

# Crime News Dominates Science News in Asia, but Reverse in North America: An Epistemological Case Study of Newspapers of 10 Years

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**Abstract:** In the era of globalization, the paramount role of communication for sustainable development through mass media is to educate people about the vicious nature and the stifling dependency relationship and helps to shift to a dynamic, industrialized, centralized planning society. According to Nora C. Quebral (University of London, December 2011), it is the art and science of human communication, applied to the speedy transformation of a country and the mass of its people from poverty to a dynamic state of economic growth that makes possible greater social equality and the larger fulfilment of human potential. In this research work, 14 countries from Asia and 4 countries from North America were considered and from each country, one leading English morning daily were taken. Time period was 2006 to 2016. It is found that, science news has least space share than all types of news in Asia, but the situation is reversed in N-America and particularly than crime news. It is the time to change the scenario.

**Key Words:** Communication, Mass media, Science, Crime, Asia, North America, Research, News

## 1. Introduction

Cheerleader or watchdog? An editorial published in one of the best science journal in the world, NATURE (Vol. 459/Issue no 7250/25 June, 2009) in which the main question is the future of science journalism in media. On the other hand, different crime news is going to dominate globally, in the newspapers. Science is developing and so types of crime and people are more prone to read and follow crime news rather than all other news, even leaving their moral values drastically. Blogs, twitter, podcasts and online videos are breaking the convention of journalism throughout the world. It is also said that there has been emerging conflict between politicians and policy makers of newspaper industry and science journalists, which is a great impediment towards the progress of science journalism. It is also noted that, autopsy of crimes are being done regularly in different medias, but not for science news.

New challenges to epistemology of science journalism in the entertainment digital age should also be kept in mind. Obviously the question arises, is it a separate discipline or inter disciplinary? Though it has accepted globally as the field of study, discipline is a debated issue. Question of discipline arises the points of funding and employability in the web journalism. Whether democracy or federal governance allows this re-orientation of social, cultural, political and economic scenario? Is there a need of evolution of more professionalism in science communication? Does science journalism posses any specific knowledge in this rapidly changing scenario? Do the science communicators actually know how to survive in the infotainment age? Here needs the question of separate discipline of science journalism.

## 2. Objective of the study

It is to be a subject of re-thinking that, social networking sites are becoming an addiction for young generation, on one hand. And on the other hand, mass media and also the science journalists are converging to more into social networking sites. It is also the objective of the study to conduct an interview-based survey of the mass media communicators-reporters-editors to assess their view on the research subject. The main objectives are as follows: 1) To find the influence of advertisement and political news over scientific news 2) To find the role of mass media to mobilize the people of grass root level to improve scientific temperament and scientific literacy 3) To find whether science journalists are under threat 4) To find the link whether it is an emerging challenge and whether there is ample opportunity of scientific writing or science journalism 5) To test a hypothesis of a causal relationship between variables.

## 3. How Science reach the masses

The way that scientific information is presented in the media needs to undergo a metamorphosis, with a new generation of the science writers and journalists presenting science in a useful and innovative manner. Science writing must not be dry and boring and this news should be widespread right down to the village level to create awareness among illiterate and newly literates. Folk forms must be used more frequently for wiping out of the beliefs of superstitions. The pre and post jatha activities would be conducted through a variety of media. Which include interactive discussions among grass-root people, public lectures, posters, docu-drama, puppet shows, wall charts, street plays, folk songs and dances etc. Training of science communicators is also needed.

Energy development, bio-science and genome research are being applied for societal welfare, economic progress. Hence formidable challenge of new diseases, deadlier vectors, growing geriatric population, drug resistant pathogens etc should be informed to general people with lucid language. As knowledge creates opportunity for action in modern society, India should leverage the power of information technology to leapfrog poverty barriers and connectivity problems. Steps to reduce the cost of computer literacy and increase of e-governance mission are also required.

There is an imminent need to produce more diversified food at affordable price with the knowledge of science and the latest technologies of mixed cropping, management of plant genetic resources etc can only be reached to the farmers by radio, short films etc with the help of

agricultural scientists. Tapping of solar energy can be taught with different scientific models to the younger generations. Science news and features pool should be channelized to exchange information for facilitating further networking.

#### 4. Challenges facing science communication

A P J Abdul Kalam (Former President of India) truly said that powerful science communication is an asset to the transformation of societies. According to him, there is a need (i) to make all citizens, particularly those in remote areas to feel the excitement about science (ii) to bring more fruits of science within the reach of their daily lives and (iii) to motivate students and entice them to embrace science as a profession. It is the main role and obviously the main challenge of science journalism. Brian Trench of Dublin City University, Ireland also listed the other challenges including the identification of science communicators. He added that scientists are underrepresented in the blogosphere and possibilities if using this as a forum to interact online with all others are yet to be explored. Challenges also include lack of training in science reporting in India.

#### 5. Literature Review

Ozkan and McKenzie (2008) contend that educators need to engage students with a more 21st century approach to teaching and social networking technologies can provide such a venue. As both distance education and SNSs continue to grow, it is becoming increasingly more important to examine how distance education and SNSs can be combined most effectively.

Achala Gupta and A.K.Sinha, in their study on "*Health Coverage in Mass Media: A Content Analysis*," had come out with the conclusion that, however all different types of media provide information regarding health matters but the political subject was the most preferred area of news, in all types of media. Mekam Maheshwar and Ragunatha D. Rao, carried out a comparison study of English and Telugu, in their study "*A Comparative Analysis of Nutrition Science Coverage by Popular Indian Daily Newspapers*". The study concluded that English Dailies had given more coverage on obesity, beverages, chocolates, whereas Telugu dailies were confined mostly to the traditional foods, promoting consumption of natural foods. English dailies also published more reports on nutrition Science in editorial pages, front pages and as box items to grab readers' attention significantly, than Telugu dailies.

Overall, the literature really lacks research into the techniques science communicators are using to breakdown science and translate it. The literature widely discusses how jargon can be used both appropriately and inappropriately and touches on complexity in communication. However it does not say how science communicators are or should be using it. Hence this study will contribute to the information already available on a science communicators' education by discussing some of the considerations of approaching science communication from a purely science or communication stance.

College students have great interest in social media. For the purpose of this study, social media was defined as Facebook, YouTube, Blogs, Twitter, MySpace or LinkedIn. Although, providing a detailed perspective on social media use among university students and underscoring that such use can produce both positive and negative consequences, according to a Nielsen Media Research study, in June 2010, almost 25 percent of students' time on the Internet is now spent on social networking websites.

#### 6. Research Methodology and Research Design

This is a social and scientific research based on different information that has been obtained from various sources. To discover the new facts and analyzing the old facts is the main motto of this research work. Here, it has been tried to find the inter-relationship between development of the society and the role of print media, basically newspaper, with role of scientific knowledge within a theoretical frame of reference. Both the comparative and non-comparative scaling techniques were used in this research. For this research work, it is not possible to have all the countries of Asia and North America as the sample space. Further, it is also too tough to analyze all the news of all countries at a glance. Hence for Asian countries- China, India, Japan, Afghanistan, South Korea, Saudi Arabia, Iran, Pakistan, Bangladesh, Thailand, Russia, North Korea, Indonesia and Israel were chosen. For North American countries-Mexico, U.S., Canada, Cuba were chosen.

The time period for this research work were chosen as 2006-2016. Answers to the questionnaires were considered in the last year of the research period. Total 18 countries were chosen and in each country, 30 respondents were considered to send questionnaire. Hence the sample size was around 540. Another major sample space is the database of paper clippings, programme sheets of audio and audio-visual media, digital media including social media. For this sample space, the dates were considered as every 7<sup>th</sup> day of every month and multiple of 7, i.e. 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> day of every month.

##### 6.1 Continent and country-wise Newspaper chosen for research

**For Asian countries:** China Daily for China, The Times of India for India, Asahi Shimbun (International Herald Tribune) for Japan, Afghanistan Times Daily for Afghanistan, The Korea Herald for South Korea, Arab News for Saudi Arabia, Tehran Times for Iran, Dawn for Pakistan, The daily Star for Bangladesh, The Nation for Thailand, The Moscow Times for Russia, The Pyongyang Times for North Korea, The Jakarta Post for Indonesia, The Jerusalem Post for Israel were chosen.

**For North American countries:** The News for Mexico, The New York Times for US, National Post for Canada and Granma for Cuba was chosen.

#### 7. Content Analysis

The following tables will show the comparative analysis of space share of science news and crime news in two continents i.e. Asia and North America.

Percentage of Space share of Science News in Asian Countries															
Chi	Ind	Jap	Thai	Indo	Russia	S.Kor	N.Kor	Bang	Pak	Afghan	S.Arab	Iran	Israe	T	
5.8	3.6	4.6	3.9	4.1	7.5	2.1	1.2	2.5	2.0	0.9	0.8	0.8	0.8	<b>2.9</b>	

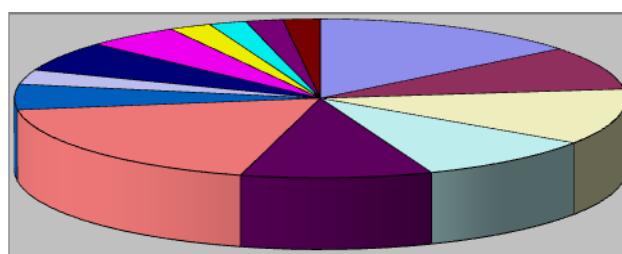
Percentage of Space share of Crime News in Asian Countries														
Ch	Ind	Jap	Thai	Ind	Russi	S.Kor	N.Kor	Bang	Pak	Afgh	S.Ara	Iran	Isr	T
3.1	13.2	5.3	8.2	8.1	7.2	4.5	4.2	6.2	15.2	18.2	16.9	18.6	6.2	<b>9.65</b>

From the above tables, it is found that, in Asian countries, percentage of space share of political news is 9.65 whereas, science news is 2.9 percent which is far low than crime news.

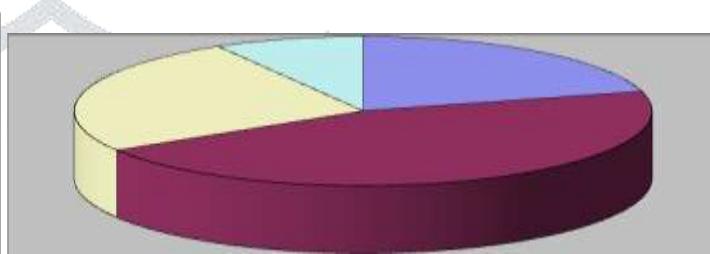
Percentage of Space share of Science News in North American Countries				
Mexico	USA	Canada	Cuba	Total
7.2	15.7	8.8	2.9	<b>8.86</b>

Percentage of Space share of Crime News in North American Countries				
Mexico	USA	Canada	Cuba	Total
6.2	3.0	5.8	9.6	<b>6.15</b>

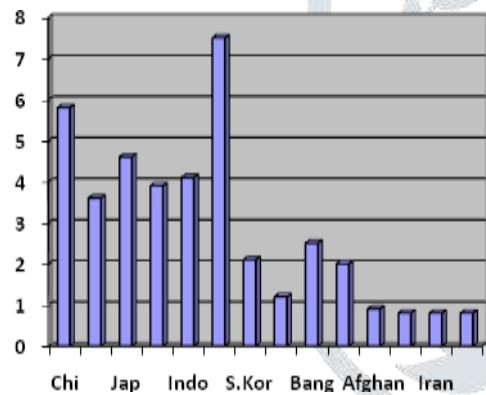
From the above tables, it is found that, in North American countries, percentage of space share of political news is 8.86 whereas, science news is 6.15 percent which is low than crime news.



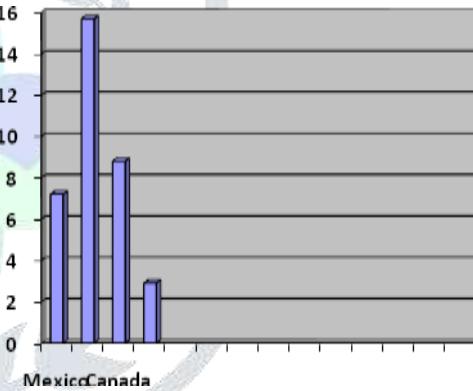
**Diagram-1** Pie diagram showing comparative analysis of science news in Asian countries



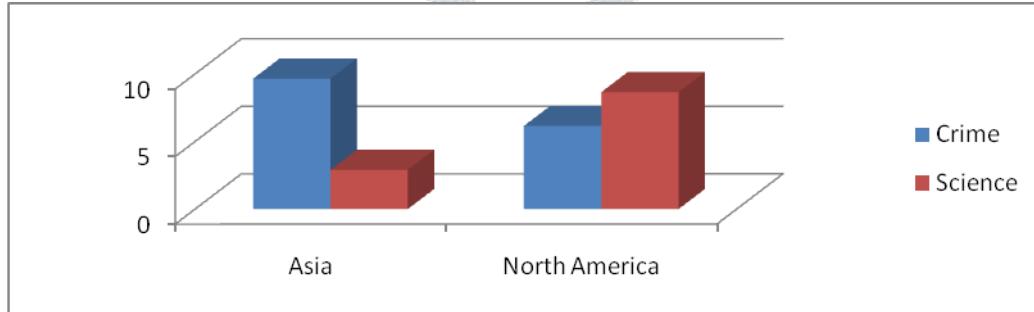
**Diagram-2** Pie diagram showing comparative analysis of science news in North American countries



**Diagram-3** Bar diagram showing comparative analysis of science news in Asian countries



**Diagram-4** Bar diagram showing comparative analysis of science news in North American countries



**Diagram-5** Bar diagram showing comparative analysis of crime and science news in Asian and N-American countries

## 8. Results and Discussion

From the above tables and Diagram 5 it can be concluded that, comparing Asian countries and North American countries, space share of science news is too low for Asian countries. But if the space share of crime news is concerned, it is lower in North American countries than Asian countries. Also it is found that, crime news (9.65 percent) dominates science news (2.9 percent) in Asia, but in North America, it is 6.15 percent and 8.65 percent respectively i.e. science news dominates crime news in this continent in 10 years.

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