

New Media Setting the Media Agenda: A study of the 2015 Sudanese Presidential Elections

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Abstract

This research on setting the media agenda during the 2015 Sudanese presidential elections investigates the influence of new media agendas on traditional news media agendas according the theoretical framework of intermedia agenda-setting. The research was guided by the following research question: What role do new media and mainstream media play in intermedia agenda-setting? This research applies content analysis, cross-lagged correlation analysis, and Rozelle-Campbell Baseline analysis. The findings demonstrate proof for intermedia agenda-setting role in Sudanese media across a number of dependent variables. The Sudanese newspapers influenced the agenda of Sudanese blogs; blogs are also obtaining an increasing impact on the agenda of newspapers. The content analysis found that socio-political blog issue agendas were strongly correlated with the agendas of the newspapers. The findings also present evidence of intermedia agenda-setting between socio-political blogs and citizen journalism.

Keywords: Intermedia agenda-setting, media agenda, presidential elections, Sudan, new media, socio-political blog, and citizen journalism

Introduction

The Internet is becoming very important as it is one of the newest and most forward-looking media. Craig (2005) points out that in the late 1990s and early 2000s, the Internet went from a specialized medium used regularly by university personnel and computer experts to a true mass medium. Garrison (1996) elaborates that “the arrival of New Communication Technology such as Mobile Phones, the Internet, Etc, has created opportunities and challenges for traditional media professions” (Garrison, 1996).

Blogs and other new media including social-networking sites such as Tweeter and Facebook, YouTube and video-sharing sites together known as Web 2.0 have become cultural phenomenon in many parts of the world. Nowadays, blogs make use of a direct effect on traditional media agenda. Blogs as defined by Blood (2002) “are Web pages with frequently composed entries arranged in reverse chronological order” (p. 19). Blogs have been materializing since the mid-1990s, and they became more well-known during the 2000s, more people nowadays use blogs for news, and the number increases considerably throughout elections periods.

Weblog or blogs can be similar to personal diaries in some ways. The aim and topic of blogs greatly differ from other Web sites links and commentary, to companies, people and ideas, news about individuals, parties, photos, poetry, mini-essays, project updates to diaries, and even fiction, but the researcher in this study is interested in those devoted to political news and social issues rather than individual news and feelings.

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As is often the case with new media technologies in their early years, blogs have been the subject of a fast-moving, fluid body of research since first coming to prominence at the beginning of the 1990s. Blogs through its genres, focus on particular areas such as entertainment blogs, health care blogs, personal blogs, and political blogs (Drezner & Farrell, 2004; Wallsten, 2007). Thus, this research attempts to explore the influence of socio-political blogs and the news agenda of newspapers based on intermedia agenda-setting theory. Sample data from socio-political blogs' news stories posted on the Internet and from three Sudanese newspapers are analyzed. This research could provide a new perspective into the relationship between news media such as socio-political blogs and mainstream media. It will also contribute to the existing agenda-setting literature by broadening the scope of research to include the field of news media and blogs

Literature Review

In the past ten years there has been great expansion and progress of new media sources in Sudan. As has been the case in other countries, these online news providers compete with newspapers to deliver news to the public; the online news sources also compete in setting the media's agenda. Sikanku (2010), points out that "these online services provide news first, they may set the content and tone for what follows later in newspapers. On the other hand, newspapers with their relatively large staff of reporters may have the means to access news first, leaving the online services as amplifiers of agendas set by the newspapers" (Sikanku, 2010, p 5).

Previous studies had investigated the intermedia agenda-setting relationship in democratic countries where information flow is free. However, this research chooses intermedia agenda-setting in Sudanese media where media freedom is not completely free and the government has the power - wholly or at least partly to control the media.

In addition, Sudan merits research because Sudanese Internet users as well as bloggers are many. According to Internet World Stats (<http://www.internetworldstats.com>, 2012) Internet users in Sudan, there are over six million representing 10% of the overall population, Sudan is placed as the fifth African nation to use much of the Internet, after Nigeria, Egypt, Morocco, and South Africa. This indicates rapid development in getting access to Internet to advanced stage. The Internet penetration rate in Sudan is 19.0% slightly lower than the 21.1% average Internet penetration rate in the world.

Because of the Sudanese government's censorship of the mass media, negative coverage of a big national event such as the 2015 Sudanese presidential elections is seldom seen in traditional Sudanese newspapers. However, negative coverage might be expected in blogs. It is easy for Sudanese journalists to access the online version of the newspapers as most of them give credit to the Sudan News Agency than to Sudanese newspapers for source coverage.

According to the website of Sudanese bloggers without borders network (<http://sdunlimitedbloggers.blogspot.com/>, 2012), the integration of blogs as a source of information during the 2015 Sudanese presidential elections proved to be hypothetically important to study the agenda-setting role of the media. This study specifically, investigates the occurrence of intermedia agenda-setting by examining two sets of new media (socio-political blogs and citizen journalism) along with the mainstream media agenda of major national newspapers. This research focuses on the relationship between new media and old media to find out if socio-political blogs and citizen journalism posts as a new media impacted the mainstream media during the 2015 Sudanese presidential elections.

The intermedia agenda-setting effects of both new media and mainstream media will be examined. By studying how existing newspapers respond to emerging new media, this study could provide new perspectives into the relationship between new media and national newspapers in Sudan. Consequently, this research will contribute to present agenda-setting literature by expanding the setting of research to other geographic regions of the world and to study the relationship between new and old media.

However, socio-political blogs' influence has only recently been explored. One study examines how socio-political blogs contribute to the development of democracy (Lim, 2009). Consequently, by considering the agenda influence of blogs and newspapers, this research seeks to discover the role of media coverage in the Sudanese presidential contest.

Agenda-setting research has developed over the last four decades and scholars recently have raised the question of how certain media set the agenda for other media. Wallsten (2007) has determined that "the blog agenda is strongly influenced by traditional news media sources and that blogs have become part of the routine news gathering process of traditional news media." Changes in standard journalistic research and attribution procedures will be discussed as both media formats often rely on each other as sources rather than on original reporting. Differences in the amount of news coverage, in the amount of sources, and issues, will be discussed. Blogs and newspaper content will be analyzed to determine the extent of the relationship between socio-political blogs and mainstream media within the concept of intermedia agenda-setting.

Blogs in Sudan have become so popular that the Sudanese public is now reading blogs on a regular basis although blogs do not compete with traditional news media. The number of blog users, however, is increasing. The public does not recognize blogs as news sources but professional journalists are paying increasing attention to blogs.

This research is conducted in a developing country of Africa as few studies of intermedia agenda-setting have been carried out in this part of the world. Sudan is an excellent place to examine this issue because of its healthy newspaper and online environment and its political stability.

To date, there have been very few studies focusing on the coverage of presidential elections in Africa. The impetus of this research lies in its ability to compare presidential elections coverage between several news media's impact on African and Arab media. It is hoped that this research will contribute to a knowledge base that may eventually include all of Africa and the Arab world.

The current research is useful for media scholars, blog authors and interested journalists because it provides an insight into the relationship between socio-political blogs and traditional media. This is also the first research that explicitly looks at socio-political blogs and media in light of intermedia agenda-setting theory. Others have claimed that blogs have an agenda-setting function but have not examined this role in light of the developing community's dependence upon traditional media sources.

Finally, a strong point of this research is to test the process of intermedia agenda-setting, which demonstrates that one medium influencing the importance of issues within another medium, in an area that can be considered to be outside the traditional agenda-setting territory such as Sudan. The fact that this research is undertaken in a developing Arab and Africa country increases its value. This is because few studies on agenda-setting of any kind have been carried out in this part of

the world. In addition, technologists often predict that new technologies such as online news services will have a healthy influence on older traditional media that are constrained by problems in delivery, paper shortages, and low levels of literacy (Sikanku, 2010).

The research on intermedia agenda-setting effects is another big challenge in the new media settings. Increasing the scope of agenda-setting effects detected among traditional media to salience transfer among new media, the researcher may find similar or possibly different trends in intermedia influence compared to that of traditional media. Regardless of whether it is similar to or different from the effects of traditional media, such an attempt can broaden our understanding of the media system in the blog era.

The Internet, as a new mass communication technology, has now become very popular; one-sixth of the entire world's population uses the Internet regularly. According to the World Telecommunications Union (WTU) 2012, this number has rocketed since people entered the new millennium. A recent survey (September 30, 2012) carried out by Internet World Stats² shows 35.6% of the world's population uses the Internet.

Theoretical Framework

While there is an increase focus on online activism and the Internet effect on politics, little has been done that addresses how socio-political blogs and newspapers fit into the agenda-setting perspective.

This research examines the intermedia agenda-setting effects of ten socio-political blogs, three mainstream media (*Alintibaha*, a private newspaper; *Akhirlahza*, a privately owned newspaper; and *Alwatan*, a privately owned newspaper), and three citizen journalism (*Sudanile.com*, *Sudaneseonline.com*, and *Albrakal.com* all of which are privately owned online websites).

This paper uses content analysis to analyze socio-political blog posts and newspaper articles during the 2015 Sudanese presidential elections. New media posts and newspaper contents are both collected. This research also analyzes rank orders of themes in socio-political blog posts and newspaper contents. Lastly, to test for intermedia agenda-setting between new media and mainstream media, the cross-lagged panel design is employed to measure the correlation of ranked themes. The cross-lagged approach with the Rozelle-Campbell Baseline has been used previously in intermedia agenda-setting research (Lopez-Escobar, McCombs & Lennon, 1998; Roberts & McCombs, 1994; Sweetser, Golan & Wanta, 2008).

Research Questions and Hypotheses

The objectives of this paper are to examine the intermedia agenda-setting between socio-political blogs and mainstream media, in order to test the hypothesis that socio-political blogs set the agenda of mainstream media and to explore the source of interaction between traditional news media and socio-political blogs during the 2015 presidential elections in Sudan. Based on the literature review, in line with the above stated research objectives and understanding of blogs and mainstream media, the researcher considers this question:

RQ₁: What role do blogs and mainstream media play in intermedia agenda-setting?

Last, this research considers if support exists for the following hypotheses.

² Internet World Stats is an International website that features up to date world Internet Usage, Population Statistics and Internet Market Research Data, <http://www.internetworldstats.com/>

H1: The issues mentioned (measured by frequency) by socio-political blogs in Time 1 will be mentioned by newspapers in Time 2.

H2: The issue salience of socio-political blogs in Time 1 shall show a significant correlation with citizen journalism issue in Time 2.

H3: Issues emphasized by the blogs in presidential elections in Time 1 will correlate with the issue agenda of the citizen journalism posts in Time 2.

H4: Socio-political blog agendas in Time 1 will influence the agendas of major national newspapers in Time 2.

Method

The present research has utilized a longitudinal design which measures change over time and doing so by collecting data concerning at least two time points to assess whether blogs have an intermedia agenda-setting function similar to the traditional media. The longitudinal design is utilized in this research because it is generally considered as a more appropriate method for descriptive as well as explanatory research. The content analysis method is also used in this research as a reliable tool for data collection.

This paper tracks news reporting of traditional media and blog discussion about issue agendas through the 2015 Sudanese presidential elections to test the hypothesis that the blog agenda exerts impact on the mainstream media agenda. Using a computer-assisted, quantitative content analysis of randomly selected socio-political blogs over a two-month period from February 9 to April 11, 2015, the researcher examined how the Sudanese mainstream media reporting the issue of Sudanese presidential elections. This research employed intermedia agenda-setting theory as its major theoretical framework and content analysis as its research method. To put these ideas to the test, an extensive set of longitudinal data on Sudanese new and mainstream media reporting during the 2015 Sudanese presidential elections was used.

Data Collection

This research attempted to analyze the intermedia agenda-setting during the 2015 presidential elections in Sudan, a topic that has received minimal scholarly attention at this point.

The 2015 Sudanese presidential elections were held on April 11, 2015. Consequently, the traditional news media and blog content were analyzed in the two-month period leading up to the elections day - from February 9, 2015 to April 11, 2015. No sample was drawn within this time frame as previous studies have done, as it was the overall purpose of this research to analyze the interaction of traditional news media and blogs on a continuous basis. Only a census of all traditional news media and blog content during the time frame allowed an examination of the relationship among blogs and mainstream media.

In order to access the newspaper articles, the socio-political blogs posts, and the citizen journalism posts, the researcher collected all the issues of the three media utilized manually for the defined time frame. The guided news search function of LexisNexis Academic was not utilized. Articles were retrieved by a search for the keywords *presidential elections*, or *name of any presidential candidates* in the full-text mode. These searches resulted in a total count of 1,501 newspaper articles, socio-political blog posts, and citizen journalism posts. The number was reduced by eliminating articles and posts that showed up several times in the search results. A few articles were also included in the search results that did not include any of the search terms. They were eliminated as well.

Therefore, 14 articles of *Alintibaha* were eliminated, 11 of *Al-Watan*, four of *sudaneseonline.com*, two of *Sudanile.com*, and one post of *Albrakal.com* had to be eliminated. In addition, the search results of socio-political blogs were reduced by 30 as online posts from blogs showed up in the search results and had to be eliminated based on the described sampling criteria. No articles of *Akhirlahza*, had to be eliminated.

The eliminations resulted in a final article and post count of 1,439, including 550 newspaper articles, 501 blogs posts and 388 citizen journalism posts. The 550 newspaper articles were divided as follows: *Akhirlahza* (n=191), *Al-Intibahah* (n=164), and *Alwatan* (n=150). The 388 citizen journalism posts were divided as follows: *Sudanile.com* (n=173), *Sudaneseonline.com* (n=162), and *Albrakal.com* (n=53).

Findings

According to the data, the most frequent issues represented across the newspapers and socio-political blogs were (in alphabetical order) the campaign, the constitutional review, conflicts in Darfur, morality, human rights/race relations and issues related to personal character such as leadership and morality. There was significant overlap in issues covered most prominently in the two media. While both media gave significant attention to issues of campaign, constitutional review, and the conflicts in Darfur, the newspapers prominently featured content dedicated to the leadership while socio-political blogs featured foreign policy issues very prominently.

As Table 1 indicates, the greatest frequent category issue was campaign in Time 1, but leadership, constitutional review, and human rights/race relations were also most categories issue in Time 1. Issues of conflicts in Darfur, CPA and morality appeared least in newspaper reporting in Time 1. In contrary, the same issue was one of the most issues in Time 2, mainly, the newspaper reporting of morality which continued to increase, and in the last few days of the elections morality issue had become the major common issue mentioned. The amount of news stories concerning human rights/race relations and constitutional review, however decreased in Time 2, while news reporting on campaign increased by Time 2.

On contrast, Table 1 shows the largest number of postings (18.2%) by socio-political blogs articulated opinions about campaign in Time 1 (see Table 1). Constitutional review was the second great highly posted stories on socio-political blogs in Time 1. Leadership and human rights/race relations were the issues that had the smallest amount of stories posted in Time 1. However, the amount of constitutional review over time, reduced from 17.6% in Time 1 to 13.6% in Time 2. Stories about campaign greatly increased from 18.2% (29 stories) in Time 1 to 28.5% (84 stories) in Time 2. The proportion of foreign policy posts measured up to the whole kind of stories enlarged from 11.3% in Time 1 to 14.6% in Time 2. In addition, stories about the conflicts in Darfur declined all through the elections, by fewer stories being reported by the last days of the elections. The amount of conflicts in Darfur stories coverage balanced to the total stories coded in Time 2 was only 4.8% yet in Time 1 the proportion of this issue was 13.2%.

H1: It was predicted that the issues mentioned by socio-political blogs in Time 1 will be mention by newspapers in Time 2 during the early weeks of the 2015 Sudanese presidential elections. The hypothesis was not supported (see Table 1). No issue was found in the socio-political blogs which strongly suggests an intermedia agenda-setting function of elections agenda issues.

Table 1
The Socio-Political Blogs, Newspaper and Citizen Journalism Issue Agenda

Issues	Socio-political blogs		Newspapers		Citizen journalism	
	Time 1 (n= 159)	Time 2 (n=295)	Time 1 (n=198)	Time 2 (n=254)	Time 1 (n=125)	Time 2 (n=227)
Campaign	18.2	28.5	27.3	30.7	12.0	34.4
Youth & students	01.3	0.00	02.5	00.8	00.0	00.9
Human rights/race	06.9	03.7	08.1	04.7	08.0	02.2
Conflicts in Darfur	13.2	04.8	04.5	01.2	14.4	03.5
Constitutional review	17.6	13.6	12.6	06.7	22.4	15.4
CPA	05.7	07.5	03.5	06.3	05.6	03.9
Creating employment	00.0	0.00	00.0	00.8	00.0	00.0
Crime/violence	03.8	04.8	01.0	03.1	01.6	04.9
Economic recovery	04.4	05.8	03.0	03.5	04.0	10.1
Farmers & agriculture	00.0	00.3	00.0	01.6	00.0	00.0
Government spending	00.0	00.3	00.0	00.0	00.0	00.0
Health care	00.0	0.00	00.5	00.4	00.0	01.3
Infrastructure	00.0	00.3	00.0	00.4	00.0	00.0
Oil	00.6	00.3	00.0	00.4	00.0	00.4
Religious tolerance	02.5	0.00	02.0	03.1	01.6	00.9
Tackling poverty	00.0	00.3	00.0	00.0	00.0	00.0
Tribalism/ethnicity	00.6	00.3	00.5	00.0	04.0	01.8
Welfare	00.0	0.00	00.0	00.8	00.0	00.0
Women's issues	00.6	00.7	04.0	00.0	00.8	00.9
Avoid disputes	01.9	00.7	00.0	00.0	00.8	00.0
Foreign policy	11.3	14.6	02.0	04.3	08.8	06.2
Compassion	01.3	03.4	01.5	00.4	00.0	00.4
Experience/ability	00.6	0.00	01.0	02.4	08.8	00.0
Knowledgeable	00.6	01.4	04.5	02.0	02.4	00.9
Leadership	08.8	07.5	13.6	14.6	09.6	09.3
Morality	00.0	01.4	07.6	11.8	03.2	02.6

Notice: All figures are percentages. For newspapers, n= number of stories; for Socio-political blogs, n= number of stories on the posts, for Citizen Journalism, n= number of stories on the posts

Table 2 shows the findings of the correlations contrasting agendas issue among the whole presidential election period. The major correlation occupied the association of the socio-political blogs in Time 1 with citizen Journalism posts in

Time 2 ($r = .721, p \leq .01$). The newspaper coverage in Time 1 was also correlated with socio-political blogs in Time 2 ($r = .687, p \leq .05$).

Table 2
Pearson Correlations Comparing Issue Agendas

	Newspapers T2	Socio-political blogs T2	Citizen journalism T2
Socio-political blogs T1	.168	.428	.721**
Newspapers T1	.611	.687**	.700**
Citizen journalism T1	.500	.547*	.185

* $p \leq .05$ ** $p \leq .01$

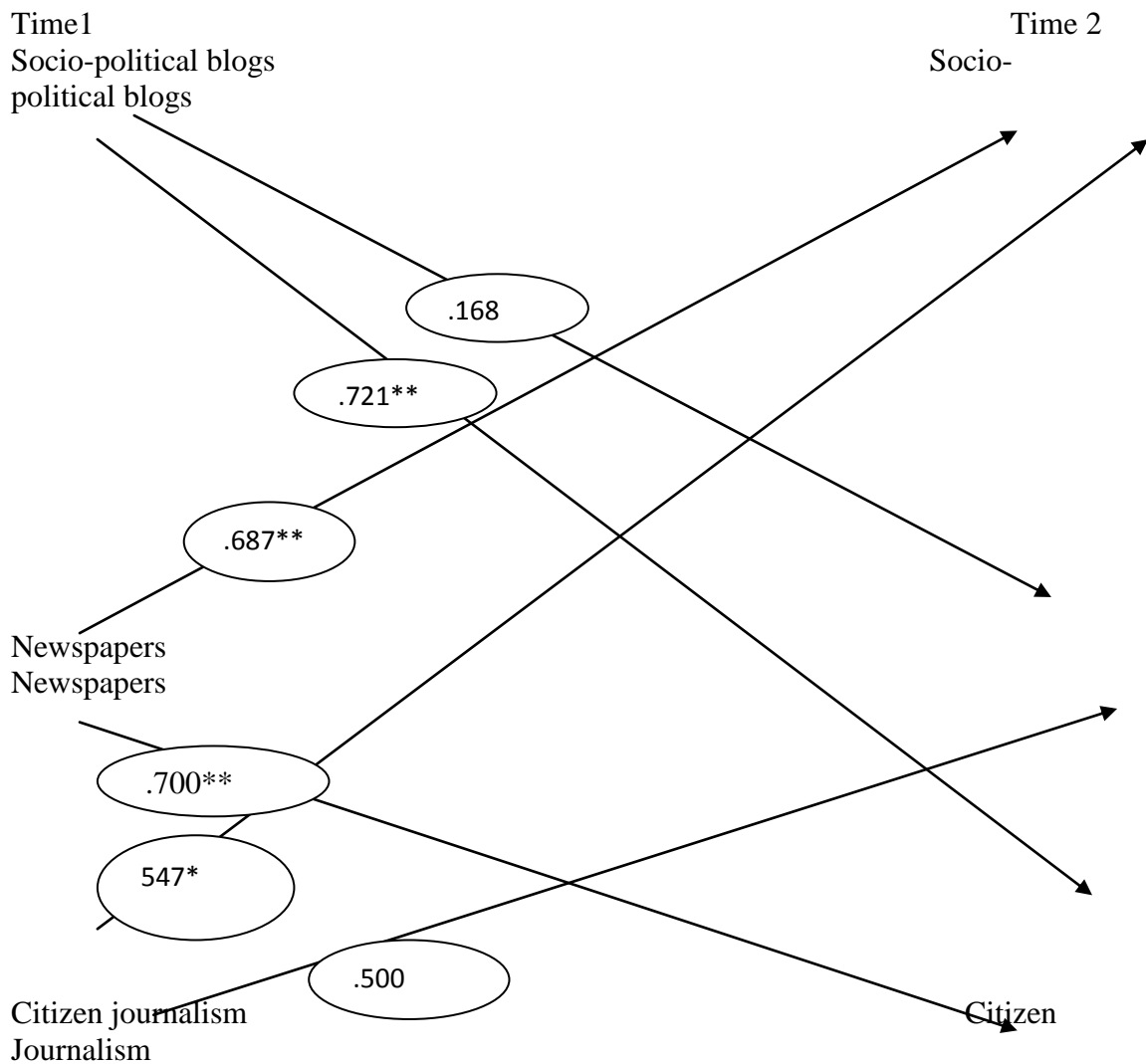


Figure 1 Cross-lagged Correlations: Agendas Issue of Blogs, Newspapers and Citizen Journalism.

Notice: * $p \leq .05$. ** $p \leq .01$.

The socio-political blogs and newspapers, although, generated significant correlations. The Pearson correlation of the socio-political blogs in Time 1 and newspapers in Time 2 at 0.168 was not found to be statistically significant. Thus, there would not be a direct relationship between the blogs and newspapers, but the socio-political blogs in Time 1 correlated with the citizen journalism in Time 2 (0.721) while the newspaper agendas in Time 1 and citizen journalism in Time 2 (0.700) correlated significantly. Although the socio-political blogs may possibly have been reporting messages in response to newspaper reporting, yet, the newspapers' coverage actually was not linked to the issues discussed in socio-political blogs.

The hypothesis (2) which predicted that a correlation between the issues salience of socio-political blogs in Time 1 with issue mentioned by citizen journalism posts in Time 2, received support. The findings of correlations of the cross-lagged are exposed (Table 2 and Figure 1). In Figure 1, four of the six cross-lagged correlations were significant. Moreover, correlations of socio-political blogs to correlations of citizen journalism were bigger than the socio-political blogs to mainstream media correlations, indicating that the socio-political blogs were responding to mainstream media reporting rather than effecting newspaper reporting.

Considering the elections coverage by Sudanese citizen journalism, the majority of coverage on the posts of Sudanese citizen journalism consisted of two issue categories (Table 3). Stories on the constitutional review dominated the number one position on Time 1 ranking. Again, stories about the campaign dominated the number one position on Time 2 ranking. Constitutional review reporting far outpaced all other issues creating up 18 of 52 stories or 34.6% of Time (1). At Time (2), campaign issues made up 39.8% of elections reporting.

Table 3
Prominence of Issue in Citizen Journalism

Time1	Stories (%)	Rank	Time 2 (%)	Stories (%)	Rank
Constitutional review	18 (34.6)	1	Campaign	33 (39.8)	1
Conflicts in Darfur	10 (19.2)	2	Economic recovery	11 (13.3)	2
Campaign	4 (07.7)	3	Constitutional review	10 (12.1)	3
Foreign policy	4 (07.7)	3	Leadership	7 (08.4)	4
Human rights/ race	4 (07.7)	3	Foreign policy	7 (08.4)	4
Leadership	3 (05.8)	6	Conflicts in Darfur	5 (06.0)	6
CPA	3 (05.8)	6	Crime/violence	4 (04.8)	7
Economic recovery	3 (05.8)	6	CPA	3 (03.6)	8
Crime/violence	2 (03.9)	9	Human rights/race	1 (01.2)	9
Morality	1 (01.9)	10	Religious tolerance	1 (01.2)	9
			compassion	1 (01.2)	9

N=26. Unit of observations= 335 citizen journalisms stories. Full mentions, Time 1= 52

and Time 2= 83. Time 1 = Feb.9 – Mar. 7, 2015. Time 2 = Mar. 15 – Apr. 11, 2015

Table 4 shows the Pearson coefficients for the citizen journalism agenda by paragraphs. The table reflects strong relationship between the three citizen journalism across the two time periods with coefficients ranging from .55 to .76. These relationships were anchored by both constitutional review and campaign coverage.

The findings of the correlations compared agendas (Table 4) crossways the whole presidential elections. The biggest correlation entailed the comparison of the

socio-political blogs with citizen journalism ($r = .753, P \leq .01$). This involves that Hypothesis 2b of this research is supported. The three citizen journalism were strongly correlated ($r = .709, P \leq .01$). Citizen journalism was also correlated with the newspapers.

What is most important for this research however is the indication of the socio-political blogs' issue impact on citizen journalism issue of agenda for the 2015 presidential elections in Sudan. This sustains the second hypothesis of this paper.

Table 4
Pearson Coefficients of 2015 Presidential Campaign Coverage
by Citizen Journalism Paragraphs

	Sudanlie T2	Sudaneseonline T2	Albrakal T2
Sudanile T1	.76	.76	.75
Sudaneseonline T1	.64	.64	.64
Albrakal T1	.56	.56	.55

Correlations Comparing Issue Agendas (r_s)

Socio-political blogs T1	.729**	.880**	.650*
Socio-political blogs T2	.721*	.753*	.655*

Note: all coefficients in the above table are significant at $P \leq .001$.

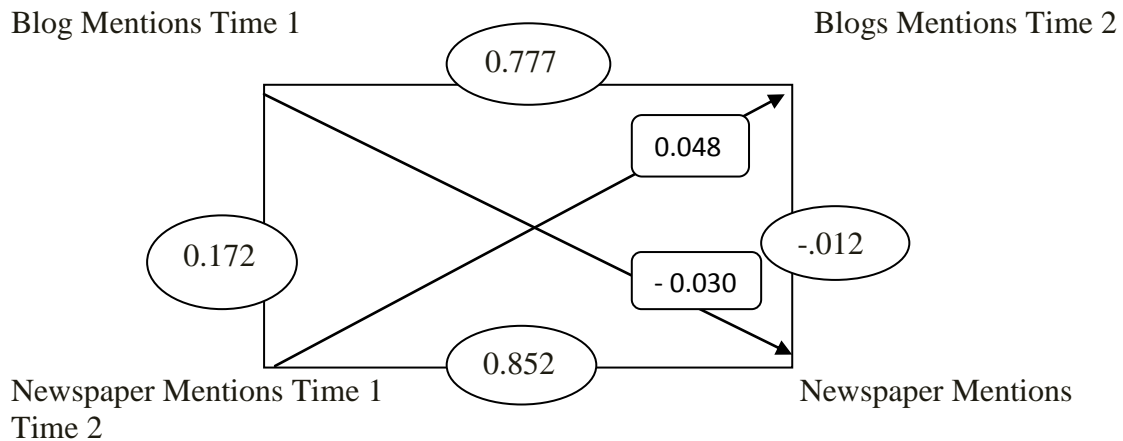
* $p \leq .05$ ** $p \leq .01$

H3 predicted that issues emphasized by the blogs in presidential elections in Time 1 will correlate with the issue agenda of the citizen journalism posts in Time 2, and thus received strong support.

Duplicating the Lopez-Escobar et al. (1998), method of cross-lagged, which let fundamental assumption to be made from data, were performed to inspect the research question. Cross-lagged correlation supposes that if X effects Y more than Y effects X, then PX_1Y_2 should be higher than PX_2Y_1 (Lopez-Escobar et al., 1998). Lopez-Escobar et al., (1998) state that "the inverse that if Y effects X more than X effects Y, then PX_2Y_1 should be higher than PX_1Y_2 is also supposed. According to Lopez-Escobar et al., (1998), the cross-lagged correlation analysis offers two benefits for examining hypothesis, "first, two competing hypotheses can be examined simultaneously". We can assess not only the hypothesized relationship between the independent variable at Time (1) and the dependent variable at Time (2), but also the strength of the hypothesized relationship vis-a-vis a hypothesis asserting exactly the opposite. Second, both of these hypotheses can be assessed based on the Rozelle-Campbell Baseline, which is the level of correlation to be expected on the basis of the autocorrelations and synchronous correlations alone" (Lopez-Escobar et al., 1998, p. 233). There are six correlations in the two variable cross-lagged situations: the synchronous correlations PX_1Y_1 and PX_2Y_2 , the autocorrelations PX_1X_2 and PY_1Y_2 , and the cross-lagged correlations PX_1Y_2 and PX_2Y_1 (Campbell & Kenny, 1999).

The results of the cross-lagged comparisons for examining the intermedia influence between the newspaper issue agenda and the socio-political blogs issue agenda appear in Figure 2. The results show that there is the influence of the newspaper issue agenda on the issue agendas of the socio-political blogs.

Figure 2 shows that the correlation of 0.048 between the newspaper issue agenda at Time 1 and the socio-political blog issue agenda at Time 2 was moderate, while the correlation of -0.030 between the socio-political blog issue agenda at Time 1 and the newspaper issue agenda at Time 2 was negative. Although the correlation was not strong, there was evidence of a modest influence of the newspaper issue agenda on the socio-political blog issue agenda because the correlation exceeded the Rozelle-Campbell Baseline of 0.046; additionally, there was no reciprocity.



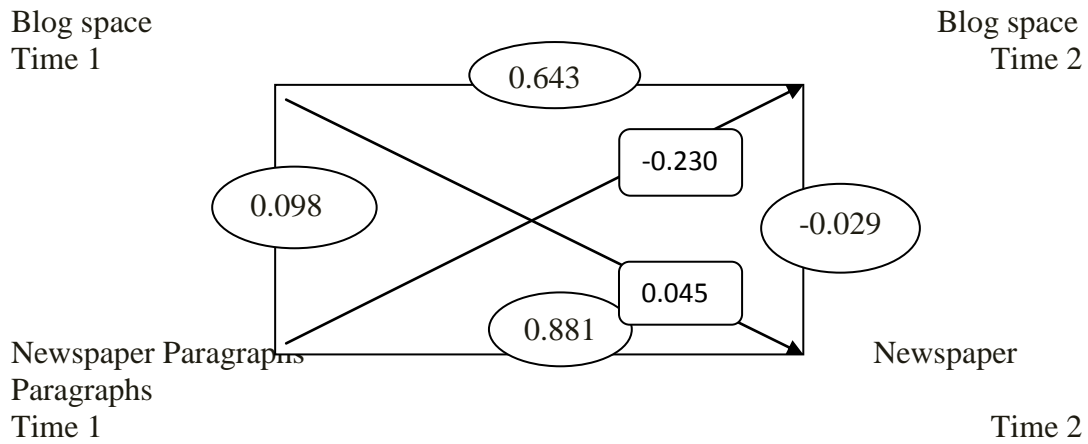
Rozelle-Campbell Baseline = + 0.046

Figure 2 Cross-Lagged Comparison (Pearson Coefficients)³
 Blog Mentions versus Newspaper Mentions

As seen in Figure 2, there was a high correlation between the issue agendas for blog mentions Time 1 and blog mentions Time 2. The same can be said for the issue agendas within the newspaper mentions at the two time periods. However, comparing the two media, the cross-legged issue agenda for newspaper mentions at Time 1 on blog mentions at Time 2 is significant (0.048) since it was above the baseline. However, the cross-lagged between blog mentions Time 1 and newspaper mentions Time 2 (-0.030) is not significant. In terms of topics the newspaper mentions did have a substantial influence on blog mentions across time. The fact that the correlations within the two, both blog mentions and newspaper mentions at different time periods were very high shows that they maintained a very high consistency in terms of the type of news articles that they covered.

Figure 3 shows a modest Pearson correlation of ($r = 0.230$) among newspaper paragraph agenda at Time (1) and socio-political blog space issue at Time (2). Though, there was no reciprocal impact as the impact of socio-political blog issue at Time (1) on the newspaper agenda at Time (2) of ($r = 0.045$) exceeded the Campbell Baseline of (0.0532).

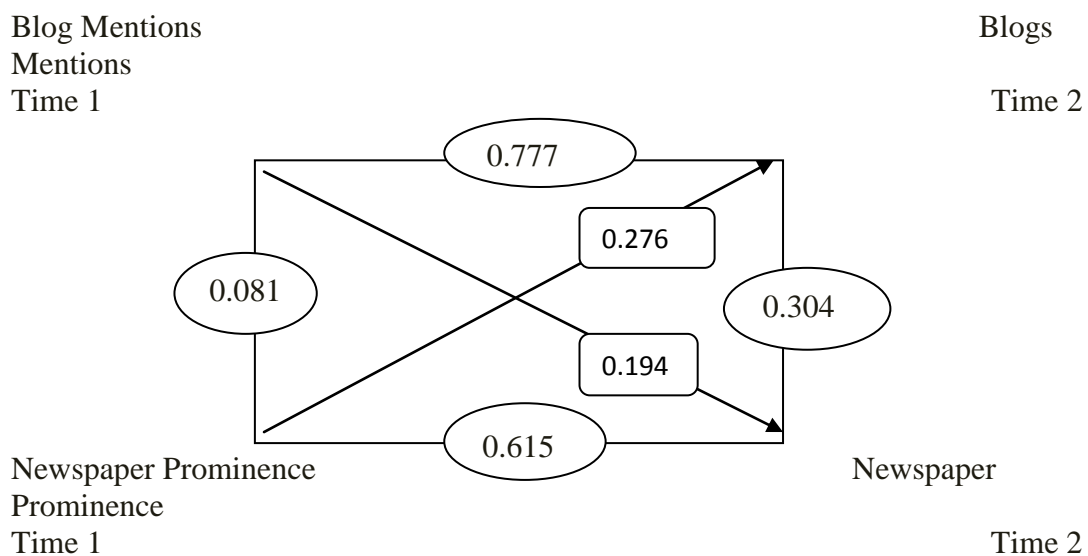
³Each line represents a Pearson coefficient. The lines in bold indicate the coefficient of primary interest and the other arrow line represents the area of interest if the reverse hypothesis was true. The Rozelle-Campbell statistic was computed for each model to determine the statistical significance of individual Pearson coefficient.



Rozelle-Campbell Baseline = + 0.0532

Figure 3 Cross-Lagged Comparisons (Pearson Coefficients)
Blog Spaces versus Newspaper Paragraphs

Although Figure 4 shows there was a high correlation of ($r = 0.276$) among prominence of newspaper agenda at Time (1) and socio-political blogs mentions agenda at Time (2), there is proof that newspaper coverage effected socio-political blogs' discussion since mutually relationship was not originated. Correlation between socio-political blogs agenda at Time (1) and newspaper agenda at Time (2) was 0.194. The two correlations went beyond the Rozelle-Campbell Baseline of (0.134).



Rozelle-Campbell Baseline = + 0.134

Figure 4 Cross-Lagged Comparisons (Pearson Coefficients)
 Blog Mentions versus Newspaper Prominence

However, although Figure 5 illustrate that the correlation of ($r = 0.124$) among the socio-political blog issue mentions agenda at Time (1) and the newspaper prominence at Time (2) was not established, there was no mutual impact. The effect of newspapers prominence at Time (1) on socio-political blog mentions at Time (2) of ($r = 0.305$) was significant. The correlation went beyond the Rozelle-Campbell Baseline of 0.122.

Rozelle-Campbell Baseline = + 0.122
 Blog space

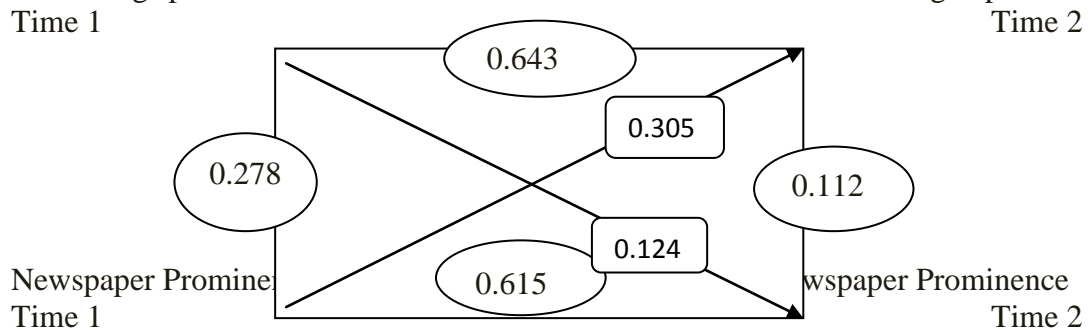


Figure 5 Cross-Lagged Comparisons (Pearson Coefficients)
 Blog Spaces versus Newspaper Prominence

H4 required examining if proof should be initiated for the opinion that socio-political blogs will affect the agendas of major newspapers more often than major newspapers influence the agendas for blogs during the 2015 presidential campaign. The cross-lag analyses did not support this hypothesis.

None of the blog coefficients were statistically significant. In contrast, nearly all of the citizen journalism variables were statistically and substantively significant. Newspapers at Time 1 were not statistically significant.

For H4 which posited that socio-political blogs agendas in Time 1 will influence the agendas of major newspaper in Time 2 greater than major newspapers influence the agendas for blogs, the cross-lag analysis presented no support for the blog coverage influence hypotheses. None of the coefficients representing the relationship of interest were statistically significant. This level of analysis did not support the power of blogs setting the agenda.

Discussion

These findings have proven that there is a relationship between the three media under research which was primarily one of influence between media. As the numbers of media outlets grow, it appears unlikely that one media form could have as clear, direct and powerful impact on another in this environment.

McCombs (2005) states that blog may have an intermedia agenda-setting role. However, this was not the case in this research. Newspapers were still major information sources for Sudanese society. But socio-political blogs provided a number of topics for readers including journalists. Journalists selected certain topics and made their comments or provided further explanations in their coverage.

Therefore, blogs will continue to set the agenda for newspapers in the future even though the Internet is widely used nowadays.

With the emergence of the Internet in the 1990s, scholars begin questioning the viability of the agenda-setting theory and begin exploring ways in which the theory would have to adapt in the online age (Takeshita, 2002). The discussion is borne out of concern over whether or not mass media is a concept of the past in the new, increasingly fragmented media environment. Certainly, the original model of a public dependent on a select few news media outlets for their understanding of the world proffered by McCombs and Shaw (1972) in the Chapel Hill study no longer applies. The Internet has given us blogs and other media such as micro-blogs that have complicated the media landscape and impacted news gathering processes. McCombs (2005) argues that in the interactive Internet age where these potential influences on the media agenda are not well understood, intermedia agenda-setting is a vein of research that scholars will be very interested in for the foreseeable future. At present, our understanding of intermedia agenda-setting in the Internet age remains limited.

This research also demonstrates that Sudan acquires a vital if not alive media platform. It illustrates that while mainstream media had a substantial intermedia impact on other newspapers, the other media under consideration such as the socio-political blogs and Sudanese citizen journalism had the possible of creating their own stories. The findings of this research show that blog agendas and newspaper agendas were not remarkably different.

Conclusion

This research further questions the relevance of news media in new media such as blogs. This is a major problem for the news media industries. Clearly, the news media source must continue to adapt to a media landscape that has shifted in order to maintain its relevance in moving forward. The fate of the news media impacts the public immensely as it is an historic institution that is so tightly bound to democracy today.

Political scientists have long considered national conditions and other contextual factors in analyzing presidential elections (Holbrook, 2002). However, the 2015 elections in Sudan focused heavily on the Comprehensive Peace Agreement (CPA). In 2015, blogs identified a variety of issues as important considerations without focusing only on the CPA.

Although there was lack of evidence showing agenda-setting from news media to blogs and citizen journalism, it must be said that the national newspapers are not irrelevant on new media as mainstream media are increasing their new media presence and gaining stronger foothold in these emergent communities. To the extent that the mainstream media adapt to new media, they may be able to increase their influence on these communities. The news media are changing and scholars, practitioners, and the public alike would be wise to not rule out the news media.

To this end, it is hoped that this research has contributed to greater understanding of the relationship between news media and blogs - even if by showing that we still have so much to learn in these times of change.

References

Blood, R. (2002). Weblogs: A History and perspective. In J. Rodzvilla (Ed.), *We've got blog: How weblogs are changing our culture*. Cambridge, MA: Perseus Publishing. Rebecca's Pocket, Retrieved July 6, 2010, from: <http://www.rebeccablood.net/essays/>

- Boyle, T. P. (2001). Intermediate agenda-setting in the 1996 Presidential Elections. *Journalism and Mass Communication Quarterly*, 78(1), 26-44.
- Callahan, C. (1999). *A Journalist's Guide to the Internet: The Net as a Reporting Tool*, Cambridge, MA: Perseus Publishing.
- Craig, R. (2005). *Online journalism: Reporting, Writing and Editing for New Media*, Thomson Wadsworth, Canada, 2005
- De Vaus, D. (2006). (ed.) *Research design* (Vols. 1-4), Sage publications, London.
- De Vaus, D. (2002). *Surveys in social sciences* (5th ed.). Australia: Routledge.
- De Vaus, D. (2001). *Research design in social research*, Thousand Oaks, CA: Sage.
- Drezner, D. W., & Farrell, H. (2004). Web of influence. *Foreign Policy*, 145, 32-40.
- Garrison B. (1996). *Successful strategies for computer-assisted reporting*, New Jersey: Lawrence Erlbaum Associates.
- Holbrook, T. M. (2002). Presidential campaigns and the knowledge gap. *Political Communication*, 19, 437-454.
- Institute for Work & Health, Toronto, Cross-sectional-vs-longitudinal-studies, At Work, Issue 55, Winter 2009, from <https://www.iwh.on.ca/wrmb/cross-sectional-vs-longitudinal-studies>. (accessed April 11, 2012).
- Kalathil, S. (2008). *Scaling a changing curve: Traditional media development and the New Media*, A Report to the Centre for International Media Assistance, March 3, 2008, from: http://www.mobileactive.org/files/file_uploads/CIMA-New_Media-Report.pdf, (accessed March 30, 2012).
- Ku, G., Kaid, L.L., & Pfau, M. (2003). The impact of Website campaigning on traditional news media and public information processing. *Journalism and Mass Communication Quarterly*, (80)3, 528-547.
- Lim, M. K. (2009). *Blogging and democracy: Blogs in Malaysian political discourse*, Unpublished Ph.D Dissertation, the Pennsylvania State University
- Lopez-Escobar, E., Llamas, J. P., McCombs, M. E., & Lennon, F. R. (1998). Two levels of agenda-setting among advertising and news in the 1995 Spanish elections. *Political Communication*, 15(2), 225-238.
- McCombs, M., & Bell, T. (1996). *The agenda-setting role of mass communication*. In M. B. Salwen, & D. W. Stacks (Eds.). *An integrated approach to communication theory and research* (pp. 93 - 110). Mahwah, NJ: Lawrence Erlbaum.
- McCombs, M. E. (1977). Agenda-setting function of mass media. *Public Relations Review*, 3(4), 89-95.
- McCombs, E. M. (1997). New frontiers in agenda-setting: Agendas of attributes and frames. *Mass Communication Review*, 24 (1-2), 32-52.
- McCombs, M. E. (2005). A look at agenda-setting: Past, present and future. *Journalism Studies*, 6(4), 543-557.
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of the mass media. *Public Opinion Quarterly*, 36, 176-87.
- McCombs, M. E., & Shaw, D. L. (1976). Structuring the "unseen environment". *Journal of Communication*, 26(2), 18-22.
- McCombs, M. E., Llamas, J. P., Lopez-Escobar, E., & Rey, F. (1997). Candidate Image in Spanish Elections: Second-level agenda-setting effects, *Journalism and Mass Communication Quarterly*, 74 (4), 703-717.
- McCombs, M. E., Llamas, J. P., Lopez-Escobar, E., & Rey, F. (1998). Candidates' images in Spanish elections: Second-level agenda-setting effects. *Journalism & Mass Communication Quarterly*, 74(4), 703-717.

- McCombs, M. E. (1972). Mass media in the marketplace. *Journalism Monographs*, 24.
- McCombs, M. (1976). Agenda-setting research: A bibliographic essay. *Political Communication Review* 26, 1- 7.
- McCombs, M. E. (1977). *Newspapers versus television: Mass communication effects across time*. In D. L. Shaw & M. E. McCombs (Eds.). The emergence of American political issues: The agenda-setting function of the press (pp. 89-105). St. Paul: West Publishing Co.
- McCombs, M. (2004). *Setting the agenda: The mass media and public opinion*. Cambridge, UK: Polity Press.
- McCombs, M, Lopez-Escobar, E, & Llamas, J.P. (2000). Setting the agenda of attributes in the 1998 Spanish general elections. *Journal of Communication* (spring), 77-92
- McCombs, M., & Ghanem, S. I., (2001). *The convergence of agenda-setting and framing*. In S. D. Reese, O. H. Gandy, & A. E. Grant (Eds.), Framing public life: perspectives on media and our understanding of the social world (pp.67-81). Mahwah, NJ: Lawrence Erlbaum Associates.
- McCombs, M. & Shaw, D. (1993). The evolution of agenda-setting research: Twenty-five years in the marketplace of ideas. *Journal of Communication*, 43, 58-67.
- McCombs, M. & Shaw, D. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36, 176-185.
- McCombs M. E. & Shaw, D. (1977). *The agenda-setting function of the press*. In D. L.
- Roberts, M., & McCombs, M., (1994). Agenda-setting and political advertising: Origins of the news agenda. *Political Communication*, (11), 249-262.
- Sikanku, E. G., (2010). *Intermedia Agenda-Setting Effects in Ghana: An Analysis of Topic Agenda Influences for Government-Owned and Private News Websites"* Paper presented at the annual meeting of the International Communication Association, 2010-06-22 Suntec Singapore International Convention & Exhibition Centre, Suntec City, Singapore Online <PDF>. 2012-12-04 from http://www.allacademic.com/meta/p405205_index.html
- Sweetser, K. D., Golan, G. J., & Wanta, W. (2008). Intermedia agenda-setting in television, advertising, and blogs during the 2004 elections. *Mass Communication & Society*, 11(2), 197-216.
- Takeshita, T. (2002). Expanding attribute agenda-setting into framing: An application of the problematic situation scheme. *Paper presented at the International Communication Association, Seoul, Korea*.
- Wallsten, K. (2007). Agenda-setting and the Blogosphere: An Analysis of the Relationship between Mainstream Media and Political Blogs, *Review of Policy Research*, Volume 24, Number 6 (2007)