

# 6<sup>th</sup> World Media Economics Conference

Centre d'études sur les médias and Journal of Media Economics

HEC Montréal, Montréal, Canada

May 12-15, 2004

---

## **Diversity in media content: An agenda for diversity research in media industries**

Sangho Seo, The Pennsylvania State University, United States

*This study is a meta-research of past research on diversity in media content. Through reviewing previous research on diversity in media content, this study would provide a suggestion for future research on diversity in media content. This study believes that the examination of the previous research on diversity in media content would be necessary in light of the importance of diversity as a critical concept in media economics and policy.*

### **Introduction**

Promoting diversity in media industries has been one of the critical goals of media policy. At the same time, diversity has been a central concept in the study of media output. The relationship between market competition and diversity as a media output has been a key interest among media economists for a long time. Some researchers have argued that a positive relationship exists between competition and diversity (Albarran, Pilcher, Steele & Weis, 1991; Chan-Olmsted, 1996). However, others have argued that only in a concentrated market structure diversity increases (Hellman & Soramaki, 1985; Lin 1995). However, despite the importance of diversity for assessing communications policy and media performance, diversity remains an ambiguous concept. It is difficult to define and measure diversity exactly in media industries. What differences in content are significantly enough to be considered diverse? To many media economists or researchers in the field of mass communication, the issues of defining and measuring diversity efficiently have been considered as a necessary work. Many media economists have tried and are still trying to figure out a valid and reliable way to operationally define

diversity in media content and measure it. Thus, based on the importance of diversity itself and further task to define and measure diversity in media content effectively, this study tries to look at the research that has already been built up in this area. This study examines published research that specifically focused on diversity in media content in various media industries. To analyze the previous research on diversity in media content, this study uses Rogers' (1981) propositional inventory to conduct meta-research as a method for the study. Based on the reviewing of previous studies using propositional inventory, this study could find the strengths and weaknesses of previous research on diversity in media content and provide a suggestion for future study on diversity in media content. This study believes that the examination of the previous research on diversity in media content would be definitely necessary in light of the importance of diversity as a critical concept in media economics and policy.

## Method

To examine the previous research on diversity in media content, this study has used Rogers' (1981) propositional inventory as a type of meta-research. Meta-research is "a study on research and an analysis of analysis" (Rogers, 1981, p. 3) and it can be defined as "the synthesis of primary research results into more general conclusions." (Rogers, 1981, p. 3) Thus, meta-research could provide valuable information that cannot be obtained in another way. According to Rogers (1981), meta-research can be divided into two ways. The first way of meta-research is 'meta-analysis', which is "the statistical re-analysis of the original data from a number of studies bearing on the same problem." (p. 3) And the second way of meta-research is 'propositional inventory', which is "the synthesis of general conclusions from research where the original data is not available and hence where only written conclusions from each of the primary studies are available to the meta-researcher." (p. 3) According to Hollifield (2001), the propositional inventory method uses "the categorizing of discrete elements such as variables, methods, or findings in a specific study. Once similar studies have been broken down, the strengths and weaknesses of the body of research can be understood as a whole and, furthermore, gaps in knowledge can be identified." (p. 137)

This study tried to locate as much of the previous work on diversity in media content as possible through Communication Abstracts and an online communications database such as "Communications & Mass Media Index." Published work on diversity in media content has been defined in this study as a research that examined the information, category/genre, and feature/format of media products in different media industries, for example, an article in newspapers or a program in broadcasts. The population of diversity in media content research was identified by doing a review of all issues of Communication Abstract, which is from 1978 to 2002, and "Communications & Mass Media Index" search for relevant work under the key words such as 'diversity,' 'content diversity,' 'program diversity,' 'variety', 'program variety,' and 'product differentiation.' In addition, conference papers and organizations' reports on diversity in media content were also included in the analysis. For example, the conference papers of *Association for Education of Journalism and Mass Communication (AEJMC)* and *Federal Communications Commission (FCC)*'s research working papers were included. However, book chapters that dealt with diversity in media content were not included in the analysis. Using this approach, 40 articles were identified as potentially focused on some aspect of diversity in media content. Among the 40 studies, 15 studies were determined to be significantly focused on diversity in media content because the other 25 studies focused on the viewpoint diversity or used qualitative methods. As a result, 25 studies were discarded. Through the process, 15 studies that significantly focused on diversity in media content have been selected. It should be noted that these 15 previous studies could not stand for the body of research on diversity in media content. However, we can look at the common outline of how the research of diversity in media content has been done in the field of mass communication through those 15 studies.

Finally, in reviewing each study, this study took into account the following key categories: (a) the

authors, (b) year of the study, (c) journals published, (d) topics or titles, (e) research questions, (f) theoretical and conceptual frameworks, (g) hypotheses, (h) operational definitions, (i) independent and dependent variables, (j) methods, (k) populations and samples, (l) findings and conclusions, and (m) limitations and suggestions for future research.

## **Findings**

### ***Authors***

Authors of 14 different works wrote the 15 studies in the data set. The authors of 15 studies were scholars of field of mass communication. Some authors are well-known names in this area. Among them, most authors are scholars who are specialized in, especially, media economics (Albarran, Pilcher, Steele, & Weis, 1991; Dimmick & McDonald, 2001; Grant, 1994; Hellman & Soramaki, 1994; Litman, 1979; Li & Chiang, 2001; Li & Wang, 1999; Wurff & Cuilenburg, 2001). The other authors were scholars who are specialized in journalism (Johnson & Wanta, 1993) or media studies (Kiernan & Levy, 1999; Lin, 1995; Wakshlag & Adams, 1985). Thus, this information implies that diversity in media content has become an interest issue among the scholars in the field of mass communication. However, few seem to publish more than one study with this topic. This fact would suggest that there is little consistency in doing a research on the topic. It seems that only Li (1999; 2001) picked up diversity as a topic for research and published more than one piece of research on this topic.

### ***Years published***

The researches examined for this study were published between 1979 and 2002. However, the majorities of the 15 studies—eight in all—were published between 1999 and 2002 (Bae, 1999; Einstein, 2002; Kiernan & Levy, 1999; Li & Chiang, 2001; Williams, Brown, & Alexander, 2002; Wurff & Cuilenburg, 2001). Between 1979 and 1998, there was little research done relatively, suggesting that after initial burst of interest in this area, interest in pursuing this topic fell off.

Another interesting fact is that research which focuses on diversity in different media content besides the content diversity of television network such as cable, radio, music, and the Internet was published in recent years (Bae, 1999; Kiernan & Levy, 1999; Li & Wang, 1999; Williams, Brown, & Alexander, 2002). Thus, this fact implies that many researchers in the field of mass communication did not pay an attention to diversity in content of various media industries until a few years ago.

### ***Journal articles published***

The 12 studies among the 15 studies of the data set were published in well-known academic journals. The majority of the 12 studies were published in the Journal of Media Economics (Bae, 1999; Dimmick & McDonald, 2001; Grant, 1994; Hellman & Soramaki, 1994; Li & Chiang, 2001; Lin, 1995;

Wurf & Cuilenburg, 2001). The other studies were published in the Journal of Broadcasting & Electronic Media (Kiernan & Levy, 1999; Litman, 1979; Wakshlag & Adams, 1985), Mass Comm Review (Johnson & Wanta, 1993) and Feedback (Albarran et al., 1991). Among the remaining three studies in the 15 studies of the data set, two studies were the research papers of the *Federal Communications Commission* (Einstein, 2002; Williams et al., 2002) and one study was a conference paper of *Association for Education of Journalism and Mass Communication* national convention (Li & Wang, 1999). In particular, one notable fact is that many researches on diversity in media content were published in the *Journal of Media Economics*. This fact implies that many media economics researchers have highly interested in diversity in media content in media industry.

### ***Research topics and titles***

Among the 15 studies, eight studies mentioned diversity in their titles (Einstein, 2002; Grant, 1994; Johnson & Wanta, 1993; Li & Chiang, 2001; Lin, 1995; Litman, 1979; Williams et al., 2002; Wurf & Cuilenburg, 2001). In addition, among the 15 studies, one study noted the newspaper industry in the title (Johnson & Wanta, 1993), seven studies noted TV networks in their titles (Albarran et al., 1991; Einstein, 2002; Grant, 1994; Li & Chiang, 2001; , Lin, 1995; Litman, 1979; Wurf & Cuilenburg, 2001), two studies noted the radio industry in the titles (Dimmick & McDonald, 2001; Williams et al., 2002), and the other studies noted a specific media industry in their titles. For example, one study noted the cable industry (Bae, 1999) and the other three studies noted each music industry (Li & Wang, 1999), the video industry (Hellman & Soramaki, 1994) and, finally, the Internet (Kiernan & Levy, 1999).

### ***Research questions***

The research questions in the 15 studies covered various issues related to diversity in media content. Most of the 15 studies, in particular, tried to investigate the relationship between diversity and the impact of related regulation and policy (Einstein, 2002; Wakshlag & Adams, 1985; Williams et al., 2002). Other studies were primarily concerned with the relationship between competition (or market concentration) and diversity in media content (Albarran et al., 1991; Hellman & Soramaki, 1994; Johnson & Wanta, 1993; Kiernan & Levy, 1999; Li & Chiang, 2001; Litman, 1979; Li & Wang, 1999; Wurf & Cuilenburg, 2001).

### ***Theoretical and conceptual framework***

Six studies were designed to investigate the changes of diversity in media content in terms of the changes of network competition using oligopoly theory as a theoretical framework (Albarran et al., 1991; Dimmick & McDonald, 2001; Grant, 1994; Li & Chiang, 2001; Lin, 1995; Litman, 1979). Three studies used the industrial organization model as a theoretical framework (Bae, 1999; Li & Wang, 1999; Wurf & Cuilenburg, 2001). Another two studies employed the financial commitment theory (Johnson & Wanta,

1993) and marketplace theory (Kiernan & Levy, 1999).

Thus, it was found that the majority of the fifteen studies used the economic market perspectives for their theoretical and conceptual framework. Two studies (Einstein, 2002; Williams et al., 2002) used policy and regulatory approach to elucidate the changes of diversity delivered by the impact of related policies and regulation. One interesting fact is that Hellman & Soramaki (1994) applied an ecological approach to their study. Thus, this fact implies that more research, which possesses varying theoretical and conceptual frameworks, should be executed in the future. For example, a study, which deals with historical, cultural, or methodological approach, would be performed. The use of such a similar conceptual framework in diversity in media content research would have both advantages and disadvantages. It creates a depth of understanding of the issues on the relationship between economic impacts and diversity in media content. However, at the same time, it would prohibit a more diverse view of diversity.

### ***Hypothesis***

Among the 15 studies, only five studies mentioned a research hypothesis in their papers (Grant, 1994; Hellman & Soramaki, 1994; Kiernan & Levy, 1999; Lin, 1995; Wurf & Cuilenburg, 2001). Thus, it would be hard to decipher the exact differences among the hypothesis of the five studies. However, among the hypotheses, some studies have a relationship hypothesis<sup>1</sup> (Grant, 1994; Kiernan & Levy, 1999; Lin, 1995; Wurf & Cuilenburg, 2001). Some studies have a comparative hypothesis<sup>2</sup> (Grant, 1994; Wurf & Cuilenburg, 2001) and, finally, some studies have a directional hypothesis<sup>3</sup> (Grant, 1994; Wurf & Cuilenburg, 2001).

### ***Operational definition***

Some studies specified diversity in media content more than others (Hellman & Soramaki, 1994; Kiernan & Levy, 1999). They discussed diversity in media content as a program category. Kiernan &

---

<sup>1</sup> Relationship hypothesis means that covariances for the research hypothesis are compared to covariances in the opposite direction (non-null competing hypothesis) or zero covariance (null hypothesis) (Watt, J., & Berg, A., 1995, p. 215). An example of relationship hypothesis is that “as income increases, newspaper readership increases proportionally.”

<sup>2</sup> Comparative hypothesis means that a descriptive measure (such as mean or the proportion) for one group is compared to the same descriptive measure for another group (Watt, J., & Berg, A., 1995, p. 215). An example of comparative hypothesis is that “people in the high income group would spend more time reading newspapers, on average, than people in the low income group.”

<sup>3</sup> A directional hypothesis states that we should see covariance with a particular direction (either positive or negative) between the variables. In contrast, a nondirectional hypothesis simply states that a relationship will be observed, without specifying the direction of the relationship (Watt, J., & Berg, A., 1995, p. 48).

Levy (1999) broke down the diversity in web content into the categories of information and formats of information. In addition, many other studies divided diversity in media content as vertical diversity and horizontal diversity (Bae, 1999; Einstein, 2002; Grant, 1994; Li & Chiang, 2001; Litman, 1979). Usually, this can be measured by Herfindahl-Hirschman index. Given this, it should be pointed out that many researchers did not have a consistent operational definition of diversity. This fact would be a disadvantage to research in the field.

### ***Independent and dependent variable***

Among the 15 studies, 10 studies used competition as an independent variable and programming diversity as a dependent variable to explore the relationship between them (Albarran et al., 1991; Dimmick & McDonald, 2001; Hellman & Soramaki, 1994; Johnson & Wanta, 1993; Kiernan & Levy, 1999; Li & Chiang, 2001; Lin, 1995; Litman, 1979; Li & Wang, 1999; Wurf & Cuilenburg, 2001).

However, in the case of Bae (1999), he examined the differences in diversity as a dependent variable with each cable national-news network as an independent variable. In the studies of Einstein (2002) and Wakshlag & Adams (1985), the introduction and elimination of the financial interest and syndication rules and the introduction of the Prime Time Access Rule were used as an independent variable for each study but two studies also used programming diversity as dependent variable for their studies.

### ***Method***

From a methodological standpoint, researchers studying diversity in media content were found to have made widespread use of content analysis for their analyses (Albarran et al., 1991; Bae, 1999; Grant, 1994; Hellman & Soramaki, 1994; Johnson & Wanta, 1993; Kiernan & Levy, 1999; Li & Chiang, 2001; Lin, 1995; Li & Wang, 1999; Wakshlag & Adams, 1985). In addition to content analysis, however, other methods such as secondary data analysis (Dimmick & McDonald, 2001; Einstein, 2002; Hellman & Soramaki, 1994; Litman, 1979; Williams et al., 2002; Wurf & Cuilenburg, 2001) and intensive interviews (Li & Wang, 1999) were employed to execute diversity studies. Secondary data analysis was one of the very common methods in studies of the area.

### ***Population and sample***

Among the fifteen studies in the data set, five studies (Albarran et al., 1991; Grant, 1994; Li & Chiang, 2001; Lin, 1995; Wakshlag & Adams, 1985) analyzed the actual broadcasting programs as a sample. Grant (1994) used 16 full days of television programming as a sample appearing on 41 nationally distributed cable and broadcast television networks from January 1986 through June 1986. Litman (1979) analyzed 810 programs, which are all regularly scheduled prime time programs on the broadcast networks aired during the television season. Li & Chiang (2001) used 44,472 programs of Taiwan's three TV network programs aired in 1986 and 1991 through 1996. However, it seems that only a few studies did a

systematic or random sampling to draw sample from a population to perform content analysis. Thus, this would be a weakness of the extant studies.

### ***Findings and conclusions***

Among the fifteen studies, some of the studies concluded that market competition increases content diversity available to consumers (Albarran et al., 1991; Bae, 1999; Dimmick & McDonald, 2001; Johnson & Wanta, 1993; Litman, 1979). In particular, Albarran et al. (1991) pointed out that the emergence of new comers in a media market had been a catalyst for some of the shifting patterns of network programming. Moreover, Bae's study (1999) also showed that cable all-news networks differentiate their programs, as the competition among the competing cable all-news networks. It concluded that each of three competing cable all-news networks offered a distinctive style of programming to attract news viewers after developing new program formats. Litman (1979) asserted that competition among TV networks resulted in more specials and more option for the viewing public. This means that overall quality of the network schedule was improved and more viewers were enticed into watching a more diverse menu of programs.

However, on the contrary, other researchers argued that there was a negative relationship between market competition and diversity (Kiernan & Levy, 1999; Lin, 1995). They asserted that program diversity increases as the media industry become more consolidated or less competitive. Lin (1995) argued that even in the competitive video marketplace of the 1980s, shifts in program diversity were limited because he pointed out that TV networks usually rely on proven formats that have been carefully tailored to meet optimal audience flows. Also among the fifteen studies, there is a study, which found that there was no any relationship between competition and diversity (Kiernan & Levy, 1999).

Finally, there are some studies arguing that the FCC's rules did not secure the increase of diversity in media content (Einstein, 2002; Wakshlag & Adams, 1985). Wakshlag & Adams (1985) maintained that the introduction of Prime Time Access Rule coincided with a decline in program diversity in prime time. In addition, Einstein (2002) claimed that the structural regulation represented by the FCC's financial interest and syndication rules was not the effective means of achieving content diversity.

### ***Limitations and future research***

Some of the 15 studies pointed out the importance of considering alternative variables as well as the market competition or the related-policy changes. They suggested that there are more factors affecting the diversity of media industry and those alternative variables should be considered to explain the content diversity in media industries. According to Johnson & Wanta, (1993), diversity may vary from market to market because of not only the impact of competition but also the variety of reader's demand and management perceptions of media firms. In addition, Li & Wang (1999) suggested that environmental elements or organizational process would have crucial impact on the degree of diversity. Thus, given

these suggestions, future studies would recognize more factors rather than concentrating on the factor of market competition to understand the issue of diversity. Some studies mentioned that there exist some problems in sampling procedure. Thus, they suggested another way of sampling to represent a population more exactly (Bae, 1999; Li & Chiang, 2001). In addition, it was noted that more research of diversity is necessary in terms of the preferences of viewers (Wurf & Cuilenburg, 2001) and the changes in media environment (Albarran et al., 1991; Lin, 1995).

### **Conclusions and Discussion**

This study has examined previous research that specifically focused on diversity in media content in various media industries using Rogers' (1981) propositional inventory as a method of conducting meta-research. Because the fifteen studies in the data set used different conceptual frameworks, methods, research questions, and so forth, it would be hard to generalize the implications of the previous studies of diversity in media content. In brief, however, it could be maintained that the previous studies of diversity in media content provide the valuable theoretical and methodological backgrounds for the future study of diversity in media content in the field of mass communication.

Through reviewing those 15 previous studies, it has been identified that diversity of content in media industries became an interesting and important issue to those researchers in the field of mass communication. Although much attention were already been paid to the diversity in media content in the last few years, it would not be enough to catch up with the increasing interest on the issue. In particular, it has been identified that the examination of diversity in media content was limited to very few media industries. Although a large body of research on diversity in media content has developed and build up the way of assessing the content diversity quantitatively in the electronic media, most studies have focused primarily on the content diversity in broadcasting media as the form of program types or genres. Thus, this study would like to maintain that the examination of diversity of content in various mass media industry such as radio, film, recording, book/publishing and video game industry is necessary.

Moreover, it seems that previous studies of diversity in media content did not address a methodological issue on diversity in media content sufficiently. Operational definitions for diversity of content were not been used consistently and systematically and previous studies tended to rely on a specific measure such as HHI-Index or to focus on one dimension of variety such as the concentration of programming across genres. In addition, most studies were primarily concerned with the relationship between the degree of market competition and the changes of diversity in terms of its features and genres as the variables for those studies. In addition, it can be point out that the previous literatures are firmly grounded in the economic and market-driven rational. Thus, we need to consider these limitations for the future research on diversity in media content and then develop our body of knowledge.

## References

- Albarran, A. B., Pilcher, A., Steel, D., & Weis, J. (1991). Trends in network prime-time programming 1983-1990: The emergence of the Fox network. *Feedback*, 2-5.
- Bae, H. (1999). Product differentiation in cable programming: The case in the cable national all-news networks. *Journal of Media Economics*, 12, 265-277.
- Chan-Olmsted, S. M. (1996). From sesame street to wall street: An analysis of market competition in commercial children's television. *Journal of Broadcasting and Electronic Media*, 40, 30-44.
- Dimmick, J., & McDonald, D. G. (2001). Network radio oligopoly, 1926-1956: Rivalrous imitation and program diversity. *Journal of Media Economics*, 14, 197-212.
- Einstein, M. (2002). Program diversity and the program selection process on broadcast network television. *Federal Communications Commission Research Paper*, 5.
- Grant, A. (1994). The promise fulfilled? An empirical analysis of program diversity on television. *Journal of Media Economics*, 7, 51-64.
- Hellman, H., & Soramaki, M. (1994). Competition and content in the U.S. video market. *Journal of Media Economics*, 7, 29-49.
- Hellman, H., & Soramaki, M. (1985). Economic concentration in the videocassette industry: A cultural comparison. *Journal of Communication*, 35, 122-134.
- Hollifield, A. (2001). Crossing borders: Media management research in a transnational market environment. *Journal of Media Economics*, 7, 29-49.
- Johnson, T. G., & Wanta, W. (1993). Newspaper competition and message diversity in an urban market. *Mass Comm Review*, 20, 136-147.
- Kiernan, V., & Levy, M. R. (1999). Competition among broadcast-related web sites. *Journal of Broadcasting & Electronic Media*, 43, 271-279.
- Lin, C. A. (1995). Diversity of network prime-time program formats during the 1980s. *Journal of Media*

*Economics*, 8, 17-28.

Li, S., & Chiang, C. (2001). Market competition and programming diversity: A study on the TV market in Taiwan. *Journal of Media Economics*, 14, 105-119.

Li, S., & Wang, P. (1999). Market competition and media performance: An examination of popular music. *Association for Education of Journalism and Mass Communication Conference Paper, Media Management and Economics Division*.

Litman, B. R. (1979). The television networks, competition, and program diversity. *Journal of Broadcasting*, 23, 393-409.

Rogers, E. H. (1981, May 21-25). Methodology for meta-research. *Presidential address at the conference of the International Communication Association*.

Wakshlag, J., & Adams, W. J. (1985). Trends in program variety and the prime time access rule. *Journal of Broadcasting & Electronic Media*, 29, 23-34.

Watt, J., & Berg, V. (1995). *Research Methods for Communication Science*. Needham Heights, MA: Allyn & Bacon.

Williams, G., Brown, K., & Alexander, P. (2002). Radio market structure and music diversity. *Federal Communications Commission Research Paper*, 9.

Wurff, R., & Cuilenburg, J. (2001). Impact of moderate and ruinous competition on diversity: The Dutch television market. *Journal of Media Economics*, 14, 213-229.