



Are newspapers' news stories becoming more alike? Media content diversity in Belgium, 1983–2013

Journalism

1–19

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Abstract

In recent years, communication scholars have expressed concerns about the diversity of news media content. While we live in an era of 'news abundance' – the number of

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outlets and channels has increased enormously – the available news is argued to have become more of the same, but has it? As empirical evidence is lacking, this article verifies whether newspapers in Flanders (Belgium), over time, have indeed become less diverse in terms of the news stories they cover. Based on data from a longitudinal content analysis of nine Flemish newspapers at four points in time (1983, 1993, 2003, and 2013), it shows that (1) newspapers, in general, have *not* become more alike in terms of news stories; (2) newspapers with a similar profile (elite/popular) are less diverse than newspapers with dissimilar profiles; and (3) newspapers owned by the same media group (concentration of media ownership) are more alike than independently owned newspapers.

Keywords

Content diversity, media ownership, news stories, newspapers, small media markets

Introduction

Over the last decades, scholars have assumed that there is a trend toward less diversity in news content (Bourdieu, 1998; Gans, 2003; Lee, 2007; Norris, 2000). This article aims to investigate this process of homogenization of news content empirically, by questioning *whether the diversity in news stories covered by newspapers (i.e. the real-world events that are selected by journalists and become news) has decreased between 1983 and 2013*. We conduct a longitudinal comparison of news coverage in print media in Flanders, Belgium's Dutch-speaking region, with newspapers' *profiles* and *ownership structures* as determinants of diversity.

The assumption that news diversity is on the decline is driven by the feeling that although we witness a period of *news abundance* characterized by a proliferation of communication channels and outlets, the content of news is increasingly similar (Blumler and Kavanagh, 1999; Bourdieu, 1998; Norris, 2000). Van Cuilenburg (1999) refers to this underlying contradiction in the current communication environment as the *diversity paradox*: more outlet diversity coincides with less content diversity.

Applied to newspapers, the alleged evolution toward less diverse content would be driven by fundamental changes in the newspaper industry. First, declining readership and circulation rates combined with a drop in advertising revenues resulted in decreasing profits, referred to as the 'newspaper crisis' (Curran, 2010; Siles and Boczkowski, 2012). Newspaper publishers responded to this 'crisis' by cutting resources and staff. Examples are reported for Germany (Brüggemann et al., 2012), the United States (see Besley and Roberts, 2010), and the United Kingdom (see Lewis et al., 2008). In some instances, competitors took over other outlets and merged editorial offices to lower costs, resulting in media conglomerates (Devereux, 2013) that apply the same news standards, share content, and increasingly cover the same news events. Second, increasing media convergence – characterized by the rise of online journalism and the integration of user-generated content in the news-making process – has led to a transition of journalists and newsrooms 'from the era of single-media to multi-media reporting' (Saltzis and Dickinson, 2008: 217). While the digitalization underlying this process has accelerated

the news production cycle, leading to increased workloads (Bromley, 2001; Paulussen and Ugille, 2008; Saltzis and Dickinson, 2008), it has also enabled journalists to gather and disseminate digital content in an easier way (Singer and Quandt, 2009). Third, deregulation in the labor market has facilitated a trend toward the deskilling of journalists, who are now more often freelancers working for several outlets, which potentially results in increasingly similar content in different outlets (Bromley, 2001).

This combination of changes led to fewer journalists with higher workloads, which, in turn, affected the production of content. In particular, it might result in an exponential growth in *copying or imitating* (Lewis et al., 2008). Consistent with Gandy's (1982) information subsidy principle, recent studies (e.g. Johnson and Forde, 2011) show that finished news products, offered by news agencies, dominate the news production process. This scenario reduces content diversity between outlets as journalists open the gates to the same stories, copy-pasting material from newswires or other news outlets.

If news content diversity were declining, this would have important normative implications. News content diversity is considered crucial to guarantee democratic debate among informed citizens (Napoli, 1999; Van Cuilenburg, 2007). Newspapers focusing on the same news stories, discarding others, prevent the public from being informed about those other stories, narrowing the range of the public debate. However, declining diversity can also be argued to have a positive impact, as increased similarity in news items between newspapers might result in media consumers of different outlets being exposed to more similar news, which could benefit the creation of a shared public sphere as people discuss issues based on the same information (Calhoun, 1992).

Existing research has done a good job of empirically studying news content diversity at one point in time, showing how newspapers resemble each other (Bigman, 1948; Boczkowski and De Santos, 2007; Lemert, 1974). However, assumptions about *declining* content diversity are sparsely verified with longitudinal analyses although the claim clearly is a longitudinal one. Therefore, this study examines the evolution of news story diversity in nine Flemish newspapers at four points in time: 1983, 1993, 2003, and 2013. Our study is one of the first to study news content diversity longitudinally, filling an important gap in the literature. Moreover, including all newspapers in Flanders, a market characterized by large changes in ownership structures in the period under study, we can empirically verify for the first time whether ownership concentration leads to decreasing content diversity.

Defining diversity

Media diversity has been conceptualized and operationalized in many ways (Karppinen, 2013). A first fundamental distinction made by McQuail and Van Cuilenburg (1983) is between *external* and *internal* diversity. While external diversity refers to the variety of externally different media outlets in the market, internal diversity refers to content diversity within the same media outlet. While external diversity does not automatically lead to internal diversity, this study builds on the notion that a decrease in external diversity corresponds to enhanced homogenization of content, as is suggested by several scholars (see Lacy and Simon, 1993; Van der Wurff and Van Cuilenburg, 2001).

Many studies have defined content diversity as the heterogeneity of news content in terms of the plurality of actors, issues, and viewpoints (or frames) represented in the news. Alternatively, Boczkowski (2010) operationalizes content diversity as the variety of news stories covered in all newspapers. The term ‘news stories’ then refers to the real-world events selected by journalists to become news (Behr and Iyengar, 1985). We apply the latter conceptualization for two reasons. First, the aggregate selection of news stories made by journalists has an important agenda-setting function (Groshek, 2008). As simply put by Noelle-Neumann (1991), events not covered in the news are also excluded from the public agenda. Analysis of diversity of news stories in the media allows us to assess the range of real-world events represented by the media and, ultimately, the diversity of the public agenda. Second, according to Lasorsa and Reese (1990), studying content diversity at story level allows for a deeper analysis of the public agenda than does an analysis based on broader issue categories.

A decline in diversity

News story diversity is a long-standing concern among communication scholars. Early studies pinpointed signs of homogeneity of news stories in the content of different outlets, both in newspapers and in television news (see Bigman, 1948; Davie and Lee, 1993; Fowler and Showalter, 1974; Franklin, 1997; Lemert, 1974). Moreover, Boczkowski’s and De Santos’ (2007) analysis of news stories in Argentina’s main print and online newspapers between 1995 and 2005 points to a homogenization of newspapers’ news agenda with a growing proportion of duplicated public affair stories over time. This result is in line with Boczkowski’s (2009) ethnographic study of journalists’ work in Argentina, which shows that the enhancement of *imitation* in the newsroom leads to an increased homogenization of news stories. Similarly, Lee’s (2007) analysis of the 2004 US presidential campaign coverage in Internet news outlets and mainstream media points to the existence of a homogeneous news agenda.

In sum, previous studies highlight the existence of homogeneity of news stories across different media outlets (e.g. newspapers), countries, and media (e.g. print, broadcasting). However, Boczkowski and De Santos’ (2007) study is the only diachronic analysis (another longitudinal study conducted by Choi (2009) analyzes the diversity of sources, geographic origin, and topics of foreign news in US newspapers, but it does not focus on the homogenization of news stories). We therefore build on their ideas but broaden the scope of investigation. First, while their sample included just two titles, we include all major newspapers within a media market. Second, we study all newspaper sections, encompassing both soft and hard news. Third, we extend the research period to three (1983–2013) rather than a single decade (1995–2005).

Most work focuses on the liberal media systems of the United States and the United Kingdom. While the Flemish media landscape instead fits the democratic-corporatist model (see Hallin and Mancini, 2004), declining news story diversity is also likely in the Flemish print media as the newspaper industry is affected by similar trends. First, paid circulation declined by 10.5 percent from 1,027,000 copies in 1983 to 919,000 in 2013 (*Centrum voor Informatie over de Media* (CIM), 2013). This is expected to have resulted in cuts in resources and staff. Second, Paulussen and Ugille (2008) found Flemish

journalists to be confronted by increasing workloads after, among other things, takeovers and ownership concentration. Both factors combined make a decreasing news story diversity in Flemish newspapers plausible. Therefore, the first hypothesis states as follows:

H1. Newspapers became less diverse in terms of news stories in the period 1983–2013.

The news production process is shaped by many factors that can affect news content diversity (Shoemaker and Reese, 1996). This contribution focuses on two key independent variables: a newspaper's profile and its owners.

Newspaper profiles

We distinguish between elite and popular newspapers. Generally, elite newspapers put greater emphasis on hard news (economy, politics), while popular papers carry more human interest or soft news stories (celebrity, sports, sex) (e.g. Hartley, 1996). This, obviously, affects news story selection. Popular newspapers' soft news preference should, for instance, lead to the selection of stories about a celebrity pregnancy, while elite newspapers' focus on hard news will result in selecting stories such as a bankruptcy. This leads to the following hypothesis:

H2. Newspapers with similar profiles are less diverse in terms of news stories compared to newspapers with dissimilar profiles.

Ownership structures

The second factor that may affect content diversity is newspaper ownership. This is a highly relevant factor in a small media market such as Flanders where the concentration of ownership has increased substantially in the past decades (De Bens and Raeymaeckers, 2010; De Schruijvere, 1992).

In order to attract readers, newspapers need to differentiate themselves from others, for example, through their content (e.g. topics, editorials, and graphics). At the same time, in order to compete, newspapers need to be substitutable to some extent; they must bring similar news (Lacy and Martin, 2004). From an industrial economics perspective, two main theoretical positions exist on how the number of market players (i.e. the level of competition) relates to greater or lesser product variety. One position, following Hotelling (1929), is that high levels of competition (i.e. many players) between media companies correlate with low content diversity (Van Cuilenburg, 2007). This is based on the principle of minimum differentiation which explains that fierce competition may reinforce producers' tendency to compete on price (and hence try to cut back on costs) and not on the product itself and to strive for the largest market share. This drives them to promote products that target a large audience and results in greater homogeneity across products, as opposed to product differentiation (i.e. heterogeneity). As media companies

have an incentive to develop products that reflect readers' preferences, this could lead to the 'excessive sameness' of media content (Van Cuilenburg, 1999: 195). Another mechanism that connects competition with less diversity could be that increased competition between media outlets leads to 'pack journalism', with newsrooms copying each other's behavior from a fear of missing out on important scoops, resulting in similar news stories (Bennett, 2003).

But there is another interpretation of the Hotelling law. Steiner (1952) argues that the ownership of several radio outlets in the hands of one firm may lead to greater differentiation. Monopolists are likely to want to serve the full scope of audience preferences, including niches, while competitors are expected to first target the mainstream audiences by duplicating the monopolist's products. This logic is based on the principle of audience maximization. In summary, many competitors may lead to price competition and hence pressure on product quality (i.e. less content diversity), while monopolistic competition may ensure product differentiation (i.e. greater content diversity).

From an organizational perspective though, there are several explanations why content in group-owned newspapers may become more homogeneous, for instance, through syndication contracts with news agencies and exchange of copies among newsrooms. The internal managerial process can indirectly affect content, for example, when management objectives are focused on output rather than quality (Soloski, 1979). It is plausible that the production overlap across media outlets belonging to the same company is exploited to maximize economies of scale (Gamson et al., 1992; Gitlin, 2003). Mergers of media companies foster collaboration between newsrooms of different outlets belonging to the same group, enabling combined news production practices that, in turn, may increase homogeneity of news stories (Dailey et al., 2005; Dupagne and Garrison, 2006).

Empirical studies into the impact of ownership on content diversity differ in methodology and have inconclusive outcomes. A content analysis of 114 US newspapers in 1984 found that slightly less space was devoted to news and editorials in group-owned compared to independently owned newspapers (Lacy, 1991). Although the 'newshole' was smaller, group-owned newspapers employed more staff for a given amount of news space. Moreover, group-owned outlets dedicated a larger share of the newspaper to (different kinds of) editorial content. George's (2007) study of US news in 1993, 1999, and 2004, on the contrary, suggested greater product variety: in a market characterized by higher concentration, a larger number of topics were reported. A Norwegian study of chain-owned regional newspapers only found content homogenization in the lifestyle and sports sections, while, more generally, differentiation strategies remained important (Sjøvaag, 2014). In sum, the relationship between media concentration and content diversity is complex (Doyle, 2002), not necessarily linear (Van Cuilenburg, 2007), and lacks systematic empirical backing (Karppinen, 2013).

Given the increased level of media concentration and collaboration between newsrooms in Flanders, we formulate the following hypothesis:

H3. Newspapers belonging to the same owner (i.e. publishing group) are less diverse in terms of news stories compared to newspapers belonging to different owners.

Data and method

Flemish newspaper market

A quantitative analysis is conducted of the news content of nine major newspapers in Flanders in 1 week in 1983, 1993, 2003, and 2013. Three of the selected titles can be considered to be elite newspapers (*De Tijd*, *De Standaard*, and *De Morgen*) and five have a rather ‘popular’ profile (*Het Laatste Nieuws*, *Het Nieuwsblad*, *Het Belang Van Limburg*, *Gazet Van Antwerpen*, and *Het Volk*) (De Bens and Raeymaeckers, 2010). The ninth title, *Metro*, entered the market in 2001 as a free morning commuter newspaper.

The Flemish newspaper market is highly consolidated: between 1983 and 2013, five takeovers between newspaper publishers (i.e. horizontal integration) took place, transforming seven independent publishers (1983) into three publishing groups (2013) (see Appendix 1).

In 1983, media group *De Persgroep*’s (named *Hoste* at the time) main newspaper was the popular newspaper *Het Laatste Nieuws* (anno 1888). In 2013, it was Flanders’ largest paid newspaper. In 1989, *De Persgroep* took over elite newspaper *De Morgen* (anno 1978) targeting a young, higher educated audience. In 2005, *De Persgroep* and Walloon media group *Rossel et Cie* each took over 50 percent of business newspaper *De Tijd* (anno 1968). The newspaper focuses on financial-economic, political, and socio-cultural news and targets entrepreneurs, managers, and investors (De Bens and Raeymaeckers, 2010; PUB, 1993–2013).

Media group *Corelio* owned elite newspaper *De Standaard* (anno 1918) and its popular counterpart *Het Nieuwsblad* (anno 1929). In 1994, *Corelio* acquired popular newspaper *Het Volk* (anno 1891), turning it into a regional edition of *Het Nieuwsblad* in 2000 before merging both entirely and terminating *Het Volk* in 2007 (De Bens and Raeymaeckers, 2010; PUB, 1993–2013).

Concentra was a media group that owns two popular newspapers with regional focus *Het Belang van Limburg* (anno 1933) and *Gazet van Antwerpen* (anno 1891). The latter was acquired in 1996. Both newspapers can be considered as national newspapers bringing national news but with much attention for one region, being the provinces of Antwerp and Limburg, respectively. In 2001, *Concentra* launched the free newspaper *Metro*, initially together with media group *Roularta* and *NMP*, later with co-owner *Rossel et Cie*. *Metro* targets commuters and young people with short news items, its articles mainly obtained from news agencies.

The nine selected newspapers made out by far the largest part of the Flemish newspaper market at the beginning (1983) and at the end of the research period (2013). There were some other outlets in Flanders, but they were much smaller targeting local or niche audiences with local consumer information or publicity/advertorials and some of them had a different periodicity (i.e. less than five times per week). Therefore, they are not incorporated in this study. Although based on a different business model, *Metro* is included in the sample because of its substantive audience share: 9.5 percent in 2003 and 11.1 percent in 2013 (CIM).

We opted to start collecting data in 1983 as each newspaper was at that time still tied to a specific ideological ‘pillar’ (liberal, catholic, or socialist) and political party. Newspapers

Table 1. Number of articles coded in every year.

Year	Week	Number of articles
1983	17 October to 22 October	6319
1993	18 October to 23 October	6596
2003	20 October to 25 October	4721
2013	8 May to 14 May	3001

in Flanders were in 1983, much as in many other European countries, still the mouthpieces of parties and social movements. This is a situation in which we expect there to be more differences and, hence, news diversity across newspapers. Moreover, newspapers in the 1980s were affected by the first big newspaper crisis (due to the oil crisis) and the rising popularity of new media such as (commercial) television. We decided to sample the newspapers with long periods of 10 years in between because of theoretical reasons. Coding every 5 years, for example, would be too fine-grained to lay bare the impact of structural changes. It occurs (as was the case in Flanders with the newspaper *Het Volk*) that a newspaper is acquired by another group and dismantled over a period of several years. An interval of 10 years allows to study the impact of media mergers, as these effects probably emerge only gradually over time.

Sampling strategy

For every selected year, all news articles of the newspapers' printed versions were coded. Regional sections and irrelevant items for media diversity such as obituaries were excluded. Regional sections were excluded because they contain hyperlocal trivial news articles (e.g. a woman's 100th birthday or the winner of the local soccer competition) aimed at and distributed only to a small community (e.g. a village). All major and more serious news is printed in other sections of the newspapers. All newspapers have a periodicity of 6 days a week with exception of *De Tijd* (Tuesday to Saturday) and *Metro* (Monday to Friday). The print newspapers were acquired from a library newspaper archive. Table 1 shows the number of news articles coded per year.

For every year, a full week of consecutive days was analyzed rather than a constructed week, news stories often run over several days, and newspapers can imitate each other over time. Moreover, the selection of 1 week per selected year suffices as it is the number of news stories rather than the number of weeks that determines sample size. Although we cannot be totally sure that all four selected weeks exhibited a similar news dynamic, each week seemed to include a 'typical' news mix of some big stories and a large variety of smaller stories.

Coding

Coding was done at the level of newspaper articles. For 2003 and 2013, a basic 'scraping' of the data was conducted by a computer program which automatically coded the date and the medium. For 1983 and 1993, these variables were coded manually. All further

Table 2. Krippendorff's alpha for news story variable.

Year	Number of news stories	K-alpha
1983	2497	.92
1993	29,264	.93
2003	1982	.93
2013	1217	.97

coding was done manually by 14 well-trained coders. A news story is operationalized as a collection of news articles covering the same news event (e.g. a murder case; a strike in a company). Two or more newspaper articles belong to the same story when they cover the exact same topic on the exact same location. A news story is broader than a news fact in the sense that the former can develop over time. For example, an article reporting on a protest on Tuesday and an opinion piece about this protest on Wednesday belong to the same story. News stories are not related to the framing of a news fact: differently framed news articles covering the same event were coded as belonging to the same news story.¹

News stories were registered in one, common document, which was further completed during the coding process. For each news article, the coder determined its news story (i.e. same event on same location). Next, the coder browsed the common document to see whether the story was already listed and added a news story if it was not. An example of a big news story was 'Peace demonstration against nuclear missiles in Brussels' (1983). It was covered by eight different newspapers, each dedicating 1–32 articles to the story.

Inter-coder reliability was calculated based on 656 news articles coded by several coders. Table 2 provides details of the number of distinct news stories per year and inter-coder reliability for the attribution of news articles to news stories.

Measuring content diversity

To conduct the analyses regarding the overlap and diversity across newspapers, data were aggregated at the level of news stories. A dummy variable was created per newspaper, indicating whether the specific news story was covered by the newspaper (1=yes, 0=no). Descriptive statistics of the share of news stories covered by every newspaper per year are provided in Table 3. Most newspapers covered on average between 20 and 35 percent of all news stories included in any of all newspapers during the analyzed week of that year.

To test our hypotheses, pairwise correlations between newspaper dummy variables are calculated for every year. The higher the correlation between two newspapers, the more similar these newspapers are in terms of their selection of news stories.

Results

Table 4 shows pairwise correlations between all newspaper pairs for each year separately. The higher the value of the correlation coefficient, the more both newspapers are

Table 3. Descriptive statistics of the share of news stories every newspaper covers per year.

Newspaper	Abbreviation	Mean 1983 (SD)	Mean 1993 (SD)	Mean 2003 (SD)	Mean 2013 (SD)
<i>De Morgen</i>	DM	.16 (.37)	.19 (.39)	.18 (.38)	.23 (.42)
<i>De Tijd</i>	DT	.13 (.34)	.14 (.35)	.20 (.40)	.15 (.35)
<i>Het Laatste Nieuws</i>	HLN	.25 (.43)	.22 (.42)	.21 (.41)	.32 (.47)
<i>De Standaard</i>	DS	.22 (.41)	.22 (.41)	.24 (.43)	.24 (.43)
<i>Het Nieuwsblad</i>	NB	.26 (.44)	.23 (.42)	.20 (.40)	.32 (.47)
<i>Het Volk</i>	HV	.27 (.44)	.21 (.41)	.28 (.45)	–
<i>Metro</i>	METRO	–	–	.13 (.33)	.14 (.35)
<i>Gazet Van Antwerpen</i>	GVA	.33 (.47)	.28 (.45)	.22 (.42)	.28 (.45)
<i>Het Belang van Limburg</i>	HBVL	.30 (.46)	.28 (.45)	.20 (.40)	.22 (.42)

SD: standard deviation.

alike and cover the same news stories. Correlations between two newspapers with a similar profile are highlighted in gray and those of newspapers belonging to the same owner are displayed in rectangles. In general, the values of the pairwise comparisons are rather low, implying that, throughout the period under study, Flemish newspapers were quite diverse and covered different stories.

At first sight, pairwise correlations do not seem to increase in the research period: some decrease, others increase. There are, however, clear similarities between newspapers belonging to the same owner (cf. correlations in rectangles): elite newspaper *De Standaard* and popular newspaper *Het Nieuwsblad* (both *Corelio*) correlate positively and significantly in all years. These newspapers have been part of the same group since 1929, suggesting a long-standing tradition of collaboration. The strongest correlation in the sample occurs between *Het Volk* and *Het Nieuwsblad* in 2003 ($\rho = .415$; $p < .01$). In 2003, these two newspapers belonged to the same media group (*Corelio*) that bought *Het Volk* in 1994. In hindsight, this similarity can be understood as part of a strategy toward the planned merger of both newspapers in 2007. Another striking evolution is the relationship between *Gazet van Antwerpen* and *Het Belang van Limburg*. While they show slightly positive to negative correlation values in 1983 and 1993, after they became part of the same group (*Concentra*), strong positive correlations occur ($\rho_{2003} = .266$, $p < .01$ and $\rho_{2013} = .265$, $p < .01$). The most distinctive newspaper is business newspaper *De Tijd*. Both before and after it was jointly bought by *De Persgroep* and *Rossel et Cie* in 2005, it stands out and is even negatively related to most other newspapers, except for *De Standaard* and *De Morgen* from 1993 onwards. *Metro* is a free newspaper mainly based on articles of news agencies, which explains its generally strong and positive relationship with many other newspapers.

In general, a pattern seems to emerge whereby newspapers with the same profile seem to be related to each other more strongly than newspapers with different profiles and whereby newspapers belonging to the same media group correlate more strongly with each other.

Table 4. Pairwise correlations between newspapers in 1983, 1993, 2003, and 2013.

1983	DM	HLN	DT	DS	NB	HV	GVA	HBVL	METRO
DM	1								
HLN	.223**	1							
DT	-.026	-.032	1						
DS	.139**	.114**	.044*	1					
NB	.251**	.144**	-.097**	.243**	1				
HV	.254**	.166**	-.067**	.064**	.174**	1			
GVA	.190**	.152**	-.083**	.048*	.143**	.154**	1		
HBVL	.136**	.080**	-.065**	.013	.072**	.100**	.055**	1	
METRO	-	-	-	-	-	-	-	-	1
1993	DM	HLN	DT	DS	NB	HV	GVA	HBVL	METRO
DM	1								
HLN	.041*	1							
DT	.005	-.089**	1						
DS	.149**	.036	.067**	1					
NB	.106**	.153**	-.064**	.251**	1				
HV	.114**	.199**	-.045*	.127**	.166**	1			
GVA	.039*	.160**	-.104**	.029	.104**	.165**	1		
HBVL	.041*	.0034	-.090**	.023	.040*	.087**	-.013	1	
METRO	-	-	-	-	-	-	-	-	1
2003	DM	HLN	DT	DS	NB	HV	GVA	HBVL	METRO
DM	1								
HLN	.053*	1							
DT	.033	-.057**	1						
DS	.149**	.061**	.124**	1					
NB	.063**	.139**	-.072**	.137**	1				
HV	-.077**	-.041	-.215**	-.016	.415**	1			
GVA	.052*	.096**	-.035	.086**	.147**	.026	1		
HBVL	.042*	.099**	-.059**	.044*	.153**	.005	.266**	1	
METRO	.139**	.052*	.115**	.153**	.064**	-.048*	.080**	.053*	1
2013	DM	HLN	DT	DS	NB	HV	GVA	HBVL	METRO
DM	1								
HLN	.101**	1							
DT	.091**	-.004	1						
DS	.141**	.095**	.136**	1					
NB	.004	.111**	-.005	.140**	1				
HV	-	-	-	-	-	1			
GVA	.013	.088**	-.037	.021	.137**	-	1		
HBVL	.015	.064*	-.047	.053	.063*	-	.265**	1	
METRO	.144**	.148**	.062*	.185**	.076**	-	.092**	.084**	1

DM: De Morgen; HLN: Het Laatste Nieuws; DT: De Tijd; DS: De Standaard; NB: Het Nieuwsblad; HV: Het Volk; GVA: Gazet Van Antwerpen; HBVL: Het Belang van Limburg; METRO: Metro.
 *Correlation is significant at the .05 level (two-tailed); **correlation is significant at the .01 level (two-tailed).

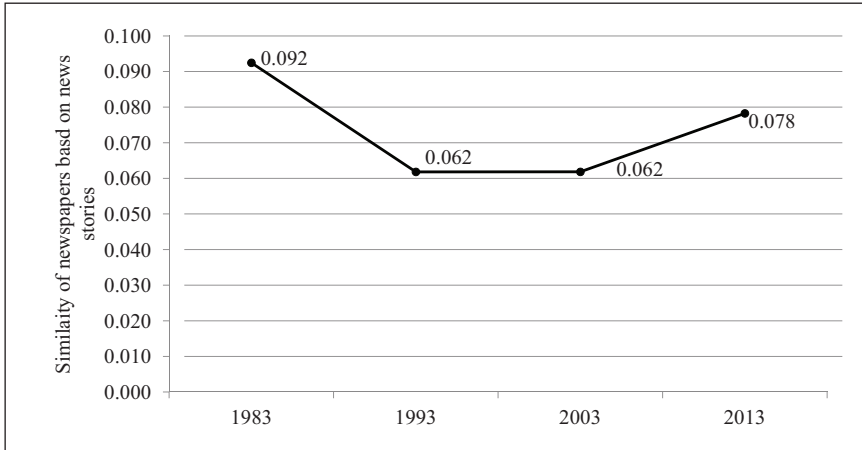


Figure 1. Average per year of pairwise correlations between newspapers ($n = 120$).

Figure 1 illustrates the evolution of the average correlation values of all newspapers over time. The results are striking. The newspapers were most alike in 1983, with the average correlation value reaching $\rho = .09$. The average correlation value dropped between 1983 and 2003 ($\rho = .06$), implying greater differences between the newspapers than before. In 2013, the average correlation value rose again to $\rho = .08$, meaning that the news story diversity decreased. This pattern does not correspond to the expectations formulated in Hypothesis 1; in fact it even directly counters these expectations. Whereas we anticipated a general decline in diversity, we observe that diversity was actually lowest in 1983. We can only speculate about explanations. Thirty years ago, newsrooms simply had fewer means to learn what was going on in the world because of less advanced technologies; this made that newsrooms were dependent on fewer, less diverse sources such as news agencies. We expect, due to pillarization and politicization of the newspapers in 1983, that the interpretation of the news stories was different, but our data do not allow us to draw this conclusion. From 1993 onwards, with the coming of the Internet and later with the rise of user-generated content and an easier access to international sources, diversity went down again and overlap between newspapers was on the rise but only slightly so. Especially between 2003 and 2013, a decrease in content diversity can be seen. This might be explained by the increasing levels of media competition in this period, where several media merged into the same media group, causing the number of media groups to decrease from four to three. The decline of the level of diversity in the period 2003–2013 seems to be especially strong for the newspapers of *De Persgroep*, the only publishing group in which a change took place in the ownership structure during this period (i.e. the acquisition of *De Tijd* in 2005), sometimes even leading to the publication of the exact same articles in the different newspapers.

To formally test our hypotheses, a regression analysis is performed with the pairwise relationship between each pair of newspapers (correlation values) as a dependent variable. Independent variables are the dummy variables for each year (1993, 2003, and

Table 5. Linear regression model of the correlations between newspapers' news stories (n = 120).

Variable	B	SE (b)	t	p
Constant	.047**	.018	2.671	.009
Profile	.088***	.017	5.308	.000
Ownership	.122***	.026	4.722	.000
1993 dummy	-.035	.022	-1.557	.123
2003 dummy	-.052*	.023	-2.289	.024
2013 dummy	-.047	.025	-1.908	.059

Adjusted R² = .328.

***p < .001; **p < .01; *p < .05.

2013), with 1983 serving as reference year. The dummies 'Profile' and 'Ownership' are awarded value 1 if the two newspapers have a similar profile (elite-popular) or the same owner (media group).

The regression analysis confirms the descriptive evidence discussed above. First, Table 5 shows that all year dummies have a negative coefficient compared to the reference year 1983. Only in 2003, this difference is marginally significant. In line with Figure 1, no decrease in content diversity is found between 1983 and 2013. Hypothesis 1 is therefore rejected. Second, newspapers with similar profiles are more likely to be more overlapping than newspapers with different profiles (B = .088, p < .001), confirming Hypothesis 2. Third, the similarity between two newspapers can be predicted by the ownership of the newspapers. Newspapers of the same media group are more likely to be similar than newspapers of different owners, supporting Hypothesis 3.

Discussion and conclusion

In response to concerns about declining content diversity (Bourdieu, 1998; Gans, 2003; Lee, 2007; Norris, 2000), this study examined whether Flemish newspapers became more alike in terms of the news covered between 1983 and 2013. Against expectations, news content diversity has not steadily decreased over the years. Instead, the studied newspapers' news agenda has even become a little more diverse between 1983 and 2003. And, only a slight decrease in diversity is found between 2003 and 2013. Variation in diversity can further be explained by similarities between the newspaper's profiles: pairs of newspapers with the same profile (elite or popular) are more overlapping than newspapers with different profiles. Ownership matters as well: newspapers of the same media group are more similar than those not belonging to the same media group, even if they have different profiles.

Theories about how the newspaper crisis and changing working conditions negatively influence the diversity of news content can thus not be empirically confirmed by our data. We can only speculate about possible explanations for this finding. Do we tend to overestimate the diversity that characterized our news environment in the past as a kind of glorification of a splendid past? The news was apparently not as diverse in 1983 as we

tend to think, or at least not in Flanders. Do certain journalistic evolutions compensate for the increased pressure in newsrooms? For instance, journalists have become more efficient in the digital era. Outsourcing strategies also might have contributed to the diversity of content by hiring specialized (freelance) journalists for a restricted number of articles. In any case, our findings strongly nuance the news content diversity debate: diversity has not systematically decreased over the past four decades – in 1983, the diversity was even lower than ever after – and while it has decreased a little between 2003 and 2013, it is only a slight decline. It could, of course, be the case that these findings are entirely idiosyncratic and due to a very peculiar Flemish situation, but we do not see how that could be the case.

However, our findings regarding ownership indicate that we should remain cautious: content diversity is not necessarily safeguarded through publishers joining forces. In our sample, the Flemish market was most competitive in 1983 with seven publishers and it became less and less competitive, with only three publishing groups with multiple newspapers in their portfolio in 2013. The situation of the Flemish market in 1983 seems to be in correspondence with Hotelling's (1929) law: many competitors leading to less diverse content. The rather low level of diversity we observed in 1983 may also be explained by practical limitations in the production process of content in a pre-Internet and pre-digital era.

As for the Flemish situation in 2013, one may argue that it fits, to some extent, the Steiner model. This model states that a monopolist better serves the full scope of the audience's preferences with more diverse content (Steiner, 1952). In 2013, there were only a few publishers with a dominant market position, and overall, our study showed indeed a rather high level of diversity. However, we observed greater similarity of news stories in newspapers belonging to the same publishing group. Publishers seemingly have more interests in producing more of the same than in diversification. While this may imply enhanced efficiency in the production process from an intra-organizational point of view (i.e. collaboration/merging of newsrooms), less diversity as a result of concentration of ownership is one of the prime concerns for the media's democratic functioning (Van Cuilenburg, 1999: 195). For this reason, careful review of media mergers by the national competition authority, like in the most recent case *Mediahuis* (a joint-venture by Corelio and Concentra, established in 2013, reducing the number of media groups to two, cf. Belgische Mededingingsautoriteit (BMA), 2013) remains important.

From a normative viewpoint, a certain degree of duplication of news stories is not necessarily a bad thing. For one, the bigger real-world events are simply relevant and it is important that people are informed about those facts. It is a good thing that factual and important news is reported by all newspapers (Lemert, 1974). Second, as observed by Atwater (1986), homogeneity of news stories in a media environment might be key in the creation of a common public agenda, thereby fostering public consensus, which is important for the good functioning of a democracy. Third, lower diversity may be compensated for by higher quality. In an era of declining newspaper readership and fewer resources, especially in a small market, it is not feasible to have specialized journalists for all topics. Sharing news may be a solution. For example, there is a division of labor within the media group *De Persgroep*: newspaper *Het Laatste Nieuws* provides sports news, *De Morgen* focuses on culture, and *De Tijd* specializes in financial-economic news. Exchanging content may be beneficial for the overall quality of all three newspapers as each newspaper's strengths are optimized.

However, too much duplication can also be detrimental for the public sphere as it might be a sign of an overall inability of news outlets to produce original news stories (Foote and Steele, 1986). Also, homogenization of news stories might stem from journalists' overreliance on powerful sources, which have the capacity of providing newspapers with a large supply of finished news products that are adopted by all newsrooms. We also note that the number of news stories in a given week has decreased drastically between 1983 and 2013. So, while there might not be a change in overlap of news stories, it might be that fewer topics are put on the media agenda, which also means a loss of news diversity and a narrowing of the range of the public debate.

Our findings do not point toward high and increasing levels of news homogeneity and, hence, nuance these normative considerations. An interesting potential research track in this respect, though, would be to test *what kind* of news is published by the different newspapers and which of these kinds of news are characterized by higher or lower levels of diversity. In an ideal situation, the most important (hard) news facts are shared between all newspapers while additionally each newspaper diversifies by targeting news stories at their specific niche. Also, diversity of viewpoints represented in a news story may be more important at the individual level than diversity of news stories. Indeed, it would be interesting to approach the concept of 'diversity' in different ways, also including diversity of viewpoints, news sources, frames, and so on. This could be a suggestion for future research.

While our study analyzed only one newspaper market (Flanders), we believe the data have a certain generalizability as many European media markets are rather small (e.g. Denmark, Finland) or are part of a complex national system with different communities such as Switzerland (Hallin and Mancini, 2004). In larger media markets, we expect the risk of decreasing diversity to be smaller as news media in large markets may have more resources to allow specialization and to differentiate themselves from other news outlets while still reaching a considerable audience. This assumption requires future research. A potential weakness of this study is the limited sample of 1 week of news content per year. While each selected week had many thousands of different news stories and the number and intensity of real-world events looked normal to us, we cannot exclude that the specific weeks we chose had an impact on our results. Still, we believe our article made a contribution to the news diversity literature by showing that news content diversity has not so drastically decreased as is often assumed.

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Note

1. For example, when one newspaper, reporting about a specific company strike, frames the strike as a legitimate action that should get support and another newspaper is critical toward the strike, they are still seen as belonging to the same news story since they cover the exact same strike in the exact same company.

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Appendix I. Overview of the newspaper publisher's owners.

Newspaper	Profile	Ownership of newspaper publisher			
		1983	1993	2003	2013
Number of newspapers (firms)		8 (7)	8 (5)	9 (4)	8 (3)
<i>Het Laatste Nieuws</i>	Popular	Uitgeverij J. Hoste	Hoste/De Persgroep: ^a (1) <i>Takeover Uitgeverij De Morgen in 1989</i>		
<i>De Morgen</i>	Elite	De Morgen			
<i>De Financieel Economische Tijd/De Tijd</i> (renamed in 2004)	Elite (business)	Uitgeversbedrijf Tijd			Mediafin ^b (owned by De Persgroep (50%) and Rossel et Cie (50%): (2) <i>Takeover in 2005</i>
<i>Het Nieuwsblad</i>	Popular		Vlaamse Uitgeversmaatschappij/VUM Media/Corelio ^c		
<i>De Standaard</i>	Elite		(4) <i>Takeover Drukkerij Het Volk in 1994</i>		
<i>Het Volk</i> (terminated in 2008)	Popular	Drukkerij Het Volk			
<i>Het Belang Van Limburg</i>	Popular		Concentra ^d		
<i>Gazet Van Antwerpen</i>	Popular	De Vlijt	(3) <i>Takeover De Vlijt in 1996</i>		
<i>Metro</i> (launched in 2001)	Free		Mass Transit Media (owned by Concentra (51%) and Rossel et Cie (49%))		

Sources: De Bens and Raeymaeckers (2010), De Schrijver (1992), various media yearbooks (*PUB Mediabook*, *Mediaplan*, and *Reklamegids*), merger decisions of the national competition authority (*Raad voor de Mededinging/Belgische Mededingingsautoriteit*), and annual financial accounts obtained from the national bank (*Nationale Bank van België*).

Ownership structures are displayed as of 31 December with the exception of 2013. Joint venture Mediahuis was established by Corelio and Concentra in November 2013. As the content analysis was conducted in May 2013, the pre-merger situation should be considered. Only relevant information about the shareholders is displayed for the sake of clarity.

^aHoste was renamed as De Persgroep in 1999.

^bUitgeversbedrijf Tijd was renamed as Mediafin in 2006.

^cVlaamse Uitgevers-maatschappij was named as VUM Media from 2000 to 2005 and changed to Corelio in 2006.

^dConcentra was named as Regionale Uitgeversgroep from 1996 to 2001.