

How Environmental Activists Built a Media Agenda and Its Attributes: The Saemangeum Project in South Korea[†]

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Abstract

This study examines the press release as the beginning point of agenda-building in the largest environmental conflict in the Republic of Korea: the Saemangeum project. The effects of the first and second - level agenda building were investigated through a content analysis of press releases and newspapers. The results showed that the number of press releases issued by environmental groups was positively associated with the amount of news coverage regarding the issue. Regarding the effects of the event, all newspapers, encompassing the liberal, neutral, and conservative, reported more stories about Saemangeum when the environmental groups planned and practiced various demonstrations. The results also revealed that the more demonstrations mentioned in the press releases, the more favorable the news coverage was found in the newspapers. In sum, this study found that a positive relationship existed between press releases and media coverage at the early triggering stage of agenda-building.

Key words: *Saemangeum, Environmental news, Agenda-building, Content analysis, Press releases*

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I. Introduction

In the spring of 2003, the Korean media reported an unprecedented 350 kilometer march, during which, for 65 days, environmental activists bowed down on their knees after every three steps. This march, called “three steps and one bow,” began with 19 religious activists. At the commencement of the march, some 1500 activists had joined. The participants’ hands were covered with blisters and their knees were scabbed. This sensational long march was led by environmentalists who opposed a massive reclamation project along the southwestern coastline, referred to as the Saemangeum project. The religious activists, who organized this symbolic demonstration, received the 2003 environmental awards which were provided by an international environmental group. Since then, various groups, including famous politicians, have adopted this symbolic march of “three steps and one bow” to express their disputes. It has become a common tool for peaceful demonstrations in South Korea.

The Saemangeum project is a noteworthy case from the perspective of the relationship that exists between social movements and the media. The project exhibited various factors that deserved media attention such as environmental pollution, animal habitat and land conservation, all of which are favored topics in news coverage (Cottle, 1993). This conflict between environmental groups and the Korean government offers an opportunity to examine how activists have succeeded or failed in building a media agenda during their long-term dispute. The process of representing issues to the media, known as agenda-building, refers to “the overall process

of creating mass media agendas” (Berkowitz and Adams, 1990, p. 723). In other words, agenda-building refers to the process that is involved in identifying the party that sets the media agenda and the manner and ways in which the media, the public, and the government agendas are built through various interactions (Weaver and Elliott, 1985; Berkowitz, 1987; Walters and Walters, 1996; Kioussis and Wu, 2005; Lee, 2009).

The media play an important role when an individual or a group attempts to trigger public concern and influence policies because the media shed light on certain issues and aspects among competitive alternatives (Cobb and Elder, 1983). In cases where the issue is related to non-profit organizations that have fewer resources than for-profit or government organizations, i.e., public interest groups, the role of the media may actually increase because they are “outsiders, those who have less access and hence need to go to some lengths to gain the attention of important government officials” (Kingdon, 1995, p. 63). This study will examine the function of environmental groups’ public relations in the process of agenda-building through content analysis of press releases, and media coverage.

This study is an extension of other agenda-setting studies in which researchers have explicated not only the transfer of issue salience (first-level agenda-setting), but also the transfer of attribute salience (second-level agenda-setting) from the media to the public (McCombs et al., 1997; McCombs and Lopez-Escobar, 2000; Hester and Gibson, 2003). In this study, the object is the Saemangeum project and the attributes are the traits of press releases. We focus on the transfer of attribute salience imbedded in the press release into the newspaper coverage, and investigate how the work of public relations practitioners contribute to the news agenda building of important societal issues.

In this sense, we seek to make contributions that are both theoretical and practical. From the theoretical aspect, this research aims to examine, empirically, second-level (attribute) agenda-building that is less frequently discussed, as well as the first-level agenda-building process (Huckins, 1999; Kioussis and Wu, 2005). Agenda-building explicates theoretically the dialogue between PR (public relations) and the media. In particular, the attribute of agenda-building is useful in terms of the strategic aspect of PR because the simple frequency of issue (issue salience) does not always represent the product of PR. In many social movements, the effect of PR can be determined not only by the success of making a news topic but also by the specific content concerning an issue. The practical implication of this study is more strongly emphasized when it comes to the function of media events by environmental groups in the process of agenda-building (Anderson, 1993). The answer as to whether events such as demonstrations and cultural events contribute to making the issues and attributes salient may offer helpful information for PR practitioners.

II. History and Background of the Saemangeum Project

The Saemangeum land reclamation project was launched in 1991 by the Korean Ministry of Agriculture and Forestry and North Jeolla Province. Previously, the largest such project in Korean history had involved the construction of a 33-kilometer seawall in North Jeolla Province with an investment of US\$1.9 billion. The Saemangeum project planned to convert tidal flats into about 28,300 hectares of farmland and a freshwater reservoir.

This highly ambitious project was met by fierce opposition from environmental groups and local residents who were concerned about possible ecological damage, and who also doubted the purported economic benefits. The voices of anti-development were amplified when the failure of the previous reclamation project, namely *Sihwa Lake*, made international headlines in the late 1990's.

In 2001, environmental groups filed a lawsuit and attempted to put pressure on the government through various measures such as demonstrations and cultural performances. Construction was temporarily suspended, but was later resumed by court order and the legal battle continued for four years and seven months, concluding on March 16, 2006, when the Supreme Court ruled in favor of the government.

While the court ruling gave the government the go-ahead to continue the Saemangeum project, activists felt that this conflict represented an important turning point in the history of the environmental movement in South Korea. Following the court's ruling, the government promised to modify the construction to address environmental concerns. A survey conducted by *Gallup Korea* before the court's final ruling showed that more than half of the respondents opposed the development.

III. Literature Review

1. Agenda-setting and Agenda-building

According to agenda-setting theory, environmental matters belong to the categories of "unobtrusive" and "concrete" issues indicat-

ing that the mass media have a relatively strong ability to draw “pictures in audiences’ heads” with regard to environmental issues (Soroka, 2002; McCombs, 2004). Many studies have supported the transmission of issue and attribute salience of the media to the public at both the national and local levels related to environmental issues (Iyengar and Kinder, 1987; Soroka, 2002; McCombs, 2004). Ader (1995) found that the agenda-setting hypothesis was supported regarding the issue of pollution from 1970 to 1990. Although overall pollution was reduced, the media’s coverage increased and, consequently, the public became more attentive to the pollution issue. This research presented a typical agenda-setting effect because there was no correlation between the real-world phenomena and the public agenda. From journalists’ view point, the environmental problem is an interesting topic of news value because it is often visible through natural disasters (Cracknell, 1993).

Since McCombs and Shaw (1972) explicated the effects of the media, namely, the transfer of issue salience from the media to the public, thousands of studies have delved into the relationship between the media coverage and public perceptions (Weaver, 2007). While public attention on the media agenda refers to the salience of object (first-level agenda-setting), public comprehension refers to the salience of attributes (second-level or attribute agenda-setting). Attribute is a “generic term encompassing the entire range of properties and traits that characterize an object” (Weaver, 2007, p. 70).

According to McCombs’ (2004) explanation, agenda-building is the fourth stage of agenda-setting research and “the influence of external agendas on the agenda of individual news media” is a core concept of agenda-building study. However, opinions about the relationship between agenda-setting and agenda-building differ depending on the scholarly perspective. McCombs (2004, p. 143) ar-

gued that “there is no fundamental difference between the two. It is a distinction without a difference”. Huckins (1999) used agenda-setting and agenda-building as synonyms. In contrast, other scholars have indicated that the agenda-building process occurs in a different phase or stage from that of the agenda-setting process, beginning with the focus by Lang and Lang (1983) on the origin of news (Berkowitz, 1987; Berkowitz and Adams, 1990; Weaver and Elliott, 1985). Weaver and Elliott (1985, p. 88) noted,

“...the focus is on how the press interacts with other institutions in society to create issues of public concern. This agenda-building approach is more concerned with how issues originate, or how subjects of news coverage become issues, than with the media audience relationship studied so often by agenda-setting researchers”.

The strategic aspect of agenda-building, which has been elaborated in politics, offers a useful frame of analysis for the relationship between PR and the media. The term agenda-building has a broader meaning for political scientists who regard it as an entire process for constructing “the list of subjects or problems” with which government will be concerned (Cobb and Elder, 1983; Kingdon, 1995). Kingdon (1995) pointed out the influence of interest groups like the environmental group with its tendency toward activities that focused not on positive promotion but rather on negative blocking, such as stopping land reclamation projects. Cobb and Elder (1983) emphasized the importance of several attributes such as definition of the conflict and the salient characteristics of those issues. They maintained that the former meant “control over the choice of battlefields” and that the latter was related to its solution. Cobb and Elder (1983) also highlighted the pivotal role of the media in determining success, especially, the interplay between “symbol” and “techniques” that groups use to obtain public atten-

tion and support. In this study, symbol and techniques are represented by “attributes” and “events,” respectively.

Like other agenda-building research, studies on environmental issues have primarily been concerned with the matter of news sources. In a study about a community conflict over the construction of a hazardous waste treatment plant, Taylor, Lee and Davie (2000) found that the media favored sources from the government and industry rather than from activists and citizens. They also found that the media functioned to legitimize local industry and to marginalize its opponents. Curtin and Rhodenbaugh (2001) concluded that previous agenda-building studies have found that journalists prefer information from sources that they perceive as having no obvious self-serving economic purpose. In particular, recent studies have shown that environmental activist groups are more strategically interactive with the media and, as a result, accomplish more successful agenda-building work (Anderson, 1991, 1993; Cracknell, 1993).

2. Public Relations as Triggers of Agenda-Building

McCombs (2004) has identified organizations, interest groups, public relations and political campaigns as main news sources, while much of the scholarship concerning the relationship between sources and news has focused on the influence of PR. Researchers have determined that from 25% to 80% of news content relies on PR (Sachsman, 1976; Turk, 1985; Cameron, Sallot and Curtin, 1997; Curtin, 1999; Curtin and Rhodenbaugh, 2001; Lee and Choi, 2009). Previous media effects studies can be divided into two groups, product-centric and practice-centric. Each has two dimensions, input vs.

outcome and individual vs. systemic. The product-centric focuses on content, while practice-centric concerns mainly the interaction between journalists and news sources.

The product-centric analyses have focused on the substance of media content and press releases. Berkowitz and Adams (1990, p. 724) pointed out that there have been two main avenues to study agenda-building: “One route has been to examine the outcome of the process. This has been accomplished by analyzing the content of newspapers or television and then drawing conclusions about the proportion of stories that appear to have been covered because of news sources’ efforts”. The second method is the analysis of raw material from which news is created (Berkowitz and Adams, 1990). While content is the main focus of product-centric analysis, the practice-centric approach is more concerned with the social factors that determine the interaction between PR and the media.

Product-Centric Approach. Much of the research about input material has been conducted in the political electoral context and reflects scholars’ interest in the effects of the campaign (Walters and Walters, 1996; Boyle, 2001; Tedesco, 2001; Ku, Kaid and Pfau, 2003; Tedesco, 2005). Content analysis of candidates’ press releases and media coverage has shown mixed results, with some cases representing the inter-relationship between the press releases and media coverage of presidential candidates (Boyle, 2001; Tedesco, 2005).

Berkowitz and Adams (1990) found that less than one-fourth of press releases and other information survived the initial gate-keeping efforts by producers of television news. They also reported that press releases from non-profit and special interest groups were relied upon more frequently than those from the government or businesses. Fürsich (2002, p. 367) found there was a strong influ-

ence of corporate public relations on news coverage of the merger of Daimler-Benz and Chrysler, and noted “unlike the familiar agenda setting dictum, public relations told the journalists what to think about and how to think about it.” Ohl, et al. (1995) also pointed out that newspaper articles shared the same points of view with press releases even in the period of a hostile merger.

The influence of PR has been measured more often through media content analysis without the accompanying analysis of press releases. The method commonly used to estimate the impact of PR is the analysis of sources. Sigal (1973) found that half of the news stories in the *New York Times* and *Washington Post* came from PR efforts such as press releases, press conferences and background briefings. Among them, Turk (1985, 1986) and Turk and Franklin (1987) concluded that news releases from state government public officers were the most influential sources.

The effects of public relations have also been explored on the international level beginning with Manheim and Albritton (1984). Based on the product-centric approach, international PR activities have been evaluated on the images of foreign nations (Manheim and Albritton, 1984; Wanta, Golan and Lee, 2004; Kioussis and Wu, 2005).

Practice-Centric Analysis. This approach of the individual level has focused on how PR practitioners and journalists assess each other, and scholarly discussion has extended to the matter of source credibility, journalistic professionalism and news value. While Brody (1984) claimed that the antipathy between PR practitioners and journalists was exaggerated, a few studies, including the ones carried out by Cameron, Sallot and Curtin (1997), revealed a negative relationship existing between the two parties, with journalists

in particular showing a certain level of hostility and contempt toward practitioners. DeLorme and Fedler (2003) identified six factors, such as early PR methods and a near-glutinous hunger for publicity, as being reasons for the hostile relationship.

It is important that the relationship between the media and public relations be discussed at the level of organization and society. One of the prominent perspectives about PR, as pointed out by Gandy (1982), is that of an information subsidy. He coined the term to describe the trade that takes place between sources and the media; specifically, on the one hand, sources who offer information to journalists for the purpose of controlling and accessing news on behalf of their clients, and, on the other hand, the media that receive subsidies at the expense of independence in order to save costs associated with information gathering. Berkowitz and Adams (1990, p. 723) asserted that “the importance of studying the role of information subsidies in the agenda-building process is that it helps assess the magnitude of news source power”.

In a case study about the development of national forests, Davis (1995) emphasized the crucial function of effective symbols used by pro- and anti-development groups. Reber and Berger (2005) investigated how the Sierra Club framed its message. In contrast to the study by Taylor et al. (2000), Reber and Berger (2005) concluded that journalists favored Sierra Club members, other environmental groups and policy makers as compared to business groups and other issue competitors. Curtin and Rhodenbaugh’s (2001) content analysis found that materials promoting an anti-environmental agenda stemmed from just a few public relations sources and that PR packages provided journalists with greater overall news utility.

The competition to succeed in building a media agenda among interest groups has inevitably intensified because “environmental

policy tends to be marked by very high levels of interest group mobilization and ideological polarization” (Davis, 1995, p. 28). Previous studies show that environmentalists tend to succeed in drawing media attention and pushing environmental issues into the political domain using stunts such as dressing up as rainforest animals (Anderson, 1993). These events have contributed to environmental pressure groups gaining greater access to the media.

Our analysis of agenda-building started with the practice-centric approach in mind, although we applied a content analysis method. Thus, we compared directly the attributes of press release with those of news stories covering the Saemangeum project and correlated them to each other. We also conducted sub-group content analysis of demonstrations and cultural events and their relationships to media coverage.

IV. Hypotheses and Research Questions

Based on the literature review above, we examine the role of public relation messages as triggers in building an agenda regarding environmental disputes. This study constructs two hypotheses based on the practice-centric approach; the first addressing the first-level, issue agenda building, and the second dealing with the second-level, attribute agenda building effects. We also raise two research questions regarding the role of media events which have not been examined quantitatively in the previous agenda-building studies. Through the sub-group content analysis, we attempt to answer how news agendas have been built through media events organized by environmental activists and various supporting publics.

- H1. The more press releases issued by environmental groups regarding the Saemangeum project, the more news stories appeared on this issue in the newspapers.
- H2. The more attributes of press releases included in the environmental press package, the more attributes of news stories appeared on this issue in the newspapers.
- RQ1. Do media events organized by environmental groups correlate with an increase in news stories?
- RQ2. Do media events organized by environmental groups correlate with an increase of favorable coverage?

V. Methods

Samples The hypotheses and research questions were examined through content analysis of press releases issued by environmental groups and their relationship to media coverage. To examine the messages of environmental activists, press releases issued by the Korean Federation for Environmental Movement (KFEM) were selected. Although there are several ongoing environmental groups in Korea, as well as short-term organizations that were launched to prevent the Saemangeum project, the KFEM is the oldest and most influential organization. The organization has posted press releases related to the Saemangeum on its website (www.kfem.or.kr), including materials issued by other environmental groups.

For use in content analysis of newspapers, *The Hankyoreh*, *The Hankook Ilbo* and *The Chosun Ilbo*'s news stories were collected through the Korea Press Institute Database (KINDS) website (www.kinds.or.kr) using "saemangeum" as the keyword. The se-

lection of newspapers was based on the level of influence and political tendencies ranging from the liberal to the conservative: *The Hankyoreh* is regarded as a liberal paper and *The Chosun Ilbo*, which has the largest circulation in Korea, is generally classified as conservative. *The Hankook Ilbo* has been recognized as a neutral news outlet, somewhere between the liberal and the conservative. Not only do these three newspapers distribute their copies nationally but they also represent the ideological spectrum of Korean newspapers. Since the purpose of this study is to examine the influence of public relations on media coverage, letters to the editor and columns written outside the newsroom were excluded from the sampling. Past research suggests that environmental groups consider the national quality press as the most useful medium for influencing public discourse (Anderson, 1993).

With regard to the time period for sampling, all the press releases and news articles were collected from January 1, 2000 to March 31, 2006. Even though the Saemangeum project was officially launched in 1991, the conflict between the activists and the government emerged in the late 1990s and the media relations of environmental groups have been robust since 2000. In March 2006, the Supreme Court put an end to the legal battle with a decision in favor of the government to continue the project. During this period of six years and three months, 714 news stories from three national newspapers (*Hankyoreh*, 280; *Hankook*, 222; *Chosun*, 212) and 140 press releases were collected. The total number of our news and press release samples is 854.

Variables This study selected six main attributes of press releases through examining the following materials: "Value of tidelands," "Livelihoods of fishermen," "Water pollution with the seawall," "Oversupply of rice," "Over-estimated economic con-

sequences” and “The right to protect one’s environment and life.” The activists used these substantive reasons to legitimize anti-development. The “Value of tidelands” included both environmental and economic discussions. Environmentalists, on the one hand, claimed that marsh land was an important area because it helped maintain the marine ecosystem and provided a habitat for migratory birds. On the other hand, the marsh produces various kinds of shellfish that have contributed to being a major source of revenue. “Livelihoods of fishermen” included the lives of residents around the area, not just fishermen. This view humanized how development destroys the daily-lives of ordinary people from both the emotional and economic aspects. “Water pollution” included statements about *Sihwa Lake* arguing that it was a representative example of wrong development; Saemangeum was often called “the second *Sihwa*.” Environmentalists often supplied research data which supported claims that the new reservoir could not be used for farming because of the bad quality of water. “Economic consequences” discussed increases in construction expenses and other financial costs. The construction, for example, ultimately cost several times the projected spending planned in the beginning. If the stories discussed overall environment and life beyond the tidelands and water, it was coded as the “the right to protect one’s environment and life.” This attribute included references to maintaining the property for the next generation and frequently cited religious leaders who emphasized the meaning of every life, rather than short-term economic value.

While this study does not include materials from the government as an object of coding, it does examine materials to answer the research question about favorability of news coverage. Six main attributes of proponents of development were selected: “Clean wa-

ter,” “Balanced regional development,” “Security of foodstuffs,” “Pro-environmental development,” “Long-term economic effects” and “Progress of work and investment.” Among these six attributes, “Clean water,” “Security of foodstuffs” and “Progress of work and investment” acted as the counter arguments against environmental groups such as “Water pollution,” “Oversupply of rice” and “Over-estimated economic consequences,” respectively. The government suggested an entirely contrary explanation concerning the situation and offered a different interpretation even with the same research data. “Balanced regional development” was cited frequently in reference to the state of underdeveloped North Jeolla Province and the sense of alienation among residents there. “Pro-environmental development” meant that both the development and protection of the environment could be accomplished at the same time. “Long-term economic effects” included various possible value-added business plans, such as a culture-leisure complex and a hub port for international trade. As a result, a total of 12 attributes, ranging from anti-development to pro-development, were selected for the coding scheme <Table 1>.

Table 1. Main attributes of anti and pro-development groups

Main attributes of environmental groups	Counter argument by Korean government
Value of tidelands	Long-term economic effects
Livelihoods of fishermen	Balanced regional development
Water pollution with the seawall	Clean water
Oversupply of rice	Security of foodstuffs
Over-estimated economic consequences	Progress of work and investment
The right to protect one’s environment and life	Pro-environmental development

With regard to media events, there were three variables: Cultural events, demonstrations, and legal actions. Painting and photo exhibitions, a folk art festival, poetry night and similar events were coded as cultural events. Demonstrations included the “three steps and one bow” march, sit-down strikes, and signature-collecting campaigns. Legal actions related to court cases, such as lawsuits by environmentalists or the government, and the rendering of verdicts by the courts.

All 12 attributes were coded using binary discretion, either 1 or 0. If the story contained an attribute, it was coded as 1; otherwise it was coded as 0. Two coders counted how many times those attributes were mentioned in the press releases and news stories. In many cases, a single article contained more than one attribute and event. However, if the same attribute was mentioned several times in a story, it was counted as one. In terms of events, they were coded by the subjects: environmental groups, government and court. This study, unlike a general agenda-setting study, did not use a time lag for calculation of the correlation because the Korean daily newspapers normally utilized press releases instantly, especially when media events led to news coverage directly.

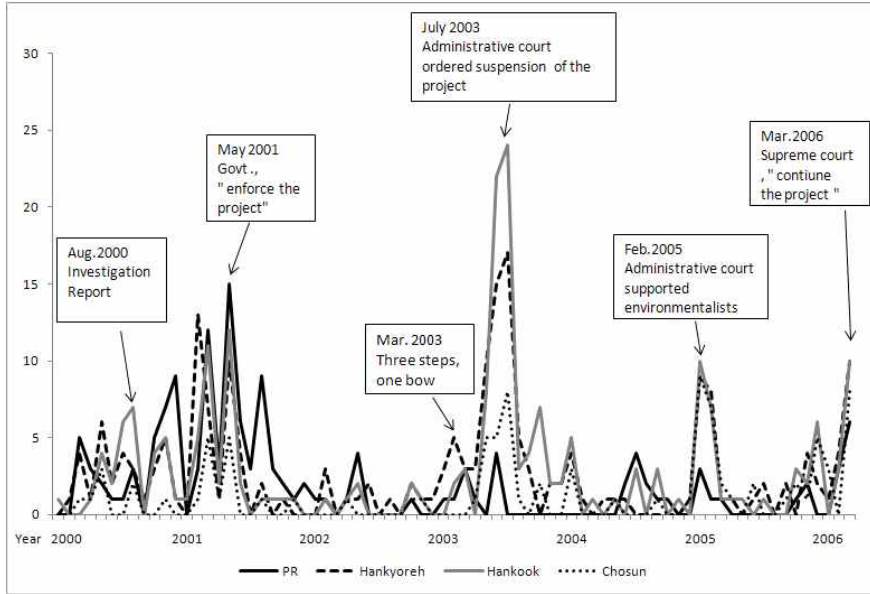
Inter-coder reliability was determined with a random sub-sample of stories (n= 60). Agreement ranged from a low of 83.3% for the variable of “Value of tidelands” and “Oversupply of rice” to a high of 100% for the “Water pollution,” “Balanced regional development,” “Security of foodstuffs,” “Progress of work and investment” and “Long-term economic effects.” The overall agreement was 94.5%. Following are the value of *Scott’s pi* and agreement percent of each variable: Value of tideland (.56, 83.3%), water pollution with the seawall (1.0, 100%), livelihoods of fishermen (.71, 91.7%), over-supply of rice (.48, 83.3%), over-estimated economic consequences

(.77, 95%), the right to protect one's environment and life (.80, 93.3%), pro-environmental development (.48, 96.7%), clean water (.70, 95%), cultural events (.77, 93.3%) and demonstrations (.73, 90%). Several of these attributes appeared manifestly both in the press releases and news stories; thus we were able to achieve the high level of coding agreement.

VI. Results

Based on monthly data, the Pearson correlation between the number of press releases and news stories in each newspaper was statistically significant. It was .45 (*The Hankyoreh*), .31 (*The Hankook Ilbo*), and .39 (*The Chosun Ilbo*) and these figures were all statistically significant at $p < .001$. Thus, the first hypothesis, which posits that the more press releases issued by environmental groups regarding the Saemangeum project, the more news stories appeared on this issue, was not rejected. That is, the result of our content analysis agreed with the first hypothesis. Figure 1 plots this pattern on the monthly base. However, there is a large gap between press releases and news coverage in the third quarter of 2003, when the court ordered a suspension of the construction. It indicates that while environmental groups responded to this victory with a brief statement only, the verdict led to the substantial amount of news coverage on the Saemangeum project in all three newspapers.

Figure 1. Press Releases and News Coverage



To examine second level agenda-building influence, Spearman’s rho correlations were calculated. Unlike the first level agenda-building in H1, the second hypothesis which posits that “the more attributes of press releases included in the environmental press package were, the more attributes of news stories appeared on the issue in the newspapers” was supported only in the liberal newspaper. While the Spearman’s rho correlation between press releases and *The Hankyoreh* ($\rho = .94$) was significant at $p < .01$ level, the value of rho between press releases and *The Chosun Ilbo* (.32) was not statistically significant. Press releases and *The Hankook Ilbo*’s rank order correlation was only marginally significant at .1 level with a ρ value of .77. Table 2 shows the frequency with which each of the six attributes appeared in the press releases, liberal, neutral, and conservative newspapers.

Table 2. Comparison of Attributes

	Press Releases	<i>Hankyoreh</i>	<i>Hankook</i>	<i>Chosun</i>
Value of tidelands	47(1)	57(1)	79(1)	13(3)
Livelihood of fishermen	21(6)	19(6)	13(5)	1(6)
Water pollution	32(3)	52(2)	57(2)	22(1)
Oversupply of rice	23(5)	21(5)	12(6)	15(2)
Economic consequences	29(4)	23(4)	26(3)	11(4)
Protection of environment & life	44(2)	36(3)	20(4)	11(4)

* The figure in parenthesis is a rank order.

The most frequently mentioned attribute in press releases and *The Hankyoreh* was the “value of tidelands,” while *The Chosun Ilbo* mentioned “water pollution” more frequently. Another notable point is that *The Chosun Ilbo* devoted more attention to problems related to rice, and reported less about the right to protect the environment and life than the press releases and *The Hankyoreh*.

We also examined whether the frequency of media events organized by environmental groups corresponded with the increase of news stories.

As Table 3 shows, demonstrations were highly related with the frequency of news coverage. All three newspapers reported more stories about Saemangeum when the environmental groups planned and practiced various demonstrations. Contrary to the coverage of demonstrations, cultural events were not significantly related to the number of news stories in the three newspapers.

Table 3. Correlations between Events and Frequency/Favorability

	Number of news stories			Favorability		
	<i>Hankyoreh</i>	<i>Hankook</i>	<i>Chosun</i>	<i>Hankyoreh</i>	<i>Hankook</i>	<i>Chosun</i>
Demonstrations	.32**	.20†	.29*	.20†	.26*	.25*
Cultural events	.10	.09	.09	-.00	.06	-.06

† p<.1, * p<.05, **p<.001

To explore the influence of media events organized by environmental groups on the favorability of coverage, the indices were computed by the sum of environmental attributes minus the sum of government attributes. The higher the final score, the more favorable to environmental groups and vice versa. Zero means neutral.

We found in Table 3 that the frequency of demonstrations organized by the environmental groups corresponded significantly with the number of favorable coverage in *The Chosun Ilbo* ($r=.25$, $p<.05$), *The Hankook Ilbo* ($r=.26$, $p<.05$) and *The Hankyoreh's* coverage ($r=.20$, $p<.1$). The sum of the final score of *The Hankyoreh* was 147, of *The Chosun Ilbo* was -24 and of *The Hankook Ilbo* was 25. These scores indicate that *The Hankyoreh* reported attributes of anti-development 147 times more than those of pro-development, while *The Chosun Ilbo* reported more attributes of pro-development. *The Hankook* covered the demonstration neutrally, showing a little favorability toward the attributes of anti-development.

VII. Discussion and Conclusion

Using content analysis and correlation figures, including both Pearson's product moment coefficient and Spearman's rho, we ex-

amined how the press releases related to the news coverage regarding the largest environmental conflict in Korea, the Saemangeum project. The confrontation between activists and the Korean government offered an opportunity to investigate how environmental groups succeeded or failed in building a media agenda during their long-term battle in the courts and on the streets.

Results of the first hypothesis showed that the amount of press releases issued by environmental groups regarding the Saemangeum project was positively associated with the amount of news stories about the issue. The correlations between the number of press releases and stories published by the three newspapers were all statistically significant. Therefore, it is arguable that the first-level initial agenda-building effect developed from the public relations efforts of environmental groups to the Korean newspapers' coverage of the Saemangeum project.

While in many cases, simple frequency itself is not always guaranteed as Cracknell (1993, p. 13) questioned: "Is media coverage always a blessing for environmentalists, or can it have adverse effects, too?" However, in the Saemangeum project, this first level agenda-building effect was meaningful for the environmental activists because the pro-development group, i.e., the Korean government, did not want to make this matter a public issue. During all stages of the conflict, the government tried merely to defend itself against the attack by the environmental groups through media coverage.

To examine the salience of attributes, Spearman's rho correlations were calculated. The Spearman's rho correlation between press releases and *The Hankyoreh* ($\rho = .94$) was significant at the $p < .05$ level, but neither *The Hankook Ilbo* nor *The Chosun Ilbo* showed a similar pattern of association, which indicates second-level

el agenda-building. This finding shows that the liberal *Hankyoreh* leaned toward the environmental groups, and the agenda building effect may have been influenced by the personality of the newspaper when it came to the attribute level. These results can be extended to the argument of whether the media have their own frames, independent from news sources.

The research questions addressed the effects of media events in the agenda-building process. Few studies have empirically tested the effects of events by public interest groups in relationship to the media coverage. In this study, our analysis presented evidence that was highly correlated with the frequencies of media coverage. All three newspapers in our study reported more stories about Saemangeum when the environmental groups planned and practiced various demonstrations. Nevertheless, peaceful cultural events such as a photo exhibition and a poetry gathering were not significantly related to the number of news stories in all three newspapers. The second research question posed whether media events organized by environmental groups contributed to an increase in favorable coverage. Again, demonstrations organized by the environmental groups did in fact contribute to an increase in favorable coverage in all three newspapers.

The strong positive correlation between the frequency of demonstrations and the amount of their coverage in *The Chosun Ilbo* is interesting because the overall tone of the newspaper favored the government rather than environmental groups. The positive and significant correlation between demonstrations and coverage in *The Chosun Ilbo* showed that demonstrations probably carried influence despite their overall, generally negative tone. This finding has practical implications about the effects of demonstrations. Even if a new organization does not favor the activists, at the very least, claims of

the groups will be reported in its coverage of the demonstrations. During the conflict over the Saemangeum project, the environmental groups introduced an unprecedented silent yet powerful demonstration, namely, the “three steps, one bow” march. The weak relationship between cultural events and attribute favorability can be understood according to how cultural events present messages implicitly and in a circuitous manner contrary to demonstrations. In addition, unlike the demonstration, cultural events appeared to attract less media coverage because they do not convey conflict and confrontation.

In sum, we found that a positive relationship existed between press releases and media coverage, and we concluded that press releases triggered news coverage of the Saemangeum issue, especially in the initial period of news coverage. The results also indicated that the mention of demonstrations in press releases had a significant influence on the favorability of news coverage, even in a conservative newspaper.

In our analysis, we assumed that Korean newspapers utilized press releases instantly, especially when they were related to controversial cases like the one similar to the nation’s largest land reclamation project. Our analysis has been certainly limited to the associational level of the PR messages with the frequency of news coverage and toward the selection of news attributes. In this study, we attempted to show the initial agenda-building effect of public relations on the controversial news coverage. It was certainly possible that both press releases and media coverage increased when the Supreme Court ruled in favor of the continuation of the Saemangeum project. Our separate analysis shows that the existing relationship of the press releases to the news coverage does not change even after controlling the variable which indicates whether

legal actions appeared in the news coverage. One of the strengths of our analysis was in making a connection from public relations messages toward the selection of attributes in the news stories by matching two sets of content analysis.

For future research, taking into account the visual characteristics of environmental issues, such as powerful images of dead shells and destroyed forests, television news should be included as an object of analysis. In addition, it would be more meaningful to examine the entire process of agenda-building and agenda-setting, i.e., the triangular relationship that exists between PR, the media, and public opinion.

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