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Paul Hendriks Vettehen\textsuperscript{a}, Shuhua Zhou\textsuperscript{b}, Mariska Kleemans\textsuperscript{a}, Leen D'Haenens\textsuperscript{c} & Trisha T.C. Lin\textsuperscript{d}

\textsuperscript{a} Communication Science, Radboud University, Nijmegen, The Netherlands
\textsuperscript{b} College of Communication & Information Science, University of Alabama, Tuscaloosa, AL, USA
\textsuperscript{c} Centre for Media Culture and Communication Technology, Catholic University of Leuven, Leuven, Belgium
\textsuperscript{d} Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore

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Competitive pressure and arousing television news: a cross-cultural study

Paul Hendriks Vettehen\textsuperscript{a*}, Shuhua Zhou\textsuperscript{b}, Mariska Kleemans\textsuperscript{a}, Leen D’Haenens\textsuperscript{c} and Trisha T.C. Lin\textsuperscript{d}

\textsuperscript{a}Communication Science, Radboud University, Nijmegen, The Netherlands; \textsuperscript{b}College of Communication & Information Science, University of Alabama, Tuscaloosa, AL, USA; \textsuperscript{c}Centre for Media Culture and Communication Technology, Catholic University of Leuven, Leuven, Belgium; \textsuperscript{d}Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore

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In many scholarly writings about journalism, the idea can be found that competitive pressure urges journalists to make news more arousing. This hypothesis was tested in two cultural settings: the Western European culture and the Chinese-dominated culture. A total of 3028 TV news stories from seven different markets, or 12 different news programs, were analyzed on the presence of arousing news characteristics. High competitive pressure at the market level appeared to contribute to the prevalence of arousing news, but this effect was more pronounced in the Chinese-dominated culture than in the Western European culture. Effects of high competitive pressure at the station level were only observed in the Western European culture.

Keywords: competitive pressure; arousal in news; content analysis; cross-cultural research

On the eve of his retirement as British Prime Minister, Tony Blair delivered a speech in which he commented on changes in the news media. ‘The result is a media that increasingly and to a dangerous degree is driven by “impact”’, Blair said, ‘Impact is what matters. It is all that can distinguish, can rise above the clamour, can get noticed. Impact gives competitive edge. Of course, the accuracy of a story counts. But it is secondary to impact’. Later in his speech he explained: ‘The audience needs to be arrested, held, and their emotions engaged. Something that is interesting is less powerful than something that makes you angry or shocked’ (Blair, 2007).

Tony Blair does not stand alone in his criticism. In both popular and scholarly discussions about the news media, Blair’s claims are consistently echoed. In these discussions, market-driven journalism is generally regarded as a major cause of arousing news, because competitive pressure compels news producers to improve their ratings. Making news more emotionally arousing is considered a successful way to achieve this goal (e.g., Bird, 2000; Franklin, 1997; McManus, 1994). The idea that competitive pressure promotes arousing news is the focal point of this study.

In line with the negative opinions on emotionally arousing news, the subject has been studied under various pejorative labels such as ‘tabloidization’ (e.g., Bek, 2004;
Bird, 2000) and ‘sensationalism’ (Grabe, Zhou, & Barnett, 2001; Hendriks Vettehen, Nuijten, & Beentjes, 2005; Hofstetter & Dozier, 1986; Slattery & Hakanen, 1994). This negative connotation for arousing news is not restricted to news scholars and journalists. Studies by Grabe, Zhou, Lang, and Bolls (2000) and Grabe, Lang, and Zhao (2003) demonstrate that an arousing story topic or a flamboyant production style may lead viewers to rate news stories as less journalistically sound. Moreover, many studies on the effects of arousing news have shown that although arousing characteristics may be effective in getting viewers’ attention, they may in various ways interfere with information processing (e.g., Aust & Zillman, 1996; Brosius, 1993; Grabe et al., 2003; Lang, Bolls, Potter, & Kawahara, 1999). The majority of these studies have dealt with television news. Considering the still pervasive role of television news as a source of political information, the scholarly effort put into studying arousing television news is understandable and justifies why this study continues examination of this programming format.

A gradual increase in television news programs employing arousing storytelling methods has been demonstrated, both in the US (e.g., Hofstetter & Dozier, 1986; Slattery & Hakanen, 1994; Slattery, Doremus, & Marcus, 2001) and a number of European countries, including Sweden (Hvitfelt, 1994), Denmark (Hjarvard, 2000), and the Netherlands (Hendriks Vettehen et al., 2005). The explanatory role of increased competitive pressure in the TV news market has been supported by European studies seeking a correlation between arousing news characteristics and significant events in the life cycles of public service news and its commercial rivals. Although these studies provided indications for increased competitive pressure as a main source of arousing news, they could not eliminate the role of contextual factors that might also influence arousing news. For this reason, the present study investigates the role of an important contextual factor that might be of interest in this respect: the cultural factor. More specifically, this study will focus on differences in arousing news between news markets with varying degrees of competitive pressure and on differences between news programs with varying levels of dependency on advertising revenues. In addition, this study will investigate whether or not similarities in the types of differences between markets and programs can be observed in different cultural contexts: namely, a Western (European) cultural context and an Eastern (Chinese-dominated) cultural context.

Arousing characteristics in television news

In this study, we have discerned six news characteristics that share the potential to emotionally arouse viewers, all of which have regularly been studied in television news, and their arousing potential has been demonstrated (for an overview cf. Kleemans & Hendriks Vettehen, 2009). The first of these is the most traditional measure of arousing news (e.g., Adams, 1978), and has been included in virtually every study on arousing news. In this study, this characteristic is labeled arousing topics, which refers to stories dealing with crime, violence, natural disasters, and accidents in television news programs.

The second arousing news characteristic is labeled dramatic pictures. The concept of ‘dramatic pictures’ in news stories refers to images of potentially dangerous situations (e.g., violence, disasters), or images showing possible outcomes of these situations (e.g., dead bodies, havoc). This category has been used as an aspect of
arousing news in several studies both in Europe (e.g., Hendriks Vettehen et al., 2005) and the US (Slattery & Hakanen, 1994; Slattery et al., 2001). Although the presence of dramatic pictures may coincide with the presence of an arousing story topic, this is not necessarily true. In some instances, news directors may be reluctant to show dramatic pictures while covering an already dramatic event. In other instances, they may use this kind of footage to liven up a non-dramatic story, a practice that has been labeled ‘embedded sensationalism’ (Slattery & Hakanen, 1994; Slattery et al., 2001).

The third and fourth arousing news characteristics are formal features of news stories. The frequency of camera shots has been described in several studies on arousing news, both in Europe (Hendriks Vettehen et al., 2005; Hjarvard, 2000; Hvitfelt, 1994), and the US (Grabe et al., 2001). Tabloid transitions have been studied as elements of arousing news in Europe (Hendriks Vettehen et al., 2005) and the US (e.g., Grabe et al., 2001). Tabloid transitions refer to decorative editing techniques such as wipes, fades, dissolves, and the addition of multiple pictures into one frame.

The fifth and sixth arousing news characteristics have been inspired by European studies on arousing news characteristics (Hendriks Vettehen et al., 2005; Hjarvard, 2000; Hvitfelt, 1994). These attributes reflect efforts by journalists to close the social distance between the viewer’s real world and news events that are often remote and abstract. Both strategies share the involvement of laypersons rather than politicians, spokespeople, or experts who comment on a news event. One strategy, which is labeled laypersons in this study, features comments on a story topic that are made by anonymous citizens. Prototypical examples of these are sound bites by randomly chosen bystanders or eyewitnesses. The other strategy goes one step further in closing the gap between the viewer’s real world and the world of news events. This strategy, which is labeled personalization in this study, does not feature laypersons as anonymous, randomly chosen commentators. Instead, these persons are introduced as the human faces representing the story issue.

**Competitive pressure**

Influences on the news production process may have different origins, ranging from the values and beliefs of the production personnel to differences between news markets (cf. Shoemaker & Reese, 1996). In this cross-cultural study, macro, social level influences are being considered. Specifically, it examines two-level influences of competitive pressure: the level at the individual market, and the level at the individual news station.

**Competitive pressure at the market level**

Basic principles of economics dictate that (a) similarity of products, (b) a large number of sellers, and (c) potential buyers, as well as (d) a minimum of entry barriers, contribute to a market in which competitive pressure maximizes. These same principles can be applied to the marketing of media products (e.g., Hoskins, McFadyen, & Finn, 2004). Below, we will elaborate on each of these contributors to competitive pressure in the television news market.

First, the more similar products are, the more likely buyers will consider these products as substitutes for each other, and the more these products may compete
In this study, the similar products are prime-time television newscasts in the markets' native language that are aimed at a nationwide audience, that cover a wide range of news events (both national and international news), and hence we may refer to as 'flagship' news program. The main influence on competitive pressure that a flagship news program will experience will come from other flagship news programs. Other non-flagship news programs within the market may also contribute to the competitive pressure, but considerably less so, as they are no comparable substitutes for the flagship news programs. For instance, cable news channels may provide prime-time newscasts in the markets' native language that cover a wide range of news events. However, these newscasts are only available to subscribers.

Second, the more suppliers of similar products, the more they will compete (e.g., Hoskins et al., 2004; Picard, 1989). Within the market for flagship news programs, it may be expected that the larger the number of flagship news programs, the harder it becomes for each of them to reach a large audience, and the more competitive pressure each of them will experience.

Third, the numbers of buyers also matters (e.g., Hoskins et al., 2004). The most obvious example, which fortunately does not apply to the television news market, is the case of just one or few buyers who dictate the market (i.e., monopsony or oligopsony). However, another example, which does apply to the television news market, is the case of large numbers of 'buyers' (audience reached). Regarding large number of buyers, Zaller (1999, p. 10) gave an example of two news stations, one in a market of 500,000 viewers and one in a market of 18 million viewers. Gaining one percent of the audience in the small market would amount to 5000 additional viewers, whereas gaining one percent in the large market would amount to 180,000 viewers, and probably considerably larger advertising revenue. Thus, the pressure to go after the additional one percent may be expected to be larger in large markets.

Finally, the absence of entry barriers refers to the degree of governmental regulation, which also contributes to the competitive nature of particular markets (e.g., Hoskins et al., 2004; Picard, 1989). One example is the dramatic deregulation of the broadcast markets that took place in many EU countries during the 1980s and 1990s, which removed entry barriers for commercial broadcasters, and which allowed for the end of public service broadcasters’ monopolies and an explosive growth of commercial stations (d’Haenens & Saeys, 2007). Many of these newcomers started to air news programs, thus increasing the degree of competitive pressure in these markets (e.g., Hendriks Vettehen et al., 2005). In the Chinese-dominated markets, a similar development took place since the market reforms began in earnest in the early 1990s (Zhou, 2008). Apart from allowing commercial broadcasting, governmental deregulation may include removing restrictions regarding revenues from sponsorships and advertising in the case of public service broadcasters, thus stimulating them to compete with commercial stations. In sum, the less regulation, the more competitive pressure can be expected (d’Haenens & Saeys, 2007; Hallin & Mancini, 2004).

In this study, we investigate the prevalence of arousing news characteristics in television news markets that can be characterized as either low or high on competitive pressure. Because the literature suggests that in highly competitive markets, newscasts will be more inclined to struggle for an audience, we expect:
H1: Television news stories in markets where competitive pressure is higher will manifest more arousing characteristics than television news stories in markets where competitive pressure is lower.

**Competitive pressure at the news station level**

Competitive pressure for television stations can be expected to be more severe as the degree of government investment in these stations diminishes. The main reason is that private stations are entirely dependent on sponsorships and advertising revenues, while stations with a significant degree of government funding are less dependent on sponsorships and advertising revenues. Consequently, maximization of their audience is paramount to the financial survival of private stations (d’Haenens & Saeys, 2007). This financial situation makes it more likely for private news stations to feature arousing news; a hypothesis that has received support in earlier studies conducted in Denmark (Hjarvard, 2000), Sweden (Hvitfelt, 1994), and the Netherlands (Hendriks Vettehen et al., 2005).

There are also reasons for not expecting large discrepancies in competitive pressure between private stations and stations with a significant degree of government funding. First, over the past decade public service stations in some countries (i.e. France, the Netherlands, Taiwan, and Hong Kong) have been increasingly allowed to compete with private stations for advertising revenues, although, in the EU, market distortion by public service stations has become a high priority issue on the policy agenda lately. Second, another recent trend in the media policy of some countries (i.e. Flanders, French-speaking Belgium, and the Netherlands) has been to consider public service broadcasting organizations as actors with whom arrangements can be made in terms of performance criteria—among which viewer ratings are increasingly featured as an important criterion (d’Haenens & Bardoel, 2007; Puppis, d’Haenens, & Saeys, 2007). Even though the pressure on public service broadcasters to compete with private broadcasters has considerably increased, we expect:

H2: News stories from private news stations will manifest more arousing characteristics than news stories from stations with a significant degree of government funding.

**Arousing content and competitive pressure in different cultures**

Cultural differences may constitute a third level of influence on arousing television news content. In this study, we concentrate on differences between Western and Eastern cultures, and more specifically between Western European and Chinese-dominated cultures.

Whether the levels of competitive pressure associated with the markets and the news station have similar effects in diverse cultures remains a challenging question. One might argue that the arousing potential of news characteristics in this study is probably universal (cf. Davis & McLeod, 2003; Shoemaker, 1996), and thus relatively similar across cultures. News directors from different cultures can resort to the same arousing news characteristics when competing for an audience. From this perspective, competitive pressure is not expected to have different effects on the presence of arousing news in Western European and Chinese-dominated cultures.
However, there is also reason for expecting a moderating effect of the differences between Western European and Chinese-dominated cultures. The main differences between the two may well be described by Hofstede (2001) who mapped cultural differences between numerous countries. In his view, Western European culture could be described as individualistic and short-term oriented, whereas the Chinese-dominated cultures could be described as collectivistic and oriented towards the long term. Since individualistic culture emphasizes such values as independence and freedom, and its members conceive of themselves as unique persons who give priority to personal achievements over group goals, it is conceivable that Western European producers would regard the station’s immediate success and its coffers prowess as a barometer of success. In contrast, since collectivistic culture gives priority to harmony and solidarity, its members consider themselves connected with others and tend to subordinate personal goals to group goals (Hofstede, 1991; Triandis, 1995). It is conceivable that producers in the Chinese-dominated culture tend to perceive themselves as members of a society, and that the greater good of society takes precedence over the short-term gains of the station (cf. Hofstede, 2001, p. 361). As a result, when confronted with a situation of large competitive pressure, producers in the Chinese-dominated culture may exercise more prudence before sensationalizing the news, thus refraining themselves from overreaching the arousing nature of news content.

In sum, theoretically there are reasons for expecting different effects of competitive pressure in diverse cultures, but also reasons for not expecting different effects. Hence, we pose the following research questions:

**RQ1:** Does competitive pressure have similar effects on arousing news characteristics in Western European and Chinese-dominated cultures?

**RQ2:** Does the degree to which news stations are private have similar effects on arousing news characteristics in Western European and Chinese-dominated cultures?

**Method**

**Design**

We examined newscasts from four West European markets and three Chinese-dominated markets. The West European markets were France, the Netherlands, and the two language communities in Belgium (Dutch-speaking Flanders and French-speaking Belgium). The three Chinese-dominated markets were Taiwan, Mainland China, and Hong Kong. In each of these markets, we examined ‘flagship’ news programs. Flagship news programs were defined as airing (a) prime-time newscasts (b) in the markets’ native language (c) aimed at a nationwide audience and (d) that cover both national and international news. Based on the number of flagship news programs, the market size, and the degree of governmental regulation, each market was assigned to the categories of ‘high’ or ‘low’ competitive pressure.

In spite of mainland China’s enormous market potential given its size (1.3 billion inhabitants), China was assigned to the low competitive pressure category. The reason for this is the high degree of governmental control preventing competition in flagship newscasts. In fact, mainland China has only one nationwide broadcaster, CCTV, and just one flagship news program (Zhou, 2008), in spite of numerous provincial and
municipal news programs. Two European markets were also assigned to the low competitive pressure category: Dutch-speaking Flanders and French-speaking Belgium. The reason for this is that each of these markets has just two flagship news programs, which compete on fairly small markets (Saeys & Antoine, 2007): there are 6 million Dutch-speaking inhabitants and 4 million French-speaking inhabitants.

Taiwan and Hong Kong were assigned to the ‘high’ competitive pressure category. Especially Taiwan, a mid-sized market (23 million inhabitants), may be characterized as having an extraordinarily fierce competition. There are five broadcasters airing flagship news programs (Lin, 2009). In addition, there are 13 cable news networks airing numerous newscasts around the clock. These cable news networks may somewhat contribute to the competitive pressure. And although Hong Kong is only a small market (7 million inhabitants), competition for flagship news programs is substantial, featuring two flagship news programs in native Cantonese and several cable news networks (TVB, 2009). The two remaining European markets (France and the Netherlands) were also assigned to the high competitive pressure category. The reason for this is not so much the number of flagship news programs. Both the Netherlands and France feature two flagship programs (Regourd, 2007; Van der Haak & Van Snippenburg, 2007). However, each market also features a cable news channel that may somewhat contribute to the competitive pressure. In addition, the Netherlands (16 million inhabitants) and especially France (63 million inhabitants) are considerably larger markets than the two tiny Belgian markets.

For each of the selected markets, news stories were content analyzed from two flagship programs featuring both domestic and international news. One program was broadcast by a station that at the time of the data collection was completely private (the ‘high degree of privation’ category), and hence completely dependent on advertising and sponsoring revenues; the other program was broadcast by a station that was at best partially private (the ‘low degree of privation’ category), and hence less dependent on advertising and sponsoring revenues. Exceptions to this rule were mainland China (with only stories from the public service newscast analyzed, which belongs to the ‘low degree of privation’ category) and Hong Kong (with only stories from the main commercial newscast analyzed, which belongs to the ‘high degree of privation’ category).

**Sample**

For each of the 12 selected stations, main evening newscasts were recorded. Two constructed weeks were assembled. To reach this goal, newscasts were recorded on 14 selected days in the fall of 2007: September 6, 12, 18, 24, and 30, October 6, 12, 18, 24, and 30, and November 5, 11, 17, and 23. The total number of newscasts in the sample was 168. Except the weather reports, all news stories from each newscast were content analyzed, which resulted in 3028 stories being coded. Table 1 provides an overview of the markets, stations, and numbers of stories per station included in the sample.

It should be noted that in the case of Taiwan, the news program in the ‘lower degree of privation’ category was not taken from the main public broadcaster, i.e., Taiwan Broadcasting System (TBS). The reason for this was that during the data collection time, the newly merged TBS was in the middle of an attempt to integrate the two news departments of Public Television Service and Chinese Television System. This integration process led to a series of conflicts in news practices and
cultures, which eventually caused TBS to give up the newsroom convergence (Taiwan Media Watch, 2008). This is why TBS was not considered a good candidate to be assigned to the ‘lower degree of privation’ category.

As an alternative, the semi-public TTV was considered a candidate for the ‘lower degree of privation’ category. At first sight, this station also seemed to be troublesome as the station finished releasing its government shares and changed the chairman of the board on 6 September 2007 (Yu, 2007), just at the start of the data collection for this study. Nominally, this made TTV a fully private station. The reason for still assigning TTV to the ‘lower degree of privation’ category is that during the period of data collection (the fall of 2007), a large-scale organizational restructuring and downsizing of manpower had not yet occurred (cf. Wu, 2008). In fact, having completely changed the leadership (e.g., board of trustees) in December 2009, its Public Relation officially considered 2008 as the starting year of privatization (TTV Information, 2010). Thus, at the time of our data collection, TTV’s news department was expected to still keep its old ways of news making and journalistic practices, and hence the collected news content was expected to reflect the station’s original mission to serve the public interest broadcasting style.

**Measurements**

The six arousing news characteristics were included in a coding instrument based on earlier codebooks by Hendriks Vettehen et al. (2005) and Grabe et al. (2001). In a number of training sessions, coders from different home languages (French, Dutch, and Chinese) were trained. In addition, an instruction DVD was produced in a language that was understood by every coder (English). The DVD included the codebook and code sheets, examples of news fragments to illustrate each arousing characteristic, a training schedule, and exercises (as homework for the coders) in the form of English language (US network) news stories to be coded, and expert codings
of these stories (i.e., codings by two of the researchers who developed the codebook) to check the codes.

A total of 12 coders were involved in coding the Dutch and Flemish news stories. To estimate their intercoder reliabilities, 213 stories were double-coded by different combinations of coders. Three coders were involved in coding the French news stories and the news stories from French-speaking Belgium. To estimate reliabilities of the coders involved in coding the news stories from France and French-speaking Belgium, 48 stories were double coded by different combinations of coders. A total of 14 coders were involved in coding the Taiwanese, Chinese, and Hong Kong newscasts. To estimate reliabilities of the coders involved in coding the Taiwanese, Chinese, and Hong Kong stories, 49 stories were double coded.

Krippendorff’s Alphas were computed using the SPSS-macro described by Hayes and Krippendorff (2007). Taking Krippendorff’s (2004, p. 241) criteria for acceptable (.67) and good (.80) as a yardstick, the Krippendorff’s Alpha’s were generally satisfactory and ranged from .78 to 1.00 for the Dutch language codings, between .74 to 1.00 for the French language codings, and between .73 and 1.00 for the Chinese-language codings. The only exceptions to this rule were the somewhat low Alpha’s for the Dutch-language codings on the tabloid transitions features wipes (.65) and dissolves (.60). These might be explained by the skewed distributions of these indicators, in combination with the relatively small reliability sample. In addition, no systematic disagreement between coders was observed on these indicators, implying that findings on the composite measure ‘tabloid transitions’ may at worst be somewhat attenuated.

Some arousing characteristics that have been included in other studies (e.g., loud and fast music, close-up) could not be included in the study because of unsatisfactory intercoder reliabilities. Table 2 provides an overview of the six arousing characteristics that were included in the study, including brief definitions, intercoder reliabilities, and descriptive statistics. Except for dramatic story subject, the arousing news characteristics were expected to correlate with the duration of the story. For example, it could be that longer news stories have more camera shots and tabloid transitions, just because of the story length. For that reason, it was decided to calculate the number of observations per minute for all arousing characteristics, by dividing the counted characteristics by the duration of the story.

Results

A multivariate analysis of variance was used to observe the effects for the two independent variables ‘competitive pressure’ (with Flanders, French-speaking Belgium, and Mainland China as low, and the Netherlands, France, Hong Kong, and Taiwan as high) and ‘type of station’ (low or high degree of privatization), and the interactions between these variables and the moderator variable ‘culture’ (Western European or Chinese-dominated culture). The six arousing news characteristics were the dependent variables.

Strictly speaking, analysis of variance assumes normally distributed dependent variables. This assumption was not met in the case of the dichotomous variable of dramatic story subject. However, because the distribution of this variable was not extremely skewed (35% of the stories had a dramatic story subject and 65% had no dramatic story subject), the considerable size of the sample, and the robustness of the
technique regarding violations of the normality assumption under such circumstances, no problems were expected with significance tests (at $p < .05$) using this procedure (cf. Lunney, 1970).

**Competitive pressure**

As proposed in H1, it was expected that news stories in higher competitive markets would feature more arousing news characteristics than news stories in lower competitive markets. The main effect for competitive pressure was significant ($F (6,3016) = 48.53; p = .001; \eta^2 = .09$). Support for the hypothesis was found for each of the six arousing characteristics (see Table 3 for means and standard deviations). News stories in higher competitive markets included significantly more dramatic story subjects ($F (1,3021) = 50.04; p = .001; \eta^2 = .02$), dramatic pictures ($F (1,3021) = 20.63; p = .001; \eta^2 = .01$), camera shots ($F (1,3021) = 17.69; p = .001; \eta^2 = .01$), tabloid transitions ($F (1,3021) = 14.11; p = .001; \eta^2 = .01$), personalization

### Table 3. Arousing news characteristics in markets with varying degrees of competitive pressure.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low pressure markets $M (SD)$</th>
<th>High pressure markets $M (SD)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dramatic story subject</td>
<td>.31 (.01)</td>
<td>.34 (.01)</td>
</tr>
<tr>
<td>Dramatic pictures</td>
<td>1.01 (.10)</td>
<td>1.44 (.09)</td>
</tr>
<tr>
<td>Camera shots</td>
<td>13.79 (.19)</td>
<td>14.37 (.17)</td>
</tr>
<tr>
<td>Tabloid transitions</td>
<td>1.16 (.04)</td>
<td>.70 (.04)</td>
</tr>
<tr>
<td>Personalization</td>
<td>.11 (.01)</td>
<td>.26 (.01)</td>
</tr>
<tr>
<td>Layperson speaking</td>
<td>.09 (.01)</td>
<td>.20 (.01)</td>
</tr>
</tbody>
</table>

$n = 1364$                      $n = 1664$
The first research question referred to a possible interaction between competitive pressure and culture. The multivariate test showed a significant interaction \((F(6,3016) = 55.91; p = .001; \eta^2 = .10)\) between the two variables. Except for ‘dramatic pictures’, all the variables indicated that the differences between high and low competitive pressure within the Western European culture were of a different kind than those within the Chinese-dominated culture: ‘dramatic story subject’ \((F(1,3021) = 79.86; p = .001; \eta^2 = .03)\), ‘camera shots’ \((F(1,3021) = 36.45; p = .001; \eta^2 = .01)\), ‘tabloid transitions’ \((F(1,3021) = 120.22; p = .001; \eta^2 = .04)\), ‘personalization’ \((F(1,3021) = 20.56; p = .001; \eta^2 = .01)\), and ‘layperson speaking’ \((F(1,3021) = 27.84; p = .001; \eta^2 = .01)\). As the differences in means between low and high pressurized markets (see Table 4) indicate, it seems that on four characteristics (‘dramatic story subject’, ‘tabloid transitions’, ‘personalization’, and ‘layperson speaking’) the effect of competitive pressure is somewhat more positive in the Chinese-dominated culture compared to the Western European culture.

To obtain a more detailed test of the effects competitive pressure may have within the two cultures, contrast analyses were performed. Results showed that within the Chinese-dominated culture, competitive pressure had a positive effect for five out of six arousing news characteristics. News stories from Chinese-dominated high-pressure markets contained significantly more dramatic story subjects \((F(1,3021) = 68.49; p = .001; \eta^2 = .02)\), dramatic pictures \((F(1,3021) = 6.33; p = .012; \eta^2 = .00)\), tabloid transitions \((F(1,3021) = 22.91; p = .001; \eta^2 = .01)\), personalization \((F(1,3021) = 32.24; p = .001; \eta^2 = .01)\), and layperson speaking \((F(1,3021) = 40.49; p = .001; \eta^2 = .01)\) compared to news stories at low-pressure markets. Only for camera shots, the opposite was found. News stories from low-pressure markets featured more camera shots than stories in high-pressure markets \((F(1,3021) = 93.44; p = .001; \eta^2 = .03)\). Within the Western European market, a positive effect of competitive pressure was found for the variables ‘dramatic pictures’ \((F(1,3021) = 10.36; p = .001; \eta^2 = .00)\), ‘camera shots’ \((F(1,3021) = 91.59; p = .001; \eta^2 = .03)\), ‘personalization’ \((F(1,3021) = 34.42; p = .001; \eta^2 = .01)\), and ‘layperson speaking’ \((F(1,3021) = 4.73; p = .03; \eta^2 = .00)\). However, ‘tabloid transitions’

### Table 4. Arousing news characteristics in Western European and Chinese-dominated markets with varying degrees of competitive pressure.

<table>
<thead>
<tr>
<th></th>
<th>Western European markets</th>
<th>Chinese-dominated markets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Pressure (M (SD))</td>
<td>High Pressure (M (SD))</td>
</tr>
<tr>
<td>Dramatic story subject</td>
<td>.45 (.01)</td>
<td>.41 (.02)</td>
</tr>
<tr>
<td>Dramatic pictures</td>
<td>1.32 (.12)</td>
<td>1.87 (.13)</td>
</tr>
<tr>
<td>Camera shots</td>
<td>11.38 (.21)</td>
<td>14.38 (.23)</td>
</tr>
<tr>
<td>Tabloid transitions</td>
<td>1.72 (.05)</td>
<td>.92 (.05)</td>
</tr>
<tr>
<td>Personalization</td>
<td>.10 (.02)</td>
<td>.23 (.02)</td>
</tr>
<tr>
<td>Layperson speaking</td>
<td>.13 (.02)</td>
<td>.18 (.02)</td>
</tr>
<tr>
<td>(n = 1027)</td>
<td></td>
<td>(n = 869)</td>
</tr>
</tbody>
</table>
were more included in news stories from markets with a low level of pressure. Regarding 'dramatic story subject' no effect of competitive pressure was found within the Western European culture. All in all, the contrast analyses revealed that the effect of competitive pressure was positive for the large majority of arousing news characteristics in both cultures.

**Type of station**

According to H2, news stories from completely privatized stations would contain more arousing news characteristics than news stories from stations with a significant degree of government funding. A significant multivariate main effect of ‘type of broadcaster’ was found ($F (6,3016) = 50.12; \ p = .001; \ \eta^2 = .09$). On five of the characteristics, the completely private character of a station did not have similar effects in the Western European culture and the Chinese-dominated culture (see Table 6). The variables ‘dramatic story subject’ ($F (1,3021) = 42.47; \ p = .001; \ \eta^2 = .01$), ‘camera shots’ ($F (1,3021) = 98.38; \ p = .001; \ \eta^2 = .03$), ‘tabloid transitions’ ($F (1,3021) = 43.55; \ p = .001; \ \eta^2 = .02$), and ‘layperson speaking’ ($F (1,3021) = 36.96; \ p = .001; \ \eta^2 = .01$), revealed different effects in the Western European and Chinese-dominated culture.

To answer the second research question of whether privatization of a news program would have similar effects on arousing news characteristics in Western European and Chinese-dominated cultures, interactions between the variables ‘type of station’ and ‘culture’ were estimated. Again, a significant multivariate effect was found ($F (6,3016) = 50.12; \ p = .001; \ \eta^2 = .09$). On five of the characteristics, the completely private character of a station did not have similar effects in the Western European culture and the Chinese-dominated culture (see Table 6). The variables ‘dramatic story subject’ ($F (1,3021) = 42.47; \ p = .001; \ \eta^2 = .01$), ‘camera shots’ ($F (1,3021) = 98.38; \ p = .001; \ \eta^2 = .03$), ‘tabloid transitions’ ($F (1,3021) = 43.55; \ p = .001; \ \eta^2 = .02$), and ‘layperson speaking’ ($F (1,3021) = 36.96; \ p = .001; \ \eta^2 = .01$), revealed different effects in the Western European and Chinese-dominated culture.

To get more insight into the nature of the effects privatization may have within the two cultures, contrast analyses were performed. These analyses showed that the effect of privatization was positive in the Western European culture for ‘camera shots’ ($F (1,3021) = 14.67; \ p = .001; \ \eta^2 = .01$), ‘tabloid transitions’ ($F (1,3021) =

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Table 5. Arousing news characteristics in stations with varying degrees of privatization.

<table>
<thead>
<tr>
<th></th>
<th>Privatization: Low degree $M \ (SD)$</th>
<th>Privatization: High degree $M \ (SD)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dramatic story subject</td>
<td>.32 (.01)</td>
<td>.33 (.01)</td>
</tr>
<tr>
<td>Dramatic pictures</td>
<td>1.22 (.09)</td>
<td>1.30 (.10)</td>
</tr>
<tr>
<td>Camera shots</td>
<td>14.93 (.17)</td>
<td>13.04 (.19)</td>
</tr>
<tr>
<td>Tabloid transitions</td>
<td>.63 (.04)</td>
<td>1.25 (.04)</td>
</tr>
<tr>
<td>Personalization</td>
<td>.22 (.01)</td>
<td>.16 (.01)</td>
</tr>
<tr>
<td>Layperson speaking</td>
<td>.16 (.01)</td>
<td>.14 (.01)</td>
</tr>
<tr>
<td>$n$</td>
<td>1662</td>
<td>1366</td>
</tr>
</tbody>
</table>
The results for the variables ‘dramatic story subject’, ‘dramatic pictures’, and ‘personalization’ were not significant. Based on these results, it may be concluded that the effect of privatization is slightly positive in the Western European culture. For the Chinese-dominated culture, a negative effect of privatization was found for ‘dramatic story subjects’ ($F(1,3021) = 13.87; p = .001; \eta^2 = .01$), ‘camera shots’ ($F(1,3021) = 160.79; p = .001; \eta^2 = .05$), ‘personalization’ ($F(1,3021) = 33.96; p = .001; \eta^2 = .01$), and ‘layperson speaking’ ($F(1,3021) = 14.94; p = .001; \eta^2 = .01$). Only for ‘tabloid transitions’ $F(1,3021) = 6.28; p = .012; \eta^2 = .00$ it was found that news stories of stations with a high degree of privatization contained more of this arousing news characteristic. No effect of privatization was observed for ‘dramatic pictures’ within the Chinese-dominated culture. In general, the results of privatization are positive or non-significant in the Western European culture, while a negative effect was found for most of the arousing news characteristics in the Chinese-dominated culture.

**Review of results**

This study showed that competitive pressure in television news markets has a positive effect on the presence of arousing news characteristics. This effect was found within the Western European markets as well as within the Chinese-dominated markets (H1). The generally positive effect of competitive pressure tends to be somewhat more positive in the Chinese-dominated culture than it is in the Western European culture (RQ1). The idea that completely private news stations featured more arousing news could not be supported unequivocally (H2). In the Western European culture, privatization had positive or zero effects on the presence of arousing news characteristics. However, in the Chinese-dominated culture, privatization mostly had a negative effect (RQ2).

<table>
<thead>
<tr>
<th></th>
<th>Western European stations</th>
<th>Chinese-dominated stations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Privatization: Low degree</td>
<td>Privatization: High degree</td>
</tr>
<tr>
<td></td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
</tr>
<tr>
<td>Dramatic story subject</td>
<td>.42 (.02)</td>
<td>.44 (.02)</td>
</tr>
<tr>
<td>Dramatic pictures</td>
<td>1.58 (.12)</td>
<td>1.60 (.12)</td>
</tr>
<tr>
<td>Camera shots</td>
<td>12.28 (.23)</td>
<td>13.48 (.22)</td>
</tr>
<tr>
<td>Tabloid transitions</td>
<td>1.01 (.05)</td>
<td>1.63 (.05)</td>
</tr>
<tr>
<td>Personalization</td>
<td>.15 (.02)</td>
<td>.18 (.02)</td>
</tr>
<tr>
<td>Layperson speaking</td>
<td>.13 (.02)</td>
<td>.18 (.02)</td>
</tr>
</tbody>
</table>

$n = 909$  $n = 987$  $n = 753$  $n = 379$
Discussion

Several longitudinal studies that were conducted within the US and a number of Western European news markets have demonstrated a positive correlation between competitive pressure and a growing presence of arousing television news (cf. Hendriks Vettehen et al., 2005; Hjarvard, 2000; Hofstetter & Dozier, 1986; Hvitfelt, 1994; Slattery & Hakanen, 1994; Slattery et al., 2001). However, a major limitation of these studies was that each study was conducted within a particular market. As a result, none of the studies could eliminate the role of concurrent changes within the market that might also influence arousing news, for instance technological changes, changes in the public’s tastes and values, or changes in journalistic ideas, norms, and practices. A major contribution of the present study is that it accounts for cultural differences in establishing a correlation between the degree of competitive pressure in the market and the presence of arousing news. Regarding technological factors that may influence the presence of arousing news characteristics, it may be assumed that at the time of the data collection (2007), digital data transmission and editing techniques were more or less equally available in each of these markets. However, in making the distinction between Western European and Chinese-dominated cultures, cultural differences such as the public’s tastes and values, and the journalistic norms and practices were largely controlled in the present study. The fact that we did find a correlation between competitive pressure in markets and the presence of arousing news characteristics gives credence to the suggestion from earlier studies that competitive pressure promotes arousing news.

The finding that the expected positive impact of competitive pressure on arousing news was more pronounced in the Chinese-dominated culture is somewhat remarkable. Drawing on the theoretical distinction between the more individualistic Western European culture and the more collectivistic Chinese-dominated culture, we anticipated that producers in a collectivistic culture would tend to perceive themselves as members of a larger society, and that for this reason they would be less sensitive to pressures from the station. Hence, if we would find different effects of competitive pressure between the two cultures at all, the effect within the Chinese-dominated culture would be smaller.

One explanation for the somewhat larger impact of competitive pressure in the Chinese-dominated culture might be that, within this culture, the firm may also count as a collective. If producers in collectivistic culture perceive themselves as employees of the station, they can be expected to be more sensitive to pressures from the station, which would explain the study finding, and which was demonstrated in group identification psychology depending on the salience of the group (Kelly & Kelly, 1994).

An alternative explanation for the larger impact of competitive pressure in the Chinese-dominated culture may start from the observation that the sample did not include stories from the type ‘Chinese-dominated culture, low competitive pressure, commercial station’. As a result, the estimated interaction between the variables ‘competitive pressure’ and ‘culture’ was only based on public service news stories. This means that the effect of competitive pressure on the Chinese-dominated markets was merely based on a comparison of the public service news stories from Mainland China and Taiwan. However, from all markets studied, the competitive pressure regarding flagship news programs probably was the lowest in Mainland China (with
a single flagship news program), while it was the highest in Taiwan (with five flagship news programs). Accordingly, the variation in competitive pressure was a bit larger in the Chinese-dominated culture markets than it was in the Western European markets, which might explain the somewhat more positive effect of competitive pressure that was found.

The finding that, in the Western European culture, news stories from fully privatized stations featured more arousing characteristics than the stories by their public service counterparts was in line with findings from earlier studies (Hendriks Vettehen et al., 2005; Hjarvard, 2000; Hvitfelt, 1994). However, the finding that, in the Chinese-dominated culture, news stories from fully privatized stations featured less arousing characteristics than news stories from stations that were low on privatization, were both new and unexpected. From a theoretical viewpoint, it is difficult to conceive why fully privatized stations would feature less arousing characteristics than (semi)public stations. However, again it should be noted that the sample did not include stories from the type ‘Chinese-dominated culture, low competitive pressure, commercial station’. As a result, the estimated interaction between the variables ‘type of station’ and ‘culture’ was only based on the high competitive pressure stories. This means that the difference between stations on the Chinese-dominated markets was based on a comparison between one Taiwanese station that was low on privatization and two stations from Taiwan and Hong Kong that were high on privatization. Moreover, as already stated in the Method section of this paper, the Taiwanese station TTV that was assigned to the ‘low degree of privatization’ category was, at the time of the data collection, in the transition phase towards a completely privately owned station. An ex post facto explanation of the unexpected findings regarding the type of station variable in the Chinese-dominated culture may be that TTV’s news editors’ and reporters’ anticipatory behavior in this transition phase has been more competitive and profit driven. If that were the case, the TTV data thus would have affected the results, explaining why, in the Chinese-dominated culture, fewer arousing characteristics were found in the completely privately owned stations’ news stories.

The most important limitation of the current study is that only six public service news stations and six commercial news stations were available for the comparison at the news station level. Moreover, the categories of competitive pressure consisted of three to four markets, and three to four markets per culture were analyzed. Finally, as already mentioned, no stories were included from the type ‘Chinese-dominated culture, low competitive pressure, commercial station’. For these reasons, a news routine specific to one particular country, or even a particular editorial staff, may have had a substantial impact on the findings.

Another consequence of the limited number of markets and stations is that the categories of our independent variables were necessarily crude. For instance, the category ‘low competitive pressure’ included Flanders, French-speaking Belgium, and Mainland China. The Chinese market is less competitive than the markets of these two small European markets, and this difference should be taken into account in the interpretations of the findings, as our discussion of the larger impact of competitive pressure in Chinese-dominated markets showed. Also, cultural differences may be expected within both the Western European culture (cf. Hallin & Mancini, 2004) and within the Chinese-dominated culture (Hu, 2009). Still, the
differences between collectivistic and individualistic cultures are considerable, which justifies our distinction between Western European and Chinese-dominated culture.

A final consequence of the limited number of markets and stations is that, although the theoretical model was clearly a multilevel model, the hypotheses were only tested at one level. However, differences between cultures do not explain variations within markets, and differences between markets do not explain variation within news stations. As a consequence, fairly low effect sizes were found (between \( \eta^2 = .01 \) and \( \eta^2 = .10 \)). Future studies on this subject might want to increase the number of cases and news programs substantially. It should be noted that this requires an enormous quantity of detailed content analyses, which are both laborious and time consuming. However, such an undertaking would enable the application of multilevel modeling, a technique that is well-suited to deal with the multilevel character of the factors at stake. If combined, a large number of cases and the application of multilevel techniques may provide more definite insight into the factors explaining arousing features in television news.

References


