as 868, was extremely time-consuming because a woodblock had to be carved for each page, and letters could not be rearranged and reused. Nevertheless, European printers used woodblocks to create playing cards and textiles (Olmert 114).
Finer points:

- bibliomancy: the practice of opening a book, such as the Bible, to a random page and reading the words there for a prophetic message about one's future (Olmert 23)

- The original "bonfires of the vanities" took place in 1495 in Florence, where a friar named Savonarola burned works by Ovid, Dante, Boccaccio, and other authors (Olmert 24)

- How important is the printer's trade? In laying the type for a Bible in 1631, a compositor left out a word in the Ten Commandments. In this book, which came to be called the Wicked Bible, Exodus 20:14 reads: "Thou shalt commit adultery."

1.7 Legal Meaning of the Press in British Indian context:

Paper\textsuperscript{71}: Defined in Act 1899 (2), S. 2(18):

Paper or Papers: A manufactured substance composed of fibre adhering to gather in form consisting of sheets of various sizes and different thickness used for writing or Printing; a substance used for writing and printing on; a written instrument or document; written paper; instrument a paper sheet. Any other material on which an instrument may be written according to Act II of 1899 (stamp), S.2 (18).

Newspaper\textsuperscript{72}: Defined in Act14, 1866 S.2; Act. 7 1908; Act 1, 1910 S.2.

Legal definition of Press\textsuperscript{73}; Printing Press; Newspaper: The power exerted by News Paper on the Public Mind.

Freedom of the Press\textsuperscript{74}: Freedom to print anything without censorship.

\textsuperscript{71} Ramaiatha Aiyar; Legal Lexicon: Reprint. 1992, p.10007
\textsuperscript{72} ibid
\textsuperscript{73} ibid
\textsuperscript{74} vide foot note No. 73
Meaning of the Press;

*Press refers to a Printing Press.*

**The Word Newspaper also means as follows**\(^75\):

a) Clipped form of Printing press.

b) A printing or publishing establishment

c) The art, business or practice of printing.

d) Newspapers, magazines, news service etc. in general. Or the persons who write them; Journalism or Journalistic\(^76\)

e) Publicity, criticism etc. in newspapers magazines etc.

**It is further understood as Paper in the Dictionary**\(^77\).

a) The art or practice of printing

b) News Papers, Journalist etc. generally or collectively.

c) A notice or piece of publicity in newspapers

d) Printing House or Establishment

e) Publishing Company.

The word Newspaper got concrete meaning as per the 20\(^{th}\) Century Dictionary\(^78\),


\(^{76}\) The Concise Oxford Dictionary IX Edn.

\(^{77}\) *The Chambers 20\(^{th}\) Century Dictionary*, New Edn.

\(^{78}\) ibid
Printing machine, printing, and a printing organization often extended to a publishing house printing activities; newspaper and periodicals collectively journalistic profession.

The press is an Establishment where printing is done.

a) Press means all plant, machinery, implements and other materials by means of which printing is done. But, in order to bring under control of the administration those who try to avoid the Law of the Press by resorting to Duplicators, instead of printing machinery, a regulatory statute. Some times enlarges the definition by including duplicating machinery as well. This has been done in the Press and Registration Books Act, 1967 by insuring the definition of printing in
S.1 (1) as follows:

"Printing includes cyclostyling and printing by Lithography."

a) The Press as a medium of publication in which connection arise the topic of Freedom of the Press.

b) The product of printing such as newspaper, pamphlet, handbills. Hence a newspaper means any printed periodical work catering public news or comments on public news.

c) Those who engage in the production of the foregoing articles, such as printing editor, publishing, Journalist, Author.

The Press as medium of expression, publicity criticism etc.
S. 2(d) of the Working Journalists (c&Es) Misc. Prov. Act1955 defines:
Newspaper established as follows;
Newspaper established means an establishment under the control of any person or
body of persons, whether in operation or not for the production or publication of
one or more newspapers or conducting any news agency or syndicate. (The Act
of 1955 special provision for the production of this category of employees who
produce newspaper\(^{85}\)).

Definition of News Papers: Indian post office Act/ Press and Registration of
Printed periodicals work containing Public news or comments on Public News\(^{86}\).

What is a Book\(^{86}\)?

a) Printed

b) Treaties filling a number of sheets fastened together.

S.1 (1) of the Press & Protection of Books Act, 1867:
Book includes every volume, part or division of a volume, and pamphlet in any
language and every sheet of music, map, chart or plan separately printed.

Pamphlet, the word is not defined in the Act\(^{87}\).

Dictionary Meaning of Pamphlet:
Small unbound treaties especially on subject of current interest; a small book,
usually printed in OCTAVO form, and stitched.

Paper means any document including a newspaper other than a book.

\(^{85}\) ibid
\(^{86}\) ibid
\(^{87}\) ibid

D.D. Basu ; *Law of The Press* ; II Edn.,1986, pp. 5-10
Document shall include any matter written, expressed or described upon any substance by means of letter, figures or marks or by more than one of those means, which is intended to be used, for the purpose of recording that matter.

1.8 Acts Governing the press:

IMPORTANT ACTS PERTAINING TO THE PRESS IN INDIA

i. The Regulations of 1799
ii. The Ordinance of 1823
iii. Metcalf's Act of 1835
iv. Regulation and Restrictions of Press Act XV of 1857
v. Indian Penal Code of 1860.
vi. The Press and Registration of Books Act, 1867
viii. The Official Secret Act of 1889
ix. Criminal procedure Code, 1898
x. The newspapers (Incitement to Offence) Act. VII of 1908.
xiii. Indian Regulations, 1914.
xiv. Newspaper Incident to Indian states Act of 1922.
xvi. Indian press (Emergency Powers) Act of 1931
xvii. Foreign Regulations Act of 1932
xviii. Indian States (Protection) Act of 1934
xix. The Industrial Employment (Standing Orders) Act 1946.
xx. Press Laws Enquiring Committee to Enquire into the Press Laws of 1948 (May)
xxii. Employees Provident Fund Act of 1952
xxiii. The Drugs And Magic Remedies (Objectionable Advertisements) Act 24 of 1954.

ibid
xxvii. The copyright Act14 of 1957

Acts Governing the Press: Pertaining to the Period (1780-1940) History of Press Legislation in India142

A. Pre-Constitution History.

➢ In India, the history of laws directed against the Press dates from the days of the East India Company almost simultaneously with the growth of 'newspapers', which, from their inception, took up the criticism of the distraction and of the officials responsible for it91.

➢ The early history, naturally, is shrouded in obscurity. Some legislations have been mentioned which preceded the current enactments, in order to show how the roots of the various forms of control and regulation lay in the remote past, and how they have been tightened or relaxed to meet newer exigencies and political vicissitudes through which the country passed over two centuries92.

➢ In 1799 the Governor-General issued Regulations requiring newspapers; under plan of penalty, to print the names of the printer, publisher and editor of newspapers and to submit all material published therein for pre-censorship by the Secretary to the Government of India. This Regulation was abolished during the time of Warren Hastings93.

➢ Pre-censorship having been abolished, the next Governor-General, in 1823, issued an Ordinance introducing 'licensing' of the Press, under which all matters printed in Press, except commercial matters, required a previous licence from the Governor-General, on the submission of an application stating the names and

142 Basu D.D; Law of the Press; II Edn. 1986,pp 5-10
91 ibid
92 ibid
93 ibid
other particulars of the press, newspapers etc. Similar regulations were made in Bombay in 1825 and 1827.\textsuperscript{94}

- The foregoing licensing Regulations were replaced, in 1835, by an Act, known as Metcalf's Act, which was made applicable to the whole of the territory of the East India Co., and which required the printer and publisher of every newspaper to declare the location of the premises of its publication. Licensing was re-introduced by Lord Caning's Act of 1857, and it was applied to all kinds of publication, including books and other printed papers, in any language, European or Indian.\textsuperscript{95}

- 1860 was a landmark inasmuch as it saw the passing of the Indian Penal Code, which, though not directed specifically towards the Press, laid down offences which any writer, editor or publisher must avoid, e.g., the offences of defamation, obscenity. Later amendments introduced the offences Code. Of sedition (S. 124A, inserted in 1870); promoting enmity between classes (S. 153A, added in 1898); imputations or assertions prejudicial to national integration (S. 153B, inserted in 1972); outraging religious feelings (S. 295A, added in 1927).\textsuperscript{96}

Press and Registration of Books Act, 1867

- The earliest surviving enactment specifically directed against the Press was passed in 1867, the Press and Registration of Books Act (XXV of 1867). The object was however not to establish governmental control over the freedom of Press. It was a regulatory law, which enabled Government to regulate printing presses and newspapers by a system of registration, and to preserve copies of books and other matter printed in India.\textsuperscript{97}

- Saw the passing of the Vernacular Press Act, which was specifically directed against newspapers published in Indian Languages, for punishing and suppressing seditious writings. It empowered the Government, for the first time, to issue search warrants and to enter the premises of any Press, even without orders from any court. Fortunately it was short lived, being repealed in 1881.\textsuperscript{98}

- 1898 saw the passing of two legislative measures relating to the general law of crimes some provisions of which particularly concerned the Press; one was the

\textsuperscript{94} ibid
\textsuperscript{95} ibid
\textsuperscript{96} vide foot note No, 95
\textsuperscript{97} ibid
\textsuperscript{98} ibid
amendment of the Indian penal Code, 1860 (the substantive law of crimes); and the other was enactment of the Code of Criminal Procedure, 1898 to consolidate and amend the law relating to Criminal Procedure and to replace the Criminal Procedure Code of 1882.

The changes in I.P.C made by the I.P.C Amendment Act, 1898, with which the Press was concerned were:

a. The substitution of 124A, to make it more effective

b. The insertion of s. 153A to punish the promotion of enmity between classes

c. The substitution of s. 505 to the making or punishing of statements conducing to public mischief.

The Newspapers (Incitement to Offences) Act, which was passed in 1908, empowered the Magistrate to seize a press on being satisfied that a Newspaper printed there in contained incitement to murder or any other act of violence or offence under the Explosive Substance Act.

The foregoing Act was followed by a more comprehensive enactment, the Indian Press Act, 1910, directed against offences involving violence as well as sedition. It empowered the Government to require deposit of security by the keeper of any press, which contained matter inciting sedition, murder or forfeiture of such deposit in specified contingencies. The rigorous of the Act of 1910 were enhanced by the Defence of Indian Regulations, which were promulgated on the outbreak of the First World War in 1914.

The foregoing Acts of 1908 and 1910 were repealed in 1922, in pursuance of the recommendations of a committee set up in 1921 to the effect that the contingency in view of which these Acts had been passed, namely, the promotion of revolutionary conspiracies through the press was over and that the purposes of

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99 vide foot note No.98
100 ibid
101 ibid
these Acts would be served by the ordinary law and by incorporating the provisions in the Act of 1910 as to seizure and confiscation of seditious publications in the Press and Registration of Books Act, the sea Customs Act and the Post Office Act, by suitable amendments. This was done by the press law Repeal and Amendment Act, 1922\(^{102}\).

- But the Launching of the Civil disobedience movement, in 1931, for the attainment of Swaraj, prompted the Government to promulgate an Ordinance to control the Press which was later embodied in the Press (Emergency) Powers Act, 1931 originally a temporary Act, it was made permanent in 1935\(^{103}\).

- The general Act which has a greater impact on the press in particular, is the Official Secret Act, 1923 which is aimed at maintaining the security of State against leakage of secret information, sabotage and the like\(^{104}\).

- The Indian Press (Emergency) powers Act, 1931, imposed on the Press an obligation to furnish security at the call of the Executive. The Act, (as amended by the Criminal Law Amendment Act, 1932) empowered a Provincial Government to direct a printing press to deposit a security which was liable to be forfeited if the press published any matter by which any of the mischievous acts enumerated in section 4 of the Act were furthered e.g. bringing the government; inciting feelings of hatred and enmity between different classes of subjects, including a public servants to resign or neglect his duty. This system of executive control and punishment of the presses foreign to democratic England.

The Indian Act was, infract, an antiquated revival of the trial by Star Chamber of Press offences and the licensing system which English democracy had fought and

\(^{102}\) ibid

\(^{103}\) vide foot note No.107

\(^{104}\) ibid
suppressed. The very preamble of the Act- “for the better control of the Press” was offensive\textsuperscript{105}.

Warren Hastings:

Fort William, 14\textsuperscript{th} Nov. 1780.\textsuperscript{106} Public notice is hereby given that as weekly newspapers called Bengal Gazette or the Calcutta General Advertiser by J. A. Hicky has lately been found to contain several improper paragraphs tending to verify private character and to disturb the peace of the settlement; it is no longer permitted to be circulated through the channel of the General post office.

Lord Wellesley: The Governor General in 1789 issued an order\textsuperscript{106}. This order issued by the Bengal Govt. prohibiting the publication of any news before it was passed by the Govt. Censor. It directed the printing of every newspaper to write his name at the bottom of every issue of the news paper and every editor and publisher had to declare the name and address to the Court. Penalty for violation of these orders was immediate deportation to Europe. Nothing was mentioned of Indian associates because there was no Indian Editor actually controlling the Press.

In 1799 Lord Wellesley issued an order for press censorship and withdrawal of all postal facilities. Pre-censorship was imposed on 13 May, 1799.\textsuperscript{107}

The Regulation for the control and Guidance of the proprietors of the News Papers was published in Calcutta.

In 1818- Lord Hastings abolished the censorship order of Lord Wellesley;

\textsuperscript{105} ibid
\textsuperscript{106} ibid
\textsuperscript{106} vide foot note No. 105
\textsuperscript{107} ibid
During the period of Lord William Bentinck the Press enjoyed the status of the liberation of the Indian Press\textsuperscript{108}.

Sir Charles Metcalf –1835 Act.: One restriction was retained that was that every newspaper should declare before the regional magistrate, the place of Publication, the premise of the printing area, and names of the people acting, as the editors, Printing and publishing. Every printed material was expected to enter the address of the printing and the problems, failing which they had to pay a fine or in default go to prisons\textsuperscript{109}.

1.9 The Press as Business\textsuperscript{110}:

The Newspaper is a manufactured product, which is offered for sale. That there once was a golden day in which newspaper publishers as well as editors and idealistic reporters had a profession rather than a business outlook. Bruce Liven, former editor of the \textit{New Republic} opines that Journalism has become a big business. It has drifted into the hands of men who are not afraid to look millions in the face, primarily into the hands of bankers and men with banking types of mind. As a matter of fact the operation of newspapers on a business basis, and the kind of paper, which will make the largest amount of money\textsuperscript{111}.

1.10 The Responsibility of Press:

Voters William, the founder of Arts School of Journalism at Missouri engraved the Journalist’s creed on the plate made of bronze, hung on the wall of J.H.F Memorial Auditorium\textsuperscript{112}.

\textsuperscript{108} \textit{ibid}
\textsuperscript{109} \textit{ibid}
\textsuperscript{110} \textit{ibid}
\textsuperscript{111} \textit{vide foot note No. 109}
\textsuperscript{112} \textit{ibid}

\textit{Bangalore Ghokale Society, \textit{Sarvejana\,Paper}, June, 1949.}
THE JOURNALIST'S CREED:

a. I believe in the profession of journalism.

b. I believe that the public journal is a public trust; that all connected with it are, to the full measure of their responsibility, trustees for the public; that acceptance of a lesser service than the public service is betrayal of this trust.

c. I believe that clear thinking and clear statement, accuracy and fairness, are fundamental to good journalism.

d. I believe that a journalist should write only what he holds in his heart to be true.

e. I believe that suppression of the news, for any consideration other than the welfare of society, is indefensible.

f. I believe that no one should write as a journalist, what he would not say as a gentleman: that bribery by one's own pocketbook is as much to be avoided as bribery by the pocketbook of another; that individual responsibility may not be escaped by pleading another's instructions or another's dividends.

g. I believe that advertising, news and editorial columns should alike serve the best interests of readers; that a single standard of helpful truth and cleanliness should prevail for all; that the supreme test of good journalism is the measure of its public service.

h. I believe that the journalism which succeeds best—and best deserves success—fears God and honours man, is stoutly independent, unmoved by pride of opinion or greed of power, constructive, tolerant, but never careless, self-controlled, patient,
always respectful of its readers, but always unafraid; is quickly indignant at injustice; is unsaid by the appeal of privilege or the clamour of the mob; seeks to give everyman a chance, and, as far as law and honest wage and recognition of human brotherhood can make it so, an equal chance; is profoundly patriotic while sincerely promoting international goodwill and cementing world-comradeship; is a journalism of humanity of and for today's world.

In April, 1923, the American Society Of Newspaper Editors adopted a code of ethics. The Code as follows:

I  RESPONSIBILITY-The right of a newspaper to attract and hold readers is restricted by nothing but consideration of public welfare. The use of a newspaper makes of the share of public attention it gains serves member of its staff. A journalist who uses his power for any selfish or otherwise unworthy purpose is faithless to a high trust.

II  FREEDOM OF THE PRESS- Freedom of the press is to be guarded as a vital right of mankind. It is the unquestionable right to discuss whatever is not explicitly forbidden by law, including the wisdom of any restrictive statute.

III  INDEPENDENCE-Freedom from all obligations except that of fidelity to the public interest is vital.

1. Promotion of any private interest contrary to the general welfare, for whatever reason, is not compatible with honest journalism, so-called news communication from private sources should not be published without public

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113 The American Society of Newspaper Editors a Code of Ethics Journal, April, 1923.
notice of their source or else substantiation of their claims to value as news, both in form and substance.

2. Partnership in editorial comment, which knowingly departs from the truth, does violence to the best spirit of American Journalism; in the news columns it is subversive of a fundamental principle of the profession.

IV SINCERITY, TRUTHFULNESS, ACCURACY- Good faith with the reader is the foundation of all journalism worthy of the name.

1. By every consideration of good faith a newspaper is constrained to be truthful. It is not to be excused for lack of thoroughness or accuracy within its control or failure to obtain command of these essential qualities.

2. Headlines should be fully warranted by the contents of the article, which they surmount.

V. IMPARTIALITY- Sound practice makes clear distinction between news reporters and expression of opinion. News reporters should be free from opinion or bias of any kind.

This rule does not apply to so-called special article unmistakably devoted to advocacy or characterized by a signature authorizing the writer’s own conclusion and interpretations.

VI FAIR PLAY- A newspaper should not unofficial charges affecting reputation or moral character without opportunity given to the accused to be heard; right practice demands the giving of such opportunity in all cases of serious accusation outside judicial proceedings.

1. A newspaper should not invade private rights or feelings without sure warrant of public right as distinguished from public curiosity.
2. It is the privilege, as it is the duty, of a newspaper to make prompt and complete correction of its own serious mistakes of facts or opinion, whatever their origin.

VII DECENCY-A Newspaper cannot escape conviction of insincerity if while professing high moral purposes it supplies incentives to base conduct, such as are to be found in details of crime and vice, publications.

Press and the social life\textsuperscript{114}: A veteran American Journalist has laid down six social responsibilities of the press:

1. Safeguarding personal liberties— The Press should keep a watch on Government, that ever dangerous force of freedom and sound the alarm whenever the ‘Citizens’ rights are infringed.
2. Enlightening the publics
3. Making a profit (the press to be free should be beholder to no single individual or group, hence it should earn its way in the market place)
4. Providing entertainment.
5. Serving the economic system (through the advertising) and.
6. The Press can contribute to a dynamic and expanding economy by bringing together the buyers and sellers of goods and service.

1.11 Propaganda\textsuperscript{115}:

What is propaganda and what can and should the newspaper do about this:

Propaganda is the common practice in Journalism. The sole aim of propaganda is to create public opinion in favour of desired goal. Its persuasive techniques are regularly applied by politicians, advertisers, journalists, radio personalities, and others who are interested in influencing human behaviour. Propagandistic messages can be used to accomplish positive social ends, as in campaigns to reduce drunk driving, but they are also used to win elections.

\textsuperscript{114} Ishwar Daidota; \textit{Akshayaya Patrikhoodham}; Published by Karnataka Patrika Academy; 1999, pp 12-13.

Edward L. Betrays cynically commented in Crystallizing Public Opinion—

The only difference between propaganda and education really is in the point of view. The Advocacy of what we believe in is education. The advocacy of what we don't believe in is propaganda—Frederic E. Lumley in The Propaganda Menace wrote: Propaganda is promotion which is veiled in one way or another as to its origin or sources (2) the interest involved (3) the methods employed (4) the content spread and (5) the result accruing to the victims any one, any two, any three, any four or all five.

Albert F. Henning in Ethics and Practices in Journalism likewise wrote: Propaganda is misinformation disguised as to nature and source designed to influence either public opinion or legislation or both in favour of private interests to the prejudice of public interest. Propaganda is the expression of opinion or action by individual or groups deliberately designed to influence opinions or actions of other individuals or groups with reference to predetermined ends.

1.12 Evolution of script and Paper Technology in India:

It is the fact that before writing was invented, man lived in acoustic space—boundless, directionless, horizon less, in the dark of the mind, in the world of emotion, by primordial intuition, by terror. Speech and writing created revolution thus moved the man from the dark into the light of the mind, brought civilization. Societies have always been shaped more by the nature of medium by which men have communicated than by the extent of communication. Strong
faith in immortal life of Human beings. Egyptians wrote on paper made of the papyrus reeds; the wall of tombs, temples and pyramids\textsuperscript{121}. Mesopotamians (3200-2400B.C) developed pictographic writing consisting of 350 signs on clay with a square edges reed, called Cuneiform. They wrote potential literature pertaining to the subject such as: temple literature, prayer, hymns, morals. The most inspiring is the Epic of Gingham, containing man’s myth. The Mesopotamian civilization employed cylinder seals-, which was rolled on clay tablet leaving an impressed band bearing the device and inscription with seed\textsuperscript{122}. Wan-gli-chang cheng, Civilization developed (5000BC-1760BC) a rich language and literature. Pictographic writing consists of 40,000 characters. Each sign indicates a word or an idea. Out of 40,000 Characters 600 signs represent fundamental characters\textsuperscript{123}. Each Chinese literature was religious in nature Hymns, songs and some prose are found. Although SHIH HUANG TI burnt the work of Confucius and the Taoists, even than many ancient texts survived\textsuperscript{124}. In early Chinese civilization wooden and bamboo tablets were used, and it progressed towards making use of Silk fabrics for writing purpose till A.D.102. Paper was invented probably in the later Han (23-220 AD) in China found to be the new Practical, perishable and it was effectively used in the process of multiplication and Dissemination of Books Press is an indispensable instrument for exchange of views, information\textsuperscript{125}. 

In Indus valley civilization (3200BC-2000BC) over 2000 seals have been discovered in Indus cities so far. This script had some 270 characters, evidently

\textsuperscript{121} Prof S.S.Settar; World History; Making Human Civilization; pp 20-26.
\textsuperscript{122} ibid
\textsuperscript{123} ibid
\textsuperscript{124} ibid
\textsuperscript{125} ibid
pictographic and boustrophedon in nature, which had an Ideographic or syllable character.\footnote{ibid}

Going back to the clay tablet of cuneiform writing and papyrus, society’s means of communication had an effect on its knowledge, and that monopoly or an oligopoly of knowledge is built up to the point that equilibrium is distributed. Written codes imply uniformity, justice and a belief in law, they also imply an element of religious duty. The ancient Indians knew writing as early as 2500 BC. But no manuscript older than the 4th century is available. They were written on Birch Bark and palm leaves. The central Asia, the home of Prakrit script, produced the skilled writers as such manuscripts were written on sheep leather and golden tablet.\footnote{vide foot note No,126} The palaeography study reveals that in ancient India writing was made by means of carving on seals, stone, pillars, rocks, rock, copper plates, temple walls, bricks and on images. The earliest inscriptions found were written in 3rd century B.C. Prakrit language along with Brahmi and Kharosti languages became popular during the 3rd century B.C. Moreover, Sanskrit became as epigraphic media in the 2nd century A.D.\footnote{Prof. A.L. Bashkym; \textit{Wonder That was India}, 1998,p.19}

In Indian context, Ashok’s inscriptions, which are the oldest surviving Indian written documents of any Historical significance. Ashok’s edicts are in the nature of Official pronouncements of policy and instructions to his officers and subjects- they contain many personal touch and the draft were probably written by the emperor himself.\footnote{Prof. Romila Thapar; \textit{A History of India}, pp. 70-91.} At the initiative of material in ancient India, Nearchos (4 th century), an admiral of Alexander’s fleet, was the first to mention that the Indians used to write letters on well-beaten cotton cloth. There was no Press or

\footnotesize\textit{ibid}
news paper in the modern scenario of the world. Ashok, the great Indian Emperor had devised his own means of communication. He used to publish the imperial edicts on rock and stone pillars\textsuperscript{130}. The news of the day was published in small pictures drawn on the walls of temples in ink or colour which could be unmoved easily. Even the moral code was proclaimed through its art of painting. A few bold strokes would convey the meaning of the Monarch to his loving people\textsuperscript{131}. The figure No.1 shows clay tablet of cuneiform writing, Figure No.2 shows various ancient writing instruments and Figures No.3 to 5, paper making process.

The Dictionary meaning of paper\textsuperscript{132} is that material made in sheets as an aqueous deposit from linen, esparto, wood-pulp or other form of cellulose, used for writing, printing, wrapping and other purpose or appearance as to papyrus, rice paper, to the substances of which some a piece of paper a written or printed deed (document or instrument) note, receipt bill, bond deed etc, a news paper.

1.12.1 Paper:
The time line of paper invention can be traced back to 3000BC\textsuperscript{133}. (Internet Sources: History of papermaking) A courtier named Ts'ai-Lun, from lei-yang in China, was the inventor of paper (not papyrus) circa 105 A.D\textsuperscript{134}. But, the word is derived from the name of the tree papyrus, which grows abundantly along the Nile River in Egypt. Paper is made of pulped cellulose fibre like wood, cotton or flax. Papyrus is made from the sliced sections of the plant, pressed together and

\textsuperscript{130} ibid
\textsuperscript{131} K.S. Padhy; \textit{The Press in India}, 1981; p.2
\textsuperscript{133} Bansal M.C. & Mukesh Kumar; \textit{Paper Making in History of Technology in India}, 2001, pp 714-725
\textsuperscript{134} ibid
Figure No. 1

Cuneiform writing

△ Writing on a soft clay tablet with a reed pen.

Figure No. 2

Ancient writing instruments - From left to right: quills, bamboo, pen sharpeners, fountain pens, pencils, brushes.
Figure No.3

Paper pulp processing.

From the 1897 *Encyclopaedia Britannica*
Figure No. 4
The process of making paper by hand. The worker in the background is picking up the plant-fiber slurry on a flat screen to form sheets of paper. The worker in the foreground is laying the sheets out to dry.

From the 1897 *Encyclopaedia Britannica*
A typical paper-making screen viewed from above. The metal design in the screen is there to form the maker's watermark in the paper.

From the 1897 *Encyclopædia Britannica*
dried. The Chinese prisoners of war brought the art of making paper to Samarkand after the battle of Atlakh near Talas, first introduced (A.D 751) the technique of papermaking from linen, flax or hemp rags based on methods used in China. Nadir Observed in Al-First; "The Chinese write on Chinese paper made from a sort of herbage. This industry is a great source of income for the city. The Arab learnt the technique of paper-making from the Chinese captives at Samarkand and diffused westward." Al Berani also stated, "The Chinese captives introduced in Samarkand and thence it diffused to the other part of the world." The paper technology reached Arab and Arabians improved the technique and supplemented linen with flax and other vegetable fibres. With the conquest of Sindh by the Arabs, Kurasanil paper was first introduced in India in the eighth century A.D. and it continued to be imported for several centuries.

Paper making there in Baghdad (793 A.D) developed, Arabs made paper in Cairo in 900AD. The art of making paper was made known to the European countries by 1100AD.

The reference to Indian paper suggests that the paper-making industry, however, limited had already established in Delhi, and Lahore, the two chief political cultural seats of the Sultanate Period.

In India, the first paper industry was developed in Kashmir, established by Sultan Zanily Abed in (Shah Khan) of Kashmir in 1417-67 A.D. Actually his father Sultan Islander (c. 1386-1410) was ruling over Kashmir at the time of Timor’s invasion of India in 1398. Sultan Sikandar sent an embassy, led by his son Shahi...
Khan, to that formidable personage and sought his friendship. Timur summoned him for a meeting but in the meanwhile political developments at home compelled him to leave India. He hastens to Samarkand but took along with him Shahi Khan. And he was kept virtually as a hostage until his death. Shahi Khan returned to Kashmir with many artisans and persons skilled in many trades with view to introducing new industries there. These included paper makers, bookbinders, harness-makers and midwives. For the quality of the papers, Kashmiri paper was much demand in the world. And rest of the country for writing manuscripts, According to Tarik-I- Farista Sultan Abu Said sent fine Arab horses and strong camels of good breed as present to Zain Abedin in return, sent saffron, paper, perfumes, rose-water, vinegar, elegant shawls, glass bowls and other fine products of Kashmir industry.

1.12.2 Indian Paper-Manufacture Centres:

With the rapid demand of writing material, the papermaking centres were established in different parts of the country like in Sialkot (Punjab), Zafarabad in District Jaumpur (Oudh); Bihar Sharif in district Azimabad (Patna) and Arwal in District Gaya (Bihar), Murshidabad and Hoogly (Bengal): Ahmedabad, Khambat and Patan (Gujarat); and Aurangabad and Mysore in south.

- The Punjab was the leading centre; Sialkot paper was white in colour and very stout. It was used throughout Punjab. In Uttar Pradesh, Zafarabad...
is a famous town of district Jaunpur. It was known as Kaghdi Shahar (paper city) in olden times. It produced a very fine, glossy and strong variety of bamboo paper. Two types of paper produced here—the first was the polished paper, which was glossy and second was unpolished.

- Bihar had two papermaking centres in medieval times. First was Arwal town in District Gaya, and second was Bihar sheriff in district Azimabad.

- In Bengal, Murshidabad and Hotly were the major papermaking centres in the medieval times. At a later period, Dinajpur also started manufacturing paper.

- Gujarat developed as the largest producer of paper. It supplied paper to rest of India and also exported to the west, other Western countries and Turkey also. In Gujarat, Ahmadabad was the largest paper making centre, it produced white and glossy paper.

- During the Mughal period, Daulatabad, with Aurangabad as its Capital, emerged as an important papermaking centre, the most remarkable features of Daulatabad paper was its durability and glossiness. Daulatabad was the chief centre of paper to south India.
Tipu Sultan developed papermaking centres in Mysore. The paper produced by Mysore was a high quality paper, which was employed only for royal use. Other big paper making centres of medieval India were Sanganer (in Jaipur, Rajasthan), Kotah (Rajasthan), Tijarah (in Alwar Rajasthan), Kanauj (Farukhabad, U.P), Kalpi and Pukharayan in Kanpur (U.P), Panchamnagar (in Dist. Damoh, Madhya Pradesh), Dharangaon and Erandel town (in Dist. East Kandesh, Maharashtra) and Poona.

1.12.3 Important categories of paper:

1. Ahmadabadi paper was a little thick and was of two qualities: fine and superfine. The paper and extra whiteness and glossiness.


3. Khasah-I- Jahangiri paper was made at Sialkot. The paper was glossy, thin, polished and bluish white.

4. Hyderabad paper was well glazed; some was polished and of brown colour with very fine shades.

5. Faisabadi paper had three varieties: 1. Unpolished paper 2. pale yellow, 3-polished dark yellow.

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151 ibid
152 ibid
153 ibid
154 vide foot note No. 153
155 ibid
156 ibid
157 ibid
6. Kanpuri paper was prepared from bamboo and was grayish in colour.

7. Aurangabadi paper was glossy and stout, had a few varieties like, Bahadur Khani (medium quality paper, thick, stout and durable), Sahib Khani paper (medium quality thick, Murad Shahi paper). Aurangabadi paper was glossy and stout, had a few varieties like, Bahadur Khani (medium quality paper, thick, stout and durable), Sahib Khani paper (medium quality paper, Murad Shahi paper).

8. (fine quality), Sharbati paper thick and fine, Qasim Begi paper (four or five varieties of different colour)

1.12.4 Indian technique of Paper making:

According to Rahman, the main tool used for paper making were: dhegi (hammer), Chhpri (screen), and sacha (teakwood frame), kunchawas (soft date-palm brush) and polished stone.

The process of making (rough paper) paper from waste paper: The waste paper was torn to pieces, sorted according to colour, moistened with water, taken to the river and pounded with stones, and washed for three days. It was then taken to cistern about 7ft X 4f X 4ft deep half-filled with water. The pulp was thrown into this cistern. When it was thoroughly dissolved, the workman sitting on the edge of the pit bending over the water, took in both hands the square frame which held the screen serving as a sieve, passed it underwater and drew it slowly and evenly to the surface: such that, as the water passed through, a uniform film of pulp was left on the screen. The screen was then lifted up and turned over, and the film of paper was spread on a rag cushion. When sufficient layers had been heaped on this cushion, about 9-14 inches high, a rag was spread over them and a plank weighted with heavy stones was laid on it. When this pressure had drained the water and some of the moisture out of the stock of paper, the stone were taken

\[158 \text{ ibid} \]

\[159 \text{ ibid} \]

\[160 \text{ ibid} \]

\[161 \text{ ibid} \]
away and two men, one standing at each end of the plank see-sawed over the
bundle of paper by hand. When it was well pressed the paper was plied off,
layer after layer, and spread to dry either on the walls of the building or on rags
lay in the sun. When dried each sheet was laid on the polished wooden board and
rubbed with a shell till it shone.

Rahman describes another process of glazed papermaking. According to
Rahman, firstly the material was cut into small pieces, moistened with water and
pounded by a heavy fixed hammer, the dhegi. Then washed with clean water and
moistened with slaked lime and left in a heap on the floor for seven or eight days,
then pounded again, heaped and left to lie for four days more. Again washed this
material (rag) with plane water and washed material mixed with k-har (impure
carbonate of soda, 1 khar : 3 8 pulp) overnight. This rag was again washed and
again mixed with khar ( 1 Khar : 40 pulp ) and dried in the son. And again
washed and. Washed rags were mixed with country soap (1 soap : 27 rags ) and
pounded and dried. Then this pulp was washed again. Then placed into a
cement-lined cistern, about 7 ft x 4 ft x 4 ft. deep. The rest of the process was
similar to the above described technique.

OTHER PROCESS OF PAPER MAKING: According to Ray, the old clothes,
old tents, the bark- of certain shrubs and trees were washed well and soaked in
water for few days; these materials were beaten -with wooden hammer (dhegi).
The pulp was mixed with a little water in a litne-lined (Cunam ) reservoir, where
the beating operation was also carried out. The workman dipped their moulds into
the reservoir, and the mixture, when lifted out, would become paper. It was

162 vide foot note No. 161
163 ibid
164 vide foot note No. 163
165 ibid
then removed, and each sheet drawn thriving a second resin, oar of water and then hung up to dry in sun. A quantity of grump Arabic was dissolved in water and then the beaten pulp was placed. The water in the second reservoir, through which the sheets were drawn, also contained garn in the form of mucilage, as well as some alum dissolved in it. The moulds or forms used by the workmen were generally made of bamboo. The gum Arabic was obtained as an exudation from the baboon tree. The early papermaking process is shown in Drawing No.2 to Drawing No. 4.

1.12.5 Paper Production in India:
In 1925, Bamboo Paper industry (Protection) Act and in 1931, Indian Finance (Supplementary and Extending) Act came into existence which provided the protection, and some more mills appeared on the scene. Rohtas Industries Ltd., Dalmianagar; Orient Paper, Brajraj Nagar; Mysore Paper Mills Ltd., Bhadravati; Star Paper Mills Ltd., Saharanpur, and Sirpur Paper Mills, Kagajnagar, Sirpur; were set up just before the outbreak of the Second World War. Indian paper Industry made remarkable progress during the war period. The net production of paper and Production of individual paper mills are shown in the Table No.1 and Table No.2 respectively.

That technique for the manufacture of which Chinese had known for several decades:

- Ink known for 25 centuries.
- Surfaces bearing Texts-carved relief

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166 ibid
143 ibid
144 ibid
170 Britannica Encyclopedia
Table No. 1

Net Production of Paper in India during the period 1911-1950

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>27.2</td>
</tr>
<tr>
<td>1921</td>
<td>24.7</td>
</tr>
<tr>
<td>1931</td>
<td>40.00</td>
</tr>
<tr>
<td>1941</td>
<td>95.0</td>
</tr>
<tr>
<td>1942</td>
<td>92.5</td>
</tr>
<tr>
<td>1943</td>
<td>102.6</td>
</tr>
<tr>
<td>1945</td>
<td>110.1</td>
</tr>
<tr>
<td>1946</td>
<td>105.1</td>
</tr>
<tr>
<td>1948</td>
<td>92.8</td>
</tr>
<tr>
<td>1949</td>
<td>106.1</td>
</tr>
<tr>
<td>1950</td>
<td>109.3</td>
</tr>
</tbody>
</table>

**Table No.2**

*Production of Individual Paper Mills in India in 1947.*

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Year</th>
<th>Name and Location</th>
<th>Production in (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1881</td>
<td>Upper India Cooper Paper Mills, Lucknow</td>
<td>2,0302</td>
</tr>
<tr>
<td>2</td>
<td>1882</td>
<td>Titagarh Paper Mills, Titagarh and Kankinara</td>
<td>38,550</td>
</tr>
<tr>
<td>3</td>
<td>1887</td>
<td>Bengal Paper Mills, Raniganj</td>
<td>11,760</td>
</tr>
<tr>
<td>4</td>
<td>1887</td>
<td>Deccan Paper Mills, Hadaspur</td>
<td>3,090</td>
</tr>
<tr>
<td>5</td>
<td>1918</td>
<td>India Paper Pulp, Naihati</td>
<td>6,040</td>
</tr>
<tr>
<td>6</td>
<td>1925</td>
<td>Andhra Paper Mills, Rajamundry</td>
<td>1,630</td>
</tr>
<tr>
<td>7</td>
<td>1925</td>
<td>Shri Gopal Paper Mills, Yamunanagar</td>
<td>10,360</td>
</tr>
<tr>
<td>8</td>
<td>1931</td>
<td>Punalur Paper Mills, Punalur</td>
<td>4,120</td>
</tr>
<tr>
<td>9</td>
<td>1933</td>
<td>Gujarat Paper Mills, Barejadi</td>
<td>1,500</td>
</tr>
<tr>
<td>10</td>
<td>1935</td>
<td>F. Pudumjee, Bombay</td>
<td>1,120</td>
</tr>
<tr>
<td>11</td>
<td>1936</td>
<td>Star Paper Mills, Saharanpur</td>
<td>4,250</td>
</tr>
<tr>
<td>12</td>
<td>1936</td>
<td>Orient Paper Mills, Brajrajnagar</td>
<td>27,310</td>
</tr>
<tr>
<td>13</td>
<td>1937</td>
<td>Mysore Paper Mills, Bhadravati</td>
<td>3,990</td>
</tr>
<tr>
<td>14</td>
<td>1938</td>
<td>Sirpur Paper Mills, Sirpur- Kaghaznagar</td>
<td>5,480</td>
</tr>
<tr>
<td>15</td>
<td>1939</td>
<td>Rohtas Industries, Dalminagar</td>
<td>12,860</td>
</tr>
</tbody>
</table>

Source: Bansal and Kumar; Paper making. In History of Technology in India; 2001, pp.723
Texts: Classics of Buddhists thought inscribed on marble pillars, to which pilgrims doubtless applied sheets of damp paper, damped the surface with ink so that the parts that stood out in relief showed up. Some were religious seals evidently used to transcribe the texts. It is believed that Buddhist Monks played a significant role in the transmission of medical and zinc technologies among the Asian Countries. More so mutual East–East technological exchanges among Asian nations were frequent. The Silk Road must also have played a significant role in the spread of early technologies. For example the BROWER MANUSCRIPT, which is named after its discoverer, was found in 1890, in Kachar, in eastern Turk Stan, on the great caravan route of China. The large medical treatise called.

1.13 Ancient Indian Writing Materials:

Indians used two types of Writing Materials:

1. Hard Materials: Hard and soft stone, metal shells and earthenwares, used for engraving, embossing, painting and scratching were used for writing.

2. Soft Materials: were wooden board (pati), dust (dhuli), birch-bark (bhrja-patra), palm leaves (tada patra), leather (ajina), Cotton cloths (karpasika pata) and paper

1.13.1 Ancient hard writing Materials:

Stone engravings were made on the walls of temples, smoothed or rough pillars, slabs, lids of vases, caskets etc. These dealt with official and private records, royal proclamations, land grants, eulogies and memorials. Metal-

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171 Chaudhuri, Mamata; Writing Materials, in History of Technology in India; 1997, pp 639-645
172 Ibid
173 Ibid
Generally gold, silver brass, bronze, iron and tin copper were used as writing materials.

Specimens of some inscribed conch-shells have been discovered from the ruins of a Buddhist establishment at Salihundam in A.P.

Bricks, earthenware, terracotta- In ancient times bricks, earthenwares and terracotta were also used as writing material. Bricks and earthenware were generally scratched before being dried or baked.174

1.13.2 Ancient Soft Writing Materials:

Wooden board- About 5th century BC the wooden board was used for writing purposes. Writing on it could be done with a piece of chalk (pandu-lekha). This method was used for teaching. Al-Biruni the great Arabian medieval scholar also writes, "The Hindus use black tablets for the children in the school and write upon them along the long side, not the broad side, writing with a white material from the left to the right.175

Birch-bark- The inner bark of bhurja (betula spp.) tree was the most popular material for writing manuscripts, especially in northern-wester India.176 Al-Biruni informs, "In central and northern India, people use the bark of the tuz tree. One kind which is used as a cover for bows. It is called bhurja. The piece of one yard long and as broad as the outstretched fingers of the hand or somewhat less and prepare it in various ways. They oil and polish it, so as to make it hard and smooth and they write on it.

Leather- Leather was rarely used by orthodox Hindus as writing material in India, but in early and medieval times it was predominant in western Asia and

174 ibid
175 ibid
176 ibid
Europe. Al-Biruni notes, "The Hindus are not in the habit of writing on hides, like the Greeks in Ancient times."

**Palm-leaves (tada-patra)** - In southern India, palm-leaves, tada or tala or tali were widely used for writing manuscripts. Al Burini has observed; "The Hindus have, in south of their country, a slender tree like date and coconut palms bearing edible fruits and leaves of the length of one yard and as broad as three figures, one put beside the other. They called these leaves tali and write on them. They bind a book of these leaves together by a cord on which they were arranged, the cord going through all the leaves by a hole in the middle of each leaf. They write the title of the book at the end of it.

**Cloth-Smooth and non-porous cotton cloth was also used as writing classics**, prepared by an official commission was reproduced by this method.

### 1.14 Evolution of Printing in India:

Printing is an industrial process for reproducing copies of texts and images, typically with ink on paper using a printing press. It is an important part of publishing. Printing was a gift of Buddhism to the world. This attempt was to make widely available the literature of that faith. This first printing was by wooden blocks, not by movable type. Indeed, the best printing in China has always been by the wooden block, akin to the woodcut, on which the desired text has been affixed by pasting the inscribed page face down upon it's and then

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177 ibid
178 ibid
179 ibid
180 ibid
carving it in such fashion that the characters left raised, ready to make the impression\(^\text{182}\).

Palaeography (the study of old writing); writings carved on seals; stones, pillars, rock, copper plates, temple walls and bricks and on images. The earliest inscription found was written in the 3\(^{rd}\) century BC, Sanskrit became an epigraphic medium in the 2\(^{nd}\) century AD. During the reign of Ashok (273-232BC) Prakrit, Brahmi and Karosti scripts developed\(^\text{183}\). First; the text was written in ink on a sheet of fine paper; than the written side of the smoother surface of a block of wood, coated with a rice paste that retained the ink of the texts\(^\text{184}\).

The rudimentary first printing was by wood blocks, not by movable type. Included, the best printing in China has always been by the wood block, akin to the wood cut, upon which the desired text has been affixed by pasting the inscribed page face down upon it, and than, carving it in such order that the character left, raised, ready to make the impression. Moreover, movable by and other methods were of printing Press should go to China. The conspicuous feature in that of wood block that the fixed work was done\(^\text{185}\).

The Diamond Sutra is the world’s earliest dated printed book. *Jin gang ban ruo boluoie* Diamond Sutra was traced in1907 in the scroll form by the archaeologist Sir Marc Aurel Stein in a Wall at the Caves of the thousand Buddha’s, near Dunhuang, in North-west China\(^\text{186}\). This printing was done in China in 868 AD\(^\text{187}\). The book carried the statement: Printed on May, 11, 868 by WANG

\(^{182}\) ibid
\(^{183}\) ibid
\(^{184}\) ibid
\(^{185}\) ibid
\(^{186}\) Kenneth Scott Lstourette; *A Short History of the far East*, London, 1969, pp125-130.
\(^{187}\) ibid
CHIC, for free general distribution, as a mark of his deep reverence to perpetuate the memory of his presents".

The art of printing further developed during the period of the five dynasties (AD907-960) and revised text of the classics, prepared by an official commission was reproduced by this method. The next Dynasty, the Sung (AD 960-1279) carried out the development of printing activities. Political weakness, though this Dynasty had, it was not cultural decay. It was famous for printing with exquisite beauty. Invention of movable type (11th century) i.e. (1041-48), Chinese alchemist PI SHENG invented the movable type of printing machine. In 1314 WANG CHANG, a Chinese made a wooden type. In 1392 General Yi, Korean, king established a metal type foundry. He printed a book with Korean Bronze in 1409. AD.

The impact that printing had upon Europe was tremendous. The development of printing and moveable type influenced and shaped both the Renaissance and the Reformation. More so, printing resulted in the establishment of national languages and indigenous literature. These events initiated the rise and spread of nationalism in Europe. Through printing education was popularized as books became cheaper and literacy spread. Education and literacy allowed for greater social mobility. The inexpensive mass production of books in conjunction with the spread of literacy ended the monopoly the clergy had over learning in medieval Europe. Inconsistencies and contradictions in older texts weakened faith and challenged traditional views. The development of printing in

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188 ibid
189 Kenneth Scott Latourette; A Short History of the Far East; Toronto; 1969, p125
191 Kenneth Scott Latourette; A Short History of the Far East; Toronto; 1969, pp125-130
192 ibid
Europe allowed individuals such as Martin Luther (1483 – 1564) and Galileo Galilei (1564–1642) to challenge traditional views and spread their ideas.

1.14.1 Founders of Printing from Moveable type:

- Guttenberg of Mainz of Germany.
- Costar of Harlem of Holland
- Johannes Brio of Bruges of Belgium
- Pamfilo Castaldo of Feltre (Italy)

Johan Guttenberg of Mainz had been, generally admitted to be the inventor of printing. His name has been perpetuated by his famous Edition of the Holy Bible. Certain letters of Indulgence were printed in 1454 from types cast in his foundry. The first bible, VULGATE BIBLE was published by him in 1456. The very important contribution was given by him was that in 1457 he published the book of PSALMS mentioning for the first time the name of the printer, the date and place of printing.

The art of printing spread to the various countries in the following order:

- In Italy (1451),
- France (1470),
- Spain (1483),
- Portugal (1495),
- India (1556)
It was William Claxton, England's first printer who had gained printing experience in Cologne. In 1476 he returned to England and a year later he established a press at the RED PALE in the Almonry at Westminster (Till then printing was done in Latin). But Claxton printed for a period of fifteen years, about hundred volumes in the English language. The church was the chief place of the Printing place. The Printing Press was used to print bible and to circulate the same in the European countries and also for the propagation of knowledge. Further, Gutenberg developed the invention of typography in 1450. Founder of printing from movable were Guttenberg of Mainz (Germany); costar of Harlem (Holland); Johannes Brito of Bruges (Belgium). European writing was based on an alphabet composed of a limited number of abstract symbols. This simplified the problem involved in developing technique for the sense of movable type manufactured in series. Chinese handwriting 80,000 symbol, lends itself only poorly to the requirements of typography. Partly for the reason, the unquestionably advanced oriental civilization, of which the richness of this writing was evidently, underwent a showering down of its evolution in comparison with the formerly more backward western civilization.

The printing has facilitated the spread of ideas that have helped to shape alteration in social relation made possible by industrial development and economic transformation, the work of the 18th century philosophers and the
United States Constitution; the Declaration of the Right of man and of the citizen and 19th century social doctrines by means of books, pamphlets and the press, information of all kinds has reached all levels of society in most countries.

Portuguese, who held their colony there in Goa, also possessed some colonies in the African continent. There's aim was to propagate the cult of Christianity in this continent. For that reason two printing press machine were brought to India in Goa, on the way to Africa by a Portuguese Ship. Fourteen Jesuits including the Patriarch designate of Abyssinia accompanied the printing press. This ship made, due to the technical snag, an emergent landing there in Goa and these two Printing Press Machines were left in Goa. As a matter of fact, Jesuit father of Goa made use of the Printing Press for the first time on 6th Sep. in 1556. The very act of the father inaugurated the new era of press in India.

The first book printed was DOCTRINA CHRISTA. It was a catechism written by St. Francis Xavier for the benefit of children. Students at the Jesuit college of St. Paul and Rachil received instructions from this book.

Jaaqo De Bustamante, who was born in Venetia (Spain), in 1536 came to India with the Printing press. He was the pioneer Indian Printer. In 1556 he joined the society of Jesuit and was ordained in 1564. His name was changed to Jaaqo Rodriguez in 1563 and died in 1588.

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202 ibid
204 ibid
205 ibid
206 ibid
207 ibid
Jaao Gonsalves, an expert Indian blacksmith, accompanied Bustamate to Goa. He was the first Indian to make types of an Indian script\textsuperscript{208}, in India. He made types of Tamil Letters and called the set: "Types of the Malayalam Language\textsuperscript{209}". These types were used for the printing of St. Zavier’s Doutrina Christa in Tamil 1578. This was the first book printed in an Indian Language. Thus, the first Indian script of which types were made was Tamil. Malayalam at that time was considered as a part of Tamil and Malayalam types were made later\textsuperscript{210}.

The press in Goa was established with the aim of Propagation of Christianity. In the programmed of Evangelization, the Indian Languages were given prominence\textsuperscript{211}.

Press in legal sense includes newspapers, periodicals and Journals. In 1621 modern prototype newspaper, Corante\textsuperscript{212} was published there in London. A weekly was started in 1622. In the short span of time British Govt. compelled to impose terms and conditions on those news paper to the extent that these news papers should not cast bad influence on the minds of the people. As such every effort were made by the King to bring the Newspapers under the statutory regulation in the interest of the State\textsuperscript{213}. If we look into the growth of newspaper in India one can make out various stages wherein newspapers developed by the British authorities, European; Anglo-Indians, Nationalists and others\textsuperscript{214}.
1.14.2 Pioneers of Printing Press:

- **Johann Gutenberg** (1397-1468) designed a printing press and movable type, which made printing practical and efficient for the first time. A German businessman with training in metallurgy, he developed these revolutionary devices between 1430 and 1450, using them to print a Latin text book called *De octo partibus orationis* in 1448 and papal indulgences, single pages sold by the Church to raise money for crusades and other projects, in 1454 and 1455. Between 1452 and 1455, he secured his place as one of the most important and famous people in history by printing about 200 copies of a two-volume Bible, now known as the Gutenberg Bible.

- **Nicolaus Jenson** (1420-1470), a Frenchman, is known for perfecting Roman typefaces, which quickly replaced Gothic typefaces as the fonts of choice for European printers.

- **William Caxton** (1422-1492) is known primarily for bringing printing to England in 1476. A British wool merchant who worked on the Continent, Caxton became interested in printing around 1471 after he had translated a French book of Greek legends and determined to make copies of it (Olmert 125). Between 1472 and 1476, he printed seven books in Bruges. In 1476, he returned to England, where he established a printing business in London. Among the 100 or so books he published here are Geoffrey Chaucer's *Canterbury Tales* in 1476-1478 and Thomas Malory's *Le Morte d'Arthur*, the most famous version of the story of King Arthur, in 1485.

- **Aldus Mauritius** (1450-1515), an Italian printer, worked with type designer Francesco Griffo to introduce the first italic type in 1500. Aldus is also known for his edition of *Hypnerotomachia Poliphili*. Published in 1499, it still is considered one of the most beautiful printing jobs in history.

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Benjamin Franklin (1706-1790) was one of the major printers of colonial America, as well as an important statesman and writer. After working as an apprentice to his brother and other printers, Franklin set up his own shop in Philadelphia in 1728. In 1730, he became the official printer of Pennsylvania.

Stanley Morris (1889-1967), a British type designer, created some of the most popular typefaces of the 20th century, including Baskerville, Garamond, and Fournier. In addition to designing type for the Pelican Press and the Monotype Corporation, he created Times New Roman for the London Times. Between 1923 and 1930, he published Fleuron, a journal of typography. Among his books on typography are 'Black Letter' Text, which he published in 1942, and John Fell: The University Press and the 'Fell' Types, published in the last year of his life.

1.14.3 Printing Processes:

- **Letterpress**: In this form of printing, the most common form from the beginnings of large scale printing in the mid-15th century until the middle of the 19th century, printers take individual letters, each cast in a raised position on a small block, and arrange them backwards in a frame, or chase. When they have finished the chase, which usually contains between two and 16 pages, they place it on the bed of the printing press, apply ink to the raised letters, and lay a sheet of paper over the frame. By applying pressure to the paper with a large plate, they force the ink on the letters to make an impression on the paper.

- **Monotype**: Using a monotype machine, invented in the 19th century, printers can cast an individual piece of type simply by pressing a key, as though typing.
• **Linotype:**
Like the monotype machine, the linotype machine allows operators to cast type by pressing keys, in this case casting an entire line of type instead of individual letters. This form of typesetting, which was invented in 1886 in New York, was the most common in America until the 1950s.

• **Offset:** This form of printing, in which letters are photographed instead of cast in type, became the most popular in the 1950s and continues to be used today. After photographing pages, printers shine light through the negatives onto photosensitive plates, causing letters and pictures to appear on the plates, where they will accept ink. These thin plates then are wrapped around rollers, inked, and pressed against rubber rollers, which then are pressed against rolls of paper, creating pages.

Some earlier printing machines are shown in Pictures No.3 to 10.

1.14.4 **Communication timeline**²¹⁵:
Communication timeline shows the evolution since the earliest period. The particular information is shown in Table No.3

1.14.5 **Newspaper timeline**²¹⁶:
Communication timeline shows the evolution since the earliest period. The particular information is shown in Table No.4

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²¹⁵ World Book 1999
Gutenberg Printing Press.

Source: Internet Source
No. 4 Printing Press of 15th Century, Gottenburge, Germany

Source: Internet Source.
Printing Press of 16th Century, No.6
Internet Source
Printing Press of 18th century,

A replica of Franklin's press.

Source: Internet Source.
Printing Press of 19th century of America, No.8
Internet Source.
No. 9 Printing Machine and camera of 19th century of British India.
No. 10 An Eight Grade Girl using the School Printing Press-1910. Location: Blaine

Source: Internet Source.
### Communication timeline

<table>
<thead>
<tr>
<th>Chronology</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>20000 BC</td>
<td>Prehistoric people used paintings and drawings to tell stories.</td>
</tr>
<tr>
<td>3500 BC</td>
<td>Sumerians developed first known system of writing.</td>
</tr>
<tr>
<td>3500 BC</td>
<td>Papyrus came into use as a writing surface.</td>
</tr>
<tr>
<td>3000 BC</td>
<td>Clay stamps used to validate written messages. Clay tablets were also used as writing surface.</td>
</tr>
<tr>
<td>1500 BC</td>
<td>Semites invented use of alphabet for writing.</td>
</tr>
<tr>
<td>750 BC</td>
<td>Greek inscriptions were carved into slabs with a hammer and chisel.</td>
</tr>
<tr>
<td>200 BC</td>
<td>A method of refining parchment from sheepskin was discovered - supposedly by the King of Pergamum. The name &quot;Parchment&quot; is derived from &quot;Pergamum&quot;.</td>
</tr>
<tr>
<td>59 BC</td>
<td>Romans began handwritten newsheet, a forerunner of today's newspapers.</td>
</tr>
<tr>
<td>59 BC</td>
<td>Chinese invented paper by the date.</td>
</tr>
<tr>
<td>105 AD</td>
<td>Ts'ai Lun, a Chinese monk, announced the invention of paper to Emperor Chien Ch'u. The first paper was made from mulberry and other barks, fish nets, hemp and rags.</td>
</tr>
<tr>
<td>400 AD</td>
<td>True ink was invented from lamp-black and used in China for brush writing and later for woodblock printing.</td>
</tr>
<tr>
<td>450 AD</td>
<td>Seals were printed with true ink. This was the first instance of actual printing with as incised stamp upon paper.</td>
</tr>
<tr>
<td>650 AD</td>
<td>The Chinese Buddhist monks first experimented with the duplication of images by rubbings, charm blocks and stencils. This was the forerunner of the true block printing of the 9th century.</td>
</tr>
<tr>
<td>868 AD</td>
<td>&quot;The Diamond Sutra&quot;, the first printed book, was printed. It was a roll sixteen feet in length and was the Original form of Chinese book printing.</td>
</tr>
<tr>
<td>1035 AD</td>
<td>Waste paper was first repulped and used as a material for papermaking. The birth of recycling.</td>
</tr>
<tr>
<td>1045</td>
<td>Pi Sheng invented movable type.</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>1282 AD</td>
<td>Italy became the first European country to use watermarks. From the period between 13th and 16th centuries, over 16000 individual watermarks have been identified.</td>
</tr>
<tr>
<td>1298 AD</td>
<td>Marco Polo reported that during his trip to China, he witnessed the printing of paper money.</td>
</tr>
<tr>
<td>1309 AD</td>
<td>Paper was first used in England.</td>
</tr>
<tr>
<td>1403 AD</td>
<td>The Royal type foundry in Korea produced the first movable type in that country. The Korean found the process very practical and used it extensively. It was more practical for them than the Chinese because they had less than 100 character in their alphabet.</td>
</tr>
<tr>
<td>1423 AD</td>
<td>The earliest dated European woodblock print. It shows St. Christopher bearing the infant Christ.</td>
</tr>
<tr>
<td>1450 AD</td>
<td>Johannes Gutenberg reinvented movable type in Europe</td>
</tr>
<tr>
<td>1462 AD</td>
<td>The first printer's mark or &quot;device&quot; was used by Fust and Schoeffer of Mainz, Germany. This printer's mark is now the official logo of the International Association of Printing House Craftsmen, or the Craftsmen's Club.</td>
</tr>
<tr>
<td>1469 AD</td>
<td>The first use of Roman type in printing.</td>
</tr>
<tr>
<td>1477 A.D</td>
<td>William Caxton brought the art of Printing to England.</td>
</tr>
<tr>
<td>1501 A.D</td>
<td>Aldus Manutius introduced his famous series of classics. It was in these that the italic form of type was first used. These were history's first &quot;Pocket Books&quot;</td>
</tr>
<tr>
<td>1540</td>
<td>The first printing was done in North America when Juan Pablos printed Manuel de Aldutos.</td>
</tr>
<tr>
<td>1563</td>
<td>By Letters of Patent of Charles IX of France, it was forbidden for any French printer to print without permission under penalty of being hanged or Strangled.</td>
</tr>
<tr>
<td>1536-1565</td>
<td>English made first graphite pencils</td>
</tr>
<tr>
<td>1600</td>
<td>Printed newsheets called &quot;corantos&quot; appeared</td>
</tr>
<tr>
<td>1724</td>
<td>Benjamin Franklin arrived in London and obtained employment as a printer's apprentice in the shop of Samuel Palmer.</td>
</tr>
<tr>
<td>1728</td>
<td>William Get perfected stereotype printing.</td>
</tr>
<tr>
<td>1735</td>
<td>The trial of John Peter Zenger, where he was found not guilty of libel. This was the first time truth was used as a defense against libel. The trial defined the</td>
</tr>
</tbody>
</table>
the fact that the truth cannot be considered libelous.

1768 Abel Buell was the first to cut and cast type in the American Colonies.

1769 The printing press made by an American craftsman was the work of Isaac Doolittle, a clock and watchmaker.

1794-98 Aloys Senefeder invented the planographic method of printing known as Lithography.

1766-1799 Claude Chappe developed a visual telegraph

1811 Friedrich Konig invented a steam-powered printing press

1812 Konig built the first automatic printing press and installed it in the office of The London Times.

1824 William Pickering introduced his "Diamond Classics," the first book to be bound in booksloth.

1826 Joseph Nicephore Niepce made first permanent photograph

1830 Louis J.M. Daguerre developed an improved photograph

1840 Samuel F.B. Morse patented his electric telegraph

1864 James Clerk Maxwell reported his theory of electromagnetism, which led to radio

1866 First successful transatlantic telegraph cable linked Europe and North America

1868 Three American inventors patented first practical typewriter.

1876 Alexander Graham Bell patented a type of telephone

1877 Thomas A. Edison developed first practical photograph

1880 Heinrich Hertz discovered electromagnetic waves.

1884 Ottmar Mergenthaler patented the Linotype machine

1895 Guglielmo Marconi developed the "wireless telegraph" (radio)

1906 Reginald A. Fessenden transmitted voice by radio.

1907 Lee De Forest patented the "triode", an improved vacuum tube.

1929 Vladimir K. Zworykin demonstrated first all-electronic TV system.

1936 British Broadcasting Corporation made the world's first TV broadcasts.
1947 Physicists at Bell Telephone Laboratories invented the transistor.

1954-1956 Television networks began to record programmes on videotape.

1960 Echo 1 received radio signals from a ground station and reflected them back to earl

1960 Xerox Corporation perfected "Xerography" a copying process.

1970 Several manufactures developed videocassette recorders.

1980-1983 Several companies had begun to market cellular mobile telephones

1987-1989 Fax machines became widely popular in business.

Internet Sources: Significant Dates In Printing History.
<table>
<thead>
<tr>
<th>Chronology</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>59 BC</td>
<td>Acta Diurna (&quot;Daily Events&quot;), earliest known newsheet, began in Rome.</td>
</tr>
<tr>
<td>700</td>
<td>Chinese circular &quot;Diabo&quot; (also spelled &quot;Ti-Pao&quot;) first printed newspaper.</td>
</tr>
<tr>
<td>1609</td>
<td>&quot;Avisa Relation oder Zeitung&quot; of Germany first regularly published printed newspapers in Europe.</td>
</tr>
<tr>
<td>1622</td>
<td>A weekly newsheet first newspaper regularly printed in England.</td>
</tr>
<tr>
<td>1644</td>
<td>John Milton's pamphlet &quot;Areopagitica&quot; one of earliest arguments for freedom of the press.</td>
</tr>
<tr>
<td>1690</td>
<td>First Newspaper in American Colonies, &quot;Publick Occurences Both Foreign and Domestic, published.</td>
</tr>
<tr>
<td>1695</td>
<td>England lifted its newspaper licensing system.</td>
</tr>
<tr>
<td>1704</td>
<td>&quot;Boston News-Letter&quot; first regularly published paper in American Colonies.</td>
</tr>
<tr>
<td>1733</td>
<td>John Peter Zenger founded &quot;New York Weekly Journal&quot;.</td>
</tr>
<tr>
<td>1735</td>
<td>Zenger tried for libel: found not guilty because he had printed the truth; truth is not libelous.</td>
</tr>
<tr>
<td>1765</td>
<td>British Parliament passed Stamp Act requiring tax stamps on newspapers; colonists protested.</td>
</tr>
<tr>
<td>1766</td>
<td>Parliament repealed Stamp Act after colonial newspapers refused to buy the stamps.</td>
</tr>
<tr>
<td>1821</td>
<td>British Newspaper &quot;Guardian&quot; founded.</td>
</tr>
<tr>
<td>1830</td>
<td>The United States had about 1,000 newspapers: most cost about 6 cents a copy.</td>
</tr>
<tr>
<td>1833</td>
<td>Benjamin H. day founded &quot;New York Sun,&quot; first successful penny newspaper.</td>
</tr>
<tr>
<td>1835</td>
<td>&quot;New York Herald&quot; newspaper established by James Gordon Bennett.</td>
</tr>
<tr>
<td>1841</td>
<td>Horace Greeley started the &quot;New York Tribune&quot; newspaper.</td>
</tr>
<tr>
<td>1844</td>
<td>&quot;Globe &amp; Mail&quot; newspaper began publication.</td>
</tr>
<tr>
<td>1847</td>
<td>&quot;Chicago Tribune&quot; newspaper began publication.</td>
</tr>
<tr>
<td>1848</td>
<td>Six New York City newspapers formed Associated Press (AP) first major news service in U.S.</td>
</tr>
<tr>
<td>1848</td>
<td>&quot;Des Moines Register&quot; newspaper began publication in Iowa.</td>
</tr>
</tbody>
</table>
1851  "San Jose Mercury News" - Newspaper began publication in California.

1861-1865  Photographer Mathew Brady and staff travelled with Union Army to take picture of the American Civil war.

1861-1865  Northern newspapers sent more than 100 reporters to cover American Civil war battles in South.

1865  "The Nation" founded as a liberal weekly newspaper, it later became a magazine.

1868  "Atlanta Journal & Constitution" newspaper began publication.

1872  "Boston Globe" - Newspaper founded.

1878  Joseph Pulitzer bought 2 newspapers and combined them into "St. Louis Post-Dispatch.

1881  "Los Angeles Times" - Newspaper founded.

1883  Joseph Pulitzer bought "New York World" newspaper.

1888  "Financial Times" newspaper founded.

1889  "Wall Street Journal" newspaper began publication.

1895  William Randolph Hearst bought "New York Journal" newspaper to compete with "New York World".

1896-1926  Edward Willis Scripps founded or bought more than 30 newspapers.

1900  Ida Tarbell, Lincoln Steffens, and other "Muckrakers" exposed government and business corruption.

1907  United Press Associations organized by Edward Willis Scripps.

1908  "Christian Science Monitor" newspaper founded.

1909  Number of U.S. newspapers peaked - 2,600 dailies, 14,000 weeklies.

1905  International News Service (INS) established by William Randolph Hearst.

1912  Columbia University School of Journalism founded with $2 million U.S. Dollars from will of Joseph Pulitzer.

1917  First Pulitzer prizes awarded, in Journalism and literature.

1925  Soviet News agency TASS founded.

1933  American Newspaper Guild Trade Union formed.

1944  Agence France-Presse news service founded.


1960  "The Columbus Dispatch" of Ohio first electronic or U.S. On-line newspaper in U.S.
1982  "U.S.A Today" began publication, intending to be "the nation's newspaper"

1985  UPI filed for reorganization under U.S. bankruptcy laws.

1991  After breakup of Soviet Union, news agency Tass reorganised in Russia and renamed ITAR-TASS.
1.15 Growth of Newspapers in India:

Jaao Gonsalves, an expert Indian blacksmith, accompanied Bustamate to Goa. He was the first Indian to make types of an Indian script, in India. He made types of Tamil letters and called the set: “Types of the Malayalam Language”. Those types were used for the printing of St. Xavier’s Doctrine Christa in Tamil in 1578. This was the first Indian script of which types were made was Tamil. Malayalam was considered as a part of Tamil and Malayalam Types were made later217.

The press in Goa was established with the intention of propagation of Evangelization, the Indian languages were given prominences. Besides, there was a gradual decline in the religious zeal of successive propagation of missionaries. So, though the printing press actually began in earnestly and it came to an end suddenly218.

The second printing press was established in (In India) in 1578 at Punikaei (a village in the Tinnevelly District of South India)219.

Father John De Faria engraved and cast Tamil types to be used in the Fishery and Coromandal coast220. He was the first to start the press at Fishery coast and he published the Flos Sancturum.

The next printing press started in Bombay in 1674220. It was set up by an enterprising bania of Gujarat, Bhimji Parekh. He addressed a letter to the East India Company to give him an able printer. His request was complied with and Henry Hills, the company with salary of 50 sterling sent an expert printer per

\[\text{B.S. Keshavan; } \textit{Printing and Publishing in India}, \textit{Vol} \text{I}, \text{1978; pp}17-60\]

\[\text{ibid}\]

\[\text{ibid}\]

\[\text{ibid}\]

\[\text{ibid}\]
annum for three years. Henry Hills arrived in India to help Bhimji in running the printing press. The company also sent with him a printing press, types and a good quantity of paper. One of the intention of the company was to help Indians was to propagation of the Christianity (Christian faith) in the Island of Bombay. When hills arrived to India, he didn’t know how to cut types in the Gujarati scripts. In course of time this printing press was used for printing literature in English. In 1679, a printing press was started at Albalkad, a village twenty miles south of Trichur in Malabar. The first Tamil-portuguese dictionary was printed and published here. Danish missionaries arrived to south India in 1772 at a place called Tranquebar in the Tanjore district of Madras. Bartholomew Ziegenbalg, born on June, 24, 1683 at Halle, Saxony came to India along with Dr. Lukens who had plan to propagate protestant Christianity creed in India. Ziegenbalg arrived at Tranquebar in 1706. He established the press in 1712 with the assistance of German print compositor. The Danish missionaries mastered Portuguese language to communicate with the Indians. The Danish missionaries with the help of Portuguese language tried to learn Indian languages through the Indian scholars. They established a type foundry to cast Tamil, Malayalam for printing books to propagate the Christian faith. They used Roman types. Tamil types was cast in Germany and brought to Tamilnadu. The first types of the New Testament in the Tamil language were published in 1714. A vocabulary was printed on palm leaves, as there was scarcity of paper, which prevented the fulfillment of many of the enterprises. 

\[\text{ibid}\]
\[\text{ibid}\]
\[\text{ibid}\]
\[\text{ibid, pp50-70}\]
\[\text{ibid}\]
planned by Danish missionaries. As a matter of fact, in 1715, an attempt was made to start a paper mill, which, however was unsuccessful.\footnote{ibid}

Ziegenbalg went to Holland for Holidays and didn't return. He had many plans for improving printing in the Malabar in Tamil language. A young Indian accompanied him with the intention of setting up a grammar of Malabar language for the use of the Europeans. Ziegen Balg wrote this grammar of the Tamil Language with the help of Indian assistant and the book in print can ever now be seen in Serampore college library.\footnote{ibid} Madras printing press started in 1761. The governor of Madras, sir Ire Coote captured Governor house in Pondicherry from the French, a printing press and some types were found in the captured Governor’s house in Pondichery.\footnote{ibid} Sir Ire Coote handed over this printing machine to the Tamil scholar by name Fabricious of Vepery, on the condition that if the company wanted any printing to be done, he should give preference to it. As such, the modified printing machine printed first hymn book. In 1779 Tamil-English Dictionary was printed and an English-Tamil Dictionary was printed in 1786.\footnote{ibid} At Goa and Madras the press was used for the propagation of Christianity and for act of conversion of Natives.\footnote{ibid}

Bengal had the unique privileges of seeking the arrival of Printing Press because of the existing political considerations. The first book in Bengal grammar written by a civil servant of the East India Company was printed at Hoogly near Calcutta in 1788.\footnote{ibid} The first complete book was printed in Bombay was calendar for the year of our Lord 1780, printed by Rustom Cavasjee

\footnote{ibid}{B.S. Keshavac, Printing and Publishing in India, Vol.1; 1978, pp.175-215.}
in Buzar. Calcutta offered ideal condition for the growth of journalism in India in 1773. This was the only presidency town which had the largest concentration of Englishmen, engaged in private trade and public service, in 1780. This was also the only metropolis in India at the time capable of sustaining an English newspaper on account of the elites of the English society. Commercial printing was in Calcutta was initiated by James Augustus Hicky in 1777, who had received professional training in this graphic art. Hicky’s survey of the market potential for a newspaper convinced him that the difficulties in launching one were not insurmountable. Hicky’s Gazette, with the permission of Warren Hastings, saw the light of the day on January 29, 1780. Since then there appeared no less than 27 other newspapers in Calcutta towards the close of the 18th century. Calcutta had the unique distinction of not only launching the First Weekly Newspaper in the South-east asian subcontinent, but also the initiation of serial publications and scientific journalism. At least one of the products of this period is still surviving without change of its original title and another, under the different grab. The Calcutta Gazette and the Journal of the Asiatic society of Bengal (which succeeds the Asiatic researchs) remind us of the precious heritage of modern Journalism in India. Earliest newspaper in India started at Bengal. The main feature of the Newspapers was for amusement, information, advertisement and literatures. Storage of information, textile, plates, wall paper packaging, bill boards- manufacture miniature Electronic circuits The main purpose of developing Printing to spread literacy, General knowledge among the

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232 ibid
234 ibid
235 ibid
236 ibid
new economic powers of society- scientific, literacy, religious texts. This practice developed in the British three major Presidencies such as Bombay Presidency, Madras Presidency and of Bengal Presidency. Table No.5 shows the list of Calcutta Press at the end of 18th century.

A list of Bible Translation done at Serampure in 19th century is shown in Table No.6.

1.15.1 FACTORS RESPONSIBLE FOR THE GROWTH OF PRESS:

a) For collecting or spreading of the news from nook and corner of the world by means of transportation such as: rail, the product of scientific invention, through postal dept.

b) Use of Telegraph and Radio, increased the frequency of gathering and spreading of news.

c) Introduction of Photographic process; increased the importance of newspapers.

d) Development of printing technology, progress in the making of paper, letters, ink; locomotives, motors, aero plane-developed the quality and beauty of the news papers.

1.16 Weakness of Indian Press:

➢ The dominance of English
➢ Urban concentration
➢ Low rate literacy
➢ Less circulation
➢ Faith of people in printed and written words.

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237 K.S. Padhy; The Press in India, 1981; pp5-9
238 ibid, pp17-22
239 DVG, Pratika Vrati; Published KPA, 1988, pp 60-100
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Names</th>
<th>Frequency</th>
<th>Original Day of Publication</th>
<th>First Ed./Printers Name</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hicky's Gazette</td>
<td>Weekly</td>
<td>Saturday</td>
<td>J.A. Hicky</td>
<td>29.01.1780 to 30.03.1782</td>
</tr>
<tr>
<td>2</td>
<td>India Gazette</td>
<td>Weekly</td>
<td>Saturday</td>
<td>P. Reed &amp; B. Messink</td>
<td>18.11.1780 to 30.12.1843</td>
</tr>
<tr>
<td>3</td>
<td>Calcutta Gazette</td>
<td>Weekly</td>
<td>Thursday</td>
<td>F. Gladwin</td>
<td>July 1789 to Dec. 1792</td>
</tr>
<tr>
<td>4</td>
<td>Bengal Journal</td>
<td>Weekly</td>
<td>Tuesday</td>
<td>T. Jones</td>
<td>Feb. 1785 to Dec. 1792</td>
</tr>
<tr>
<td>5</td>
<td>Asiatic Miscellany</td>
<td>Quarterly</td>
<td>-</td>
<td>F. Gladwin</td>
<td>Sep. 1785 to 1788</td>
</tr>
<tr>
<td>6</td>
<td>Calcutta Chronicle</td>
<td>Weekly</td>
<td>Thursday</td>
<td>W. Ballie</td>
<td>Jan. 1786 to Jan. 1798</td>
</tr>
<tr>
<td>7</td>
<td>Oriental Magazine</td>
<td>Monthly</td>
<td>-</td>
<td>W. Jones</td>
<td>April 1785 to Sep. 1785</td>
</tr>
<tr>
<td>8</td>
<td>Calcutta Advertiser</td>
<td>Weekly</td>
<td>Monday</td>
<td>W. Mackay</td>
<td>09.04.1787 to 1793</td>
</tr>
<tr>
<td>9</td>
<td>Asiatic Mirror</td>
<td>Weekly</td>
<td>Wednesday</td>
<td>C.K. Bruce</td>
<td>Feb. 1788 to 1820</td>
</tr>
<tr>
<td>10</td>
<td>New Asiatic Misc.</td>
<td>HY</td>
<td>-</td>
<td>F. Gladwin</td>
<td>July 1789 to Dec. 1789</td>
</tr>
<tr>
<td>11</td>
<td>Asiatic Researches</td>
<td>A</td>
<td>-</td>
<td>W. Jones</td>
<td>1788 to 1839</td>
</tr>
<tr>
<td>12</td>
<td>Calcutta M. Register</td>
<td>Monthly</td>
<td>-</td>
<td>H. McKenly</td>
<td>Nov. 1790 to June 1791</td>
</tr>
<tr>
<td>13</td>
<td>Bengal Universal Intelligencer</td>
<td>B-M</td>
<td>Tuesday</td>
<td>-</td>
<td>12.11.1790 to 1791</td>
</tr>
<tr>
<td>14</td>
<td>Calcutta Sunday Recorder</td>
<td>Weekly</td>
<td>Sunday</td>
<td>J. Cooper &amp; A. Upjohn</td>
<td>07.11.1790 to 1792</td>
</tr>
<tr>
<td>No.</td>
<td>Title</td>
<td>Frequency</td>
<td>Day</td>
<td>Editor</td>
<td>Dates</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------</td>
<td>-----------</td>
<td>------</td>
<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>15</td>
<td>Calcutta General Advertiser</td>
<td>Weekly</td>
<td>Tuesday</td>
<td>R. Nowland</td>
<td>April 1791 to May 1792</td>
</tr>
<tr>
<td>16</td>
<td>Journal</td>
<td>Weekly</td>
<td>-</td>
<td>-</td>
<td>Oct. 1791 to ?</td>
</tr>
<tr>
<td>17</td>
<td>Calcutta Magazine</td>
<td>Monthly</td>
<td>-</td>
<td>J. White</td>
<td>Oct. 1791 to June 1792</td>
</tr>
<tr>
<td>18</td>
<td>World</td>
<td>Weekly</td>
<td>Saturday</td>
<td>W. Duane</td>
<td>15.19.1791 to June 1794</td>
</tr>
<tr>
<td>19</td>
<td>Times</td>
<td>Weekly</td>
<td>Friday</td>
<td>T. Jones</td>
<td>24.02.1792 to 11.05.1792</td>
</tr>
<tr>
<td>20</td>
<td>Calcutta Friday Morning Post</td>
<td>Weekly</td>
<td>Friday</td>
<td>Bush</td>
<td>03.05.1792 to 1818</td>
</tr>
<tr>
<td>21</td>
<td>Oriental Star</td>
<td>Weekly</td>
<td>Saturday</td>
<td>J. Thomas</td>
<td>Jan, 1793 to 1820</td>
</tr>
<tr>
<td>22</td>
<td>Calcutta Monthly Journal</td>
<td>Monthly</td>
<td>-</td>
<td>J. White</td>
<td>Nov. 1794 to 1841</td>
</tr>
<tr>
<td>23</td>
<td>Bengal Hircarran</td>
<td>Weekly</td>
<td>Tuesday</td>
<td>C MacLean</td>
<td>Feb. 1795 to Dec. 1866</td>
</tr>
<tr>
<td>24</td>
<td>Indian Apollo</td>
<td>Weekly</td>
<td>Sunday</td>
<td>T. Hollingbery</td>
<td>04.10.1795 to Sep. 1797</td>
</tr>
<tr>
<td>25</td>
<td>Calcutta Courier</td>
<td>Weekly</td>
<td>Sunday</td>
<td>T. Hollingbery</td>
<td>06.05.1798 to 1799</td>
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<td>Weekly</td>
<td>Saturday</td>
<td>H. Mkenly</td>
<td>23.04.1796 to 1808</td>
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<tr>
<td>27</td>
<td>Asiatic Magazine</td>
<td>Monthly</td>
<td>-</td>
<td>M. Cantopher</td>
<td>April 1798 to 1798</td>
</tr>
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Table No.6

A List of Bible Translation done at Serampore

<table>
<thead>
<tr>
<th>Language</th>
<th>Year</th>
<th>Work</th>
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<tbody>
<tr>
<td>Assamese</td>
<td>1815-1819</td>
<td>New Testament</td>
</tr>
<tr>
<td>Assamese</td>
<td>1832</td>
<td>Old and New Testaments</td>
</tr>
<tr>
<td>Baloochi</td>
<td>1815</td>
<td>New Testament only</td>
</tr>
<tr>
<td>Bengali</td>
<td>1801</td>
<td>New Testament (NT)</td>
</tr>
<tr>
<td>Bengali</td>
<td>1802-1809</td>
<td>Old and New Testament (ONT)</td>
</tr>
<tr>
<td>Gujarati</td>
<td>1820</td>
<td>NT</td>
</tr>
<tr>
<td>Hindi</td>
<td>1809-1811</td>
<td>NT</td>
</tr>
<tr>
<td>Hindi</td>
<td>1813-1816</td>
<td>ONT</td>
</tr>
<tr>
<td>Kanarese (Kannada)</td>
<td>1822</td>
<td>NT</td>
</tr>
<tr>
<td>Kashmiri</td>
<td>1820</td>
<td>NT and part of OT</td>
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<tr>
<td>Konkani</td>
<td>1819</td>
<td>Pentateuch only</td>
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<tr>
<td>Marathi</td>
<td>1811</td>
<td>NT</td>
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<tr>
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<td>1820</td>
<td>NT</td>
</tr>
<tr>
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<td>1821</td>
<td>ONT</td>
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<tr>
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<td>ONT</td>
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<tr>
<td>Punjabi</td>
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<td>NT</td>
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<tr>
<td>Pushtoo</td>
<td>1819</td>
<td>NT</td>
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<tr>
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<td>1820</td>
<td>NT &amp; Pentateuch</td>
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<tr>
<td>Urdu</td>
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