

Science News Reportage in selected Nigerian Newspapers

RAHEEMAT ADEFOLAKE ADENIRAN* AND
GANIYAT OLUWABUKOLA ADENLE **

Abstract

The paper examines science reporting as a branch of journalism with its attendant challenges, which does not favour its reportage among journalists nor attract the interest of many media audience. The paper thus sought to examine media coverage of science beats with two sampled Nigerian newspapers. The agenda-setting theory formed the theoretical framework for the study. The findings revealed that Nigerian newspapers follow similar pattern in their reportage of science beats. The paper thus called for wider coverage of the science beat and urged science journalists to strive for professional excellence in their reportage.

Key Words: Beat, Coverage, Journalists, Newspaper, and Science.

Introduction

Science is one beat in journalism that requires great efforts especially on the part of the science journalist who is tasked with the responsibility of breaking down scientific and other professional jargons into the lay man's language. This is necessary if the writer hopes to get his message across to non-professionals in the field he is writing on, thereby arousing their interests in the issue being reported on. For this reason, most media organisations usually go the extra mile to ensure that only capable hands are deployed to the science beat or any of its affiliates.

The science beat consist of various other areas of specialisations or affiliates like Telecommunication, Health, Environment, Technology, Agriculture, Food & Nutrition, Oil & Gas, Energy / Power, among others. Reporting these various beats in science reporting requires great passion on the part of the reporter who must also be willing and enthusiastic about the particular beat he/she is assigned to cover. Ganiyu (2004) noted that the science reporter must be favourably disposed to science, preferably with a science degree and post graduate diploma in Journalism or mass communication. The author noted that in the absence of anyone with such qualification, the individual assigned to cover the field must have a basic knowledge and interest in science, plus a willingness to learn, and an exhibited talent in writing about science subjects.

Science journalism began as a specialized beat in the early twentieth century but burgeoned in the United States after World War II. The 1957 Soviet launch of Sputnik was an especially galvanizing event; in response, US newspapers ramped up their science content, and a generation of writers cut their teeth covering the "space race". Another

*Raheemat Adefolake Adeniran is a Lecturer in the Department of Journalism, School of Communication, Lagos State University, Ojo, Lagos, Nigeria.

**Mrs. Ganiyat Oluwabukola Adenle is a Lecturer in the Department of Journalism, School of Communication, Lagos State University, Ojo, Lagos, Nigeria.

boom came in the late 1970s and early '80s, when Carl Sagan's *Cosmos* series reached 500 million people globally, and fifteen new science magazines, eighteen new newspaper science sections and seventeen new science TV shows were launched in the United States. This "popular science" movement sought nothing less than to bring science to the entire public, to mediate between the technical and the lay, the wonky and the approachable. The thinking was that translating scientific knowledge into a form everyone could understand would help forge a more enlightened citizenry and, ultimately, a stronger democracy (Mooney and Kirshenbaum, 2009).

Writing on the attributes of the science journalist, Akinfeleye (2008) noted that the science reporter need not necessarily be a scientist, but he must approach his reportage from a scientific news angle. He added that he must be systematic in his coverage, and analytical in his news gathering and presentation. He agreed that science reporting is not as exciting as other beats like economy, politics or fashion, hence requires patience, commitment, endurance and professional integrity.

Science journalism is a relatively new branch of [journalism](#), which uses the art of reporting to convey information about [science](#) topics to a public forum. The communication of scientific knowledge through mass media requires a special relationship between the world of science and news media. The first task of a [science journalist](#) is to render the very detailed, specific, and often jargon-laden information produced by scientists into a form that the average media consumer can understand and appreciate, while still communicating the information accurately (Wikipedia: 2008)

In recent years, the amount of scientific news has grown rapidly with science playing an increasingly central role in society, and interaction between the scientific community and news media has increased. The media is expected to pass science information to members of the public. According to the British Council (2008), the Science journalists aim to explain science in a way that the public can understand.

For the reasons discussed above, the science beat is not usually a favourite for most reporters and readers alike. It requires more effort on the reporter to make the story interesting to possible readers, who equally requires more than the average effort for them to consider reading any science story at all.

Practice of Science Journalism in Nigeria

Science journalism is still a growing phenomenon in Nigeria. There are a few science journalists in the country and most media establishments tend to focus on areas or beats that can attract the audience, as well as the advertisers. Mostly, media outlets in the country tend to assign reporters to science beats they consider to be lucrative, while neglecting others. For instance the telecommunication industry is highly reported in the Nigerian media because the industry is a major player in today's economy.

Akinfeleye (2008: 157) attributed the poor coverage of science beats to the dearth of science journalists in the country due to the daunting process involved, and also the fact that it generates very little advertising revenue for media establishments. He noted that members of the public are also more interested in other beats like politics, sex saga; as against the sciences, since scientific culture in Nigeria is still in its developmental stages.

Objectives of Study

The specific objectives of this study are:

- To determine the science beat mostly reported in Nigerian newspapers.
- To determine the level of prominence given science stories in Nigerian newspapers
- To determine how reporters source stories on science.
- To determine Nigerian newspapers' treatment of reported science stories

Research Questions

The research questions that guided this study are:

- What science beat is mostly reported by Nigerian newspapers?
- How important do Nigerian newspapers consider science reports?
- How do science journalists source for science stories they report?
- In what form are science stories reported in Nigerian newspapers?

Theoretical Framework

The theory adopted for this study is the agenda-setting theory which posits that the extent of coverage the media gives to an issue influences the level of importance the public attach to such issue. The crux of the theory is that the media set the agenda for public discussion by focusing on certain issue and playing down others.

Agenda-setting theory's main postulate is [salience](#) transfer. Salience transfer is the ability of the news media to transfer issues of importance from their news media [agenda](#) to public agendas. "Through their day-by-day selection and display of the news, editors and news directors focus our attention and influence our perceptions of what are the most important issues of the day. This ability to influence the salience of topics on the public agenda has come to be called the agenda setting role of the news media (Mccombs, 2004).

McQuail (2005), noted that the core idea of the theory is that the news media indicate to the public what the main issues of the day are, which is usually reflected in what the public perceives as the main issues.

Proponents of the theory, McCombs and Shaw (1972), describing the agenda setting function of the media wrote that "the media may not only tell us what to think about, they also tell us how and what to think about it, and perhaps even what to do about it. (Cited in Griffin 2003:398)

Mccombs (2004) states that, "need for orientation is a [psychological](#) concept, which means that it describes individual differences in the desire for orienting cues and background information." Two concepts: [relevance](#) and [uncertainty](#), define an individual's need for orientation. [Relevancy](#) is the first and of primary importance as an individual will feel less [dissonant](#) if a situation or issue is not personally relevant. Hence, if [relevancy](#) is low, people will feel the need for less orientation. There are many issues in our country that are just not relevant to people, because they do not affect us. Many news organizations attempt to frame issues in a way that attempts to make them relevant to its viewers/readers. This is their way of keeping their viewership/readership high "Level of [uncertainty](#) is the second and subsequent defining condition of need for orientation. Frequently, individuals already have all the information that they desire about a topic. Their degree of [uncertainty](#) is low. When issues are of high personal [relevance](#) and [uncertainty](#) low, the need to monitor any changes in those issues will be present and moderate the need for orientation. If at any point in time viewers/readers have high [relevance](#) and high [uncertainty](#) about any type of issue/event/election campaign there was a high need for orientation."

The media thus have the potential to get people interested in certain science issues through their emphasis and framing of such issues. According to Akinfeleye (2008), the media, as agenda setter, are expected to enlighten the public on the importance of science in development. He noted that reporting science is crucial for any country experiencing positive change in its development process.

Since one common condition for agenda-setting is that different mass media tend to share the same set of news priorities (McQuail: 2005), the study will also examine if the sampled newspapers will be focussing on similar areas of the science beat.

Methodology

The paper adopted the content analysis method for this study. Two national newspapers, *The Nation* and *Thisday*, were sampled and content analysed. The month of September, 2008 was randomly selected as the editions of the selected newspapers to be analysed. In all, 30 editions of each of the sampled newspapers published in September 2008 were selected for the study, giving a total of 60 editions.

All the News, Features, Analysis, Opinions, Editorials, and other stories published on science, or any of its affiliates, form the units of analyses. A coding schedule was developed to measure different variables analysed in the study.

Data Analysis and Discussion

Table 1: Total number of stories analysed

Newspaper	Number of stories	Percentage (%)
<i>The Nation</i>	210	46.7
<i>Thisday</i>	240	53.3
Total	450	100

Table 1 above shows the total number of science and environment stories published by the two sampled newspaper during the month under review (September 2008). *Thisday* newspaper published more stories on science and environment with 53 percent of the totals stories being content analysed. *The Nation* devoted less attention to such stories having about 47 percent of the total science stories published by the two newspapers.

Table 2: Type of science issue reported in the sampled newspapers

Issue	<i>The Nation</i> (%)	<i>Thisday</i> (%)
Telecommunication	25 (11.9%)	45 (18.8%)
Health	41 (19.5%)	60 (25%)
Environment	21 (10%)	12 (5%)
Pure Sciences	0 (0%)	3 (1.25%)
Technology	20 (9.5%)	20 (8.3%)
Agriculture	25 (11.9%)	19 (7.9%)
Food & Nutrition	12 (5.7%)	2 (0.8%)
Oil & Gas	36 (17.1%)	57 (23.8%)
Energy / Power	25 (11.9%)	22 (9.2%)
Others	5 (2.4%)	0 (0%)
Total	210 (100%)	240 (100%)

Table 2 above shows stories on various science fields reported in the two dailies. The table shows that the two newspapers favoured health sector and oil and gas sector compared to the other science fields reported in the newspapers during the month under review. One-quarter of science stories published in *Thisday* newspaper was on health. It is closely followed by the oil and gas sector which has about 24 percent science report coverage. *The Nation* newspaper followed similar trend having about 20 per cent health stories and over 17 percent oil and gas stories.

Telecommunication sector has the third largest coverage in *Thisday* newspaper with about 19 percent of total science stories it reported. Although *The Nation* newspaper also gave similar coverage to the telecommunication sector, the sector however shares its position as the third most reported issue with Agriculture and Energy/Power sectors. The three fields have almost twelve percent coverage each of the total science stories reported in *The Nation* newspaper.

Thisday newspaper devoted the least attention to stories on Food and Nutrition while *The Nation* has no story published on the pure sciences. *The Nation*, unlike *Thisday*, however has other science related stories which do not fall within any of the various fields identified above. This accounts for over two percent of the science stories published.

Table 3: Prominence Given Science Stories

Appearance page	<i>The Nation</i> (%)	<i>Thisday</i> (%)
Front Page	26 (12.4)	17 (7.1)
Back Page	8 (3.8)	2 (0.8)
Inside Pages	176 (83.8)	221 (92.1)
Total	210 (100%)	240 (100%)

Table 3 shows the degree of importance each of the two sampled newspapers placed on science stories. It reflects the prominence level of science reports as presented by the dailies through the pages of appearance of such stories.

As shown above, the two dailies have majority of their science reports published in their inside pages. *Thisday* has the highest percentage with over 92 percent while *The Nation* has about 84 percent. *The Nation* however gave more prominence to science stories when compared to *Thisday*. It has over 12 percent of its published science stories on its front page with less than four percent of the total science stories it published appearing on the back page. *Thisday* on its part however only reported just over seven percent of its science stories on its front page with less than one percent on the back page.

Table 4: Forms of published science stories

Form	<i>The Nation</i> (%)	<i>Thisday</i> (%)
News	42 (67.6)	196 (81.7)
Features	57 (27.1)	29 (12.1)
Analysis	8 (3.8)	8 (3.3)
Opinions	0 (0)	2 (0.8)
Editorials	3 (1.4)	2 (0.8)
Others	0 (0)	3 (1.3)
Total	210 (100%)	240 (100%)

Table 4 shows the various forms of stories published as presented in the two dailies sampled for the study. The two sampled newspapers presented most of their stories as straight news. *Thisday* has a higher percentage, with about 82 percent of its published science stories reported as straight news. *The Nation* has a lesser percentage with about 68 percent straight news reports. Both papers followed this with features as their second most used form in their presentations of science stories. With news and features taking almost 95 percent in of the stories published in the two dailies (*The Nation* has 94.7 percent and *Thisday* has 93.8 percent), the other forms which include news analysis,

opinions, editorials and others share the remaining percentage with news analysis taking the lead in both newspapers.

However, since editorials are written on burning issues, *The Nation* newspaper's publication of three different editorials on science related issues is worth mentioning. It implies that the newspaper considered the science issues it wrote those editorials on to be highly significant. *Thisday* newspaper performed less with its two editorials published on science issues during the month under review.

Table 5: Sources of science stories

Story Sources	<i>The Nation</i> (%)	<i>Thisday</i> (%)
Event coverage	95 (45.2)	99 (41.3)
Press Release	11 (5.2)	12 (5)
Research findings	52 (24.8)	34 (14.2)
Other media publications	13 (6.2)	42 (17.5)
No specifications	38 (18.1)	50 (20.8)
Others	1 (0.5)	3 (1.3)
Total	210 (100%)	240 (100%)

Table 5 above shows the sources of science stories published in Nigerian newspapers as represented by the two sampled newspaper. The table shows that most of the stories were actually covered by the reporters who later report the occurrence to the readers. *The Nation* has a higher percentage with over 42 percent of its stories derived from coverage of events or happenings. *Thisday* has over 41 percent of its science stories from event coverage.

Science stories sourced from Research findings have the second largest share with about 25 percent in *The Nation*, followed by a large percentage of stories whose sources were not specified which accounted for 18 percent. Other sources of science stories published in *The Nation* are those from other media publications which gulped over six percent (6.2%), press releases have over five percent (5.2%), those from other sources not identified in the study has less than one percent (0.5%).

Contrary to what obtains in *The Nation*, stories whose sources were not specified have the second largest percentage in *Thisday* newspaper with about 21 percent (20.8%). Stories sourced from other media publications are next with about 18 percent (17.5%). Stories sourced from research findings has over 14 percent (14.2%) while press releases and those from other sources not identified in the study have five percent and over one percent (1.3%) respectively.

Discussion of Findings

Going back to our research question, on *the beat mostly reported in the media*, one can conclude that the health beat is the most reported beat. This can be attributed to the fact that the health beat is a multi-faceted sector of the economy. It is an area that affects all segments of the society. Apooyin (2003: 14) speaking on the importance of the field noted that medical subjects have become matters of interest to media audience generally. People are getting more curious on health issues affecting their health. These findings suggest that the media is rising up to the challenge of enlightening the public on various health problems.

On the *level of importance accorded science reports* in Nigerian newspapers, it was discovered that Nigerian newspapers attach little or no importance to science stories as most of the reports are placed in inside pages. Placement of reports on newspapers pages is influenced by the level of importance a newspaper medium attaches to the story being

reported. Generally, newspapers usually position their most important stories of the day on the front page. This is because the first page must be able to attract the attention of the potential reader for him/her to consider whether to read the newspaper, at all. Also, since most Nigerian newspaper is sold through vendors on a daily basis, as against subscription as practised in the industrialised world, newspapers published in the country must then compete for the buyer's attention if it must make any sales for the day. For this reasons editors try as much as possible to ensure that only stories that can arouse the interest of the potential buyers (and readers) make the front page of their newspapers. The fact that science is not an area that interests a majority of people must have influenced Nigerian newspaper editors to place the minimal amount of science reports on their front and back pages, as evident in our findings.

On *how science journalists source their news*, our findings show that most stories published on sciences were from event coverage. The implications of this is that most science journalists are willing to cover science stories whenever they are invited to, and even dig out science stories wherever they occur. Also the high percentage of stories published without writers specifying their sources show that science journalist tend to err on the ethical consideration for not acknowledging their sources. Usually, several science reports published in Nigerian newspapers are downloaded from the internet and most writers present such stories to readers as if they had done the leg-work on the stories.

The science journalists should however be commended for reporting research findings regularly in their reports. As emphasised by Apooyin, (2003:21) in his guidelines for reporting science news, it is important for science reporters to use journal articles and published reports to verify and improve their stories rather than relying on interviews with scientists alone.

The *treatment of science reports* in Nigerian newspapers was also considered in the study and our findings show that most science reports were carried as straight news. This calls for concern as science is an area of specialisation that requires further interpretation and analysis for readers' understanding. Reporting most science stories as straight news gives writers limited opportunity to elaborate on issues which readers might not understand. In essence most science reports in Nigerian newspapers may not be understood by readers. Hence people are likely to shun reading similar stories in future.

Conclusions and Recommendations

The findings of this study suggest that Nigerian newspapers follow similar pattern in their reportage of science and related beats. They focus their attention on reporting similar science beats and equally gave similar editorial treatments to the science stories reported.

Based on our findings, it is suggested that Nigerian media practitioners should make decisive efforts to improve coverage of science issues, particularly beats like the pure sciences, which is often neglected. There is need for more interpretative analysis of science reports. This is particularly important if science journalists hope to get more members of the public interested in science issues. Providing adequate interpretation and analysis on science issues will help in further enlightening the public, and get them interested in the issue being reported.

The findings also show that a large percentage of stories reported did not include their sources. To this end, science journalists are urged to always identify sources of the stories they report. Stories derived or gotten from other media, such as the internet, should be clearly identified as such. Avoiding plagiarism is one of the ethics of the profession and science journalists are not exempted from this rule.

References

- Akinfeleye, R.A. (2008) Enhancing professional and ethical standards of science journalism. In Ralph Akinfeleye ed. *Mass media and society: A multi-perspective approach*. Akoka: Department of Mass Communication, University of Lagos.
- Apooyin, B. (2003). *Specialised reporting*. Ikeja, LA: Batapin Associates
- British Council (2008) *Science Journalism: Talking science*. Retrieved October 15 from <http://www.britishcouncil.org/talkingscience-media-news.htm>
- Ganiyu, M. (2004). *The reporter's companion: A complete guide to news reporting and writing (Companion series 1)*. Ibadan: Emgee Books
- Griffin, E. (2003). *A first look at communication theory (5th Ed.)* New York: McGraw-Hill
- Mccombs, M. (2004). *Setting the Agenda: The mass media and public opinion*. Malden, MA, Blackwell Publishing Inc. p 1, p. 54-55.
- McQuail, Denis (2005). *Mass Communication Theory (5th Ed.)* London: Sage Publications Ltd., pgs 512, 514.
- Mooney, Chris and Kirshenbaum, Sheril (2009). Unpopular Science. *The Nation*, Aug. 17, 2009. Retrieved from <http://www.thenation.com/article/unpopular-science?page=full> on December 14, 2011.
- Wikipedia, (2008). Science journalism. Wikipedia, the free encyclopedia. Retrieved October 15, 2008 from http://en.wikipedia.org/wiki/science_journalism