FOLIA GEOGRAPHICA • ISSN 1336-6157 (hard copy) • ISSN 2454-1001 (online)

REGIONS IN TV NEWS BROADCASTING: SELECTED ASPECTS ON THE EXAMPLE OF THE CZECH REPUBLIC

Jaroslav URMINSKÝ [A*]

Received: August 21, 2018 | Revised: September 29, 2018 | Accepted: October 4, 2018
Paper No. 18-60/2-517

Abstract
The presented contribution evaluates the role of mass media within territorial development. The purpose of the paper is to analyze and evaluate regionally bound TV news reporting in the Czech Republic between years 2005-2011. The attention is focused on the information about economies of self-governing regions (NUTS III) broadcasted in the news reporting of main television stations in the Czech Republic. A combination of research methods was used. Due to the character of dataset, empirical research is based on the contingency tables. Afterwards Pearson's chi-square test and Cramer's V were used. Correspondence analysis was applied for the evaluation and visualization of virtual reflection of economic information about regions. Development potential of the territory could be suppressed or supported by the mass media, as virtual portrayals may (not) correspond to the real character of the territory. One single event can distort the entire portrayal of a particular territory. We find also differences in the structure of information between public and commercial televisions. Content structure of concrete TV broadcasting substantially affects audience opinion.

Key words
Territorial development, mass media, mental maps, correspondence analysis, regions, Czech Republic

INTRODUCTION

Effective functioning of a globally connected society is dependent on ensuring the access and flow of information. Individual actors make decisions and act on the basis of information available to them. But the information often comes from secondary sources, e.g. statistical databases, cartographic maps or mass media. Attention is focused on the mass media. They can be perceived as means communicating a message to a wide range of recipients, populations, organizations, investors etc. They provide information from the economic, social and environmental spheres of life. It should be stated that most of them contain spatial connotations (McLuhan, 1994; De Fleur and De Fleur, 2009 or McQuail, 1994).

A* VŠB -Technical University of Ostrava, Department of Regional and Environmental Economics, 17. listopadu 15/2172, 708 33 Ostrava, Czechia
jaroslav.urminsky@vsb.cz (corresponding author)

Thus, among others, mass media compose spatial patterns of information, also containing economic characteristics of towns, regions, countries etc. Based on them, people can create ideas, opinions, stereotypes, expectations and preferences about places in which they have never been before. These mental aspects directly enter into the decision process in the context of behavior in space. Mass media represent actors actively influencing territorial development. Some authors call it media-territorial or meditorial development (see Sucháček *et al*., 2015). Obviously, the management of regions and municipalities should take into account the role of the media in everyday world. The resulting virtual portrayals, which are created by the media, co-determine the resulting form of territorial image. Through mental maps they influence current situation but also the future success of particular territories. Finally, it's possible to claim that mass media play an increasingly important role in the society and also within territorial development (Gregory *et al*., 2009; Gould and White, 1986 or Canter, 1977).

Psychological aspects are among the primary factors influencing formation and evolution of territorial inequalities. This underlines the complexity and multidimensional nature of territorial inequalities (Kutscherauer *et al*., 2010 or see Klamár *et al*., 2015). These psychological aspects represent also images that people have about particular territory. Mass media have capability to influence formation, change or conservation of images by content of published information, their processing and contextual interpretation. Thus, it is important to focus on the differentiation among territories within massmedia world.

It can be argued that such issues reflect the growing attention given to intangible geographies and soft factors of territorial development.

The structure of the contribution is divided into three parts. The first part is focused on role of the mass media in the society. The main attention is devoted to the issue how the media select real events for inclusion and processing into the news reporting. It should be stated that this selecting process does not have a random character. The news reporting can be perceived as one of the most important sources of information. By selecting the real events that are ultimately presented to the public, mass media set up a public agenda and co-shape mental maps of the actors.

The second part of the paper contains input data and description of the method of correspondence analysis. The input data matrix encompasses data about regionally bound TV news contributions reflecting the economic character of self-governing regions (NUTS III) in the Czech Republic. News reports were broadcasted by the largest TV stations in the Czech Republic between 2005-2011. The method of correspondence analysis was applied to capture, evaluate, and visualize the relationships among the monitored categories, i.e. among TV stations, regions and thematic structure of the information. The basic methodical procedure can be described as follows. The first step contains quantification of potencial depen-

dence between observed categories in the contingency tables. Basic measure of association between categories is represented by χ^2 statistics. Then, based on χ^2 the statistic, Pearson's Chi-Square test of independence at the level of significance α=0.05 was applied. Cramer's coefficient V was used for the evaluation of the level of potential dependence. Correspondence analysis was applied in the last step. The results of the correspondence analysis are expressed in a synthetic form through scatter plot, due to the limited scope of the article.

The third chapter contains results of our research, their visualization and interpretation in the context of territorial development. The author will test three basic research hypotheses in this part.

OBJECTIVES

Based on unique database including wide spectrum of TV news about particular regions, the objective of the paper is to analyze and evaluate regionally bound TV news reporting in the Czech Republic. The attention is focused on the economic information. Correspondence analysis was applied for the assessment and visualization of virtual reflection of the economic information about regions in the Czech Republic.

MASS MEDIA AND TERRITORIAL DEVELOPMENT

Globalization substantially transformed a spatio-temporal context, in which we are acting. The suppression of space-time barriers has allowed mutual interconnection, but also the mutual interdependence of an ever-wider spectrum of actors and their activities. We are dependent on actors located often in remote locations. Contrary to that, the interaction of people with each other and with the environment is still partly limited by physical possibilities. Nonetheless, it is possible to claim, that we have the opportunity to gather as much information about our surroundings as never before. We do not live in an informational vacuum. We are informed about what's happening in remote streets, towns, regions, countries etc. One obtains information and experience on events beyond their own personal experience. This was made possible through mediated information. The issue of securing flow of information in the mass scope comes at the forefront.

The systematic interconnection of human society necessitates increasing requirements to the technical equipment and to the ability of mutual communication. Access to the information, capability of their perceiving, cognitioning and the capability of effectively evaluating and transformating of them to the knowledge, usable for specific purposes, with a pervasive number of communication links is becoming a key area for the functioning of human societies and their systems and subsystems including economic ones. In other words, the information needs are currently put at the level of physical needs. One of the key aspects of the commu-

nication process is the way to find such a transfer of information that would ensure that the information gets from the original source to as many as possible and to the widest range of recipients. This feature is fulfilled by mass media. They provide access to a broad information sources and extend the boundaries of imagination and knowledge. Mass media is a means of communication that provides mass information flows in this context (Giddens, 1990; Harvey, 1989, Franklin and Murphy, 1991 or Jakubowicz, 2004)

The mass media can be perceived as an institution. Institutions represent socially established rules. They influence and limit human relations and activities. The main function of the institutions is to reduce the uncertainty of everyday life through the provision of stable structures of human relations. These structures can take the form of both formal and informal rules (see North, 1990). Developed countries have established rules applicable for organizations providing mass communication. The so-called „*Media laws*" are formal institutions in this sense. On the other hand, there are also informal rules such as ethical codexes. Work routines and stereotypes affect the resulting form of media products, including also TV news reporting. The news reporting are broadcasted in the prime time. They can be considered as one of the key media products. It is possible to claim they represent one of the primary sources of information in the current world at the same time (Amin and Thrift, 1995; Jakubowicz, 2001; Karlsson and Picard, 2011 or Rottig, 2016)

Obviously, personal characteristics also play a significant role within the process of creating news reporting. But Shoemaker *et al*. (2001, p. 242) suggests that: „*The data support the idea that routine forces are more successful in winning the competition to determine what becomes news than are individual forces*". The theory of gatekeeping deals with the issue of how are events selected and transformed into the news.

The wide spectrum of events happens in every municipality, region or country virtually every day. Naturally, all events can not be transformed to the form of news. Gatekeeping is the process by which a vast number of everyday events are filtered, processed and transformed into a few news that are actually transmitted. This is not only about selection of events. It also includes how the news are edited, disseminated in time, but also how are manipulated. The gatekeeping can be perceived as a complex process by which the transfer of social reality through the media is constructed (Galtung and Ruge, 1965; Shoemaker *et al.*, 2001 or Jirák and Köpplová, 2003).

Every event is representing potential news. But every event contains certain aspects that facilitate or limit their passage through media channels. Therefore, the selection of events for processing and inclusion into the news reporting is not random. It is governed by routine rules that represent so-called news values or news factors. By the news values are understood all factors that directly influence both selection and transformation of events into the news reporting. These

values are always dependent on the given social and cultural environment and on the analyzed period (see Dearing and Rogers, 1996; Shoemaker and Vos, 2009 or McCombs and Shaw, 1972).

The first methodologically-based analysis of news values was provided by Galtung and Ruge (1965) in their study focusing on the structure of Norwegian foreign news reporting. They defined twelve fundamental factors that predetermine the event for transformation into the news. Unambiguity, personification, negativity, frequency and others can be classified as key factors co-determining the selection of events.

Potter (2012) describes the nature of people's reactions to stimuli coming from the media. He mentions cognitive effects among others. The mass media presents information that can be processed, memorized and later called back and used to the audience. Thus, they help to perceive, recognize, evaluate and orient within environment of the particular territories from the spatial point of view. In other words, the capability to construct a mental description of places in which he or she has never been is typical for human. This ability is possible through texts, speeches, friends' descriptions, but also through information transmitted by the media. Within the news reporting, information that can be assigned to the particular territory are mainly published. They co-shape perception, knowledge, expectation and evaluation of these territories. Put succinctly, mass media co-shape mental maps of the population (Kitchin, 1994; Saarinen and McCabe, 1995; Gould and White, 1986; Crang, 1998 or Haq and Rahman, 2015).

Mental maps reflect psychological representation of space. We receive information and adapt them to our own schemes of similar events, with which we have either a personal or a mediated experience. In this way, our cognitive schemas allow us to create and copy unknown information about territories. According to this, we design our own forms of mental maps. Mental maps, among other things, serve as one of the oldest mnemonic tools. They serve as means of structuring and retaining knowledge. They extend beyond mere spatial knowledge towards social and environmental characteristics. Mental maps are not a stable entities. Conversely, they are characterised by dynamics, changes and evolve over time. They are highly complex, selective, abstract and generalized structures. They are incomplete, schematized, expanded and also distorted. Mental maps can also be seen as models, in which people make day-to-day decisions (Kitchin, 1994; Tuan, 1975; Downs and Stea, 1977; Bellazza, 1983 or Sucháček *et al.*, 2016).

Mental maps can be linked to the so-called image of the territory. The image can be understood in terms of perception of the territory in the minds of the population, enterprises or institutional structures that are located both inside and outside of the territory. Rijnks and Strijker (2013) describe two main aspects that affect the image. The first aspect is how people get information about the territory and the second how they interact with the territory. The amount of personal

interactions usually decreases with increasing distance from the territory. Information is obtained through sources other than personal experience in this case. The resulting range of information, knowledge and ideas can be severely limited as well as distorted. The image of the region is becoming even more streamlined and uniform with growing distances, through the production and reproduction of information about territory. The important is that stereotypes about individual territories are deeply rooted in the past and very resistant to the change. The information about territory itself can be also consciously or unconsciously distorted. The mass media play an important role in this context. Management of respective territories should monitor regionally bound information appearing in media. The main reason is that the resulting virtual portrayal does not have to match the real situation of the territory. Development potential of the territory can be suppressed or supported by the mass media (Kotler *et al.*, 1993; Vanhove and Klaasen, 1987; Sucháček *et al.*, 2014, Bačík *et al.*, 2015 or Matlovičová, 2008).

DATA AND METHODS

The contribution is focused on intangible aspects of the development of self-governing regions in the Czech Republic. The main attention is devoted to the virtual reflections of economic information from individual regions within television news reporting. Regionally bound TV news were analyzed between 2005 and 2011. The territory of the capital city of Prague and Central Bohemia was aggregated into one territorial unit, due to the natural characteristics of these territories (for more information see Sucháček *et al.*, 2015). Altogether, 13 regions in this paper were analyzed. The thirteen regions are: Prague/Central Bohemia, South Bohemia, Pilsen, Karlovy Vary, Usti, Liberec, Hradec Kralove, Pardubice, Olomouc, Vysocina, South Moravia, Zlin and Moravia-Silesia.

Three basic research hypotheses are tested in our paper:

H1: We assume independence between TV news reporting and economic information variables.
H2: Independence between regions and TV news reporting variables can be assumed.
H3: We expect independence between region and economic information variables.

The news were published within the four news reporting of the three largest television stations in the Czech Republic. The news reporting *Televizní noviny* and *Zprávy* TV of the commercial stations TV Nova and FTV Prima and *Události* a *Události a komentáře* of the public Czech TV were monitored at the same time. Database of news contribution was purchased from Media Tenor, Ltd. This company deals with systematic analysis of media reports, which includes also content analysis of media.

CORRESPONDENCE ANALYSIS

Correspondence analysis is a multivariate statistical technique. It is an algorithm capable of some measurement of correspondence between the rows and the columns in a correspondence table. Using this method, it is possible to describe associations of nominal or ordinal variables and to get a graphical representation in multidimensional space, i.e. subjective map in this case. The position of points directly expresses associations in graph (Hirschfeld, 1935; Yelland, 2010 or Suchá-ček *et al.*, 2014).

The method of correspondence analysis is based on contingency tables with *n* rows and *m* columns. It is possible to define matrix *U* as *n* x *m* with elements U_{ij}. These elements correspond to elements of the contingency table. We can formulate row sums N_{j+}, column sums $N_{+}i$ and the total sums N_T according to:

$$N_{j+} = \sum_{i=1}^{m} U_{ij} , \qquad N_{+i} = \sum_{j=1}^{n} U_{ij} , \qquad N_T = \sum_{j=1}^{n} N_{j+} + \sum_{i=1}^{m} N_{+i} .$$

It is also possible to define the marginal relative frequencies of the rows $r_j = N_{j+} / N_T$ and columns $c_i = N_{+}i / N_T$. When we define frequency matrix *P* with elements $p_{ij} = U_{ij} / N_T$, then the chi-quadrat statistic X^2, used to test the null hypothesis of non-existence of associations between rows and columns can be calculated as follows:

$$X^2 = N_T \sum_{i=1}^{n} \sum_{j=1}^{m} (p_{ij} - r_i c_j)^2 / r_i c_j \ .$$

The formula $t = X^2 / N_T$ represents the Pearson mean quadratic contingency coefficient. The homogeneity is characterized by a small *t* value and heterogeneity by a large *t* value. The *t* value can be expressed as follows:

$$t = \sum_{i=1}^{n} r_i \sum_{j=1}^{m} \left[(p_{ij}/r_i - c_j)^2 / c_j \right] .$$

This is equal with weighted Euclidean distance between the vector of relative frequencies and the average of row profile.

The row profile of the matrix *U* is determined as vector $p_j = (p_{j1} \ldots, p_{jm})$ for $j = 1 \ldots, n$ with elements $p_{ij} = U_{ij} / N_{j+}$. The average row profile $p^T = (p_1, \ldots, p_m)^T$ has components $p_j = N_{+}i / N_T$. As a measure of how rows profiles are different from average rows profiles, we utilized X^2 distance as follows:

$$d_{cj}^2 = (p_j - \bar{p})^T D_p^{-1} (p_j - \bar{p}) ,$$

where D_p^{-1} is diagonal matrix with elements $1/\bar{p}_i$ on the diagonal. Then the statistic X^2 is:

$$X^2 = \sum_{j=1}^{n} N_{j+} d_{c_j}^2 .$$

When we denote $r = P\,I$ and $c = P^T I$, where I are vectors containing only ones, then we can denote matrix J with elements proportional to the standardized residues of contingency table U. Matrix J is defined as follows:

$$J = D_r^{-1/2} (P - rc^T) D_c^{-1/2}$$

It is possible to decompose the rectangular matrix E to the three matrices $E = U\,S\,V^T$, where S *is matrix of singular numbers and* U and V *are left and right eigenvectors. The row profile components of contingency table* f_i are rows of matrix

$$F = D_r^{-1/2} US .$$

The column profile components of contingency table g_i are rows of matrix

$$G = D_c^{-1/2} VS .$$

The pairs of row and column components f_i, g_i are elements of orthogonal residue decomposition ordered hierarchically according to the importance. Finally, this decomposition is referred to as correspondence analysis. Components f_i a g_i are uncorrelated. They have zero mean values, but they are connected by the following linkages:

$$G = D_c^{-\frac{1}{2}} P^T F S^{-1} , \qquad F = D_r^{-1/2} P G S^{-1} .$$

Correspondence analysis allows the decomposition of the X^2 statistics to assess the structures in matrix N. The main objective of correspondence analysis is to identify the sources of heterogenity in the contingency tables (see Meloun and Militký, 2004; Greenacre, 2007 or Rencher, 2002).

VIRTUAL REFLECTION OF REGIONS IN THE CZECH REPUBLIC

Regionally oriented TV news contributions contain information about economic, social and environmental characteristics of the territories. All contributions were categorized into their respective areas based on a uniform methodology through the so-called coding book. Based on the coding book, it is possible to create the content analysis of text documents. Content analysis can be perceived as a method used for the objective, systematic and quantitative description of the content of the communication (Krippendorff, 2012).

Table 1 Distribution of economic information - categories

Category	Frequency	Percent
Economic Life	1 575	23.5
Economic Policy	775	11.6
Economic Criminality	2 518	37.6
Research, Development and Education	1 824	27.3
Total	6 692	100

Source: author calculation, data - Media Tenor

Altogether the amount of more than 52 thousand contributions was published within TV news reporting in the period from 2005 to 2011. Economically-oriented contributions were aggregated into four categories and they can be characterized as follows: economic life, economic policy, research, development and education and economic criminality (see Table 1). The share of news about economic characteristics of the territories was almost 13 % (6 692 news) on the total number of contributions. Each contribution was linked to the particular region.

ECONOMIC INFORMATION WITHIN NATIONAL TV NEWS REPORTING

Relationship between TV news reporting and structure of economic information will be examinded in the first part of the chapter. We test the following research hypothesis:

H1: We assume independence between TV news reporting and economic information variables.

The category of economic criminality can be considered as the most attractive for TV broadcasting. This is in compliance with previous research (see Sucháček *et al*., 2015), in which criminality was one of the most attractive category within TV news broadcasting. The share of this category was almost 37.6% on the total amount of economically oriented contributions. Then follow the categories of research, development and education with 27.3%, economic life with 23.5% and economic policy with only 11.6% on the total amount of news.

The results of Pearson chi-square are shown in the Table 2. Based on the chi-square test we can claim, that statistically significant independence between categories of TV news broadcating and thematic categories of economic information is not existing. Thus, hypothesis *H1* can not be rejected at the level of significance α=0.05. On the other hand, the value of Cramer's V coefficient of contingency means very weak measure of dependency.

Table 2 Measures of dependence in contingency table – TV news and economic information

Description	Value	df	Asymptotic Significance (2–sided)
Pearson Chi-Square	164.017[a]	9	0.000
Cramer's V	0.090		
N of Valid Cases	6692		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 106. 31.
Source: author calculation, SPSS

The results of correspondence analysis are syntetically shown in the Figure 1. Scatter plot visualizes relationship between observed categories based on the method of symmetrical normalization. Figure 1 consists of two dimensions. Correspondence analysis describes 100% of information from the original contingency table in this case. This value can be considered as very high. The first dimension covers 99.2% of variability (inertia) and the second are 0.08%.

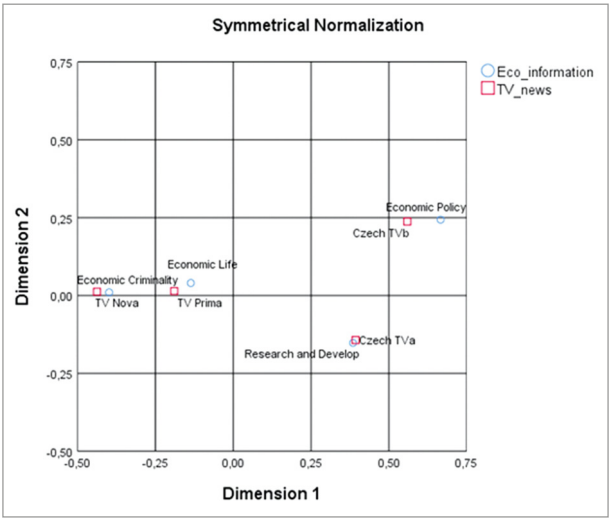

Figure 1
Scatter plot for both TV news broadcasting and economic information
Source: edited by the author, SPSS

Scatter plot shows some interesting relationships. The differences among news reporting of the commercial television and news reporting of public Czech TVa (*Události*) and Czech TVb (*Události, komentáře*) are quite obvious. We can observe the relative proximity of commercial TVs with thematic categories related to the

economic crime in case of TV Nova (*Televizní noviny*) and the economic life in case of TV Prima (*Zprávy*). Contributions about economic crime are primarily of tabloid nature. There are published information about the biggest negative events associated with extensive corruption, misuse of powers and unlawful behavior of actors in the economic system in general (for more information see Urminský, 2018). Contrary to that, TV news reporting of Czech TV is closer to the categories of research, development, education and economic policy. Greater attention is given to the topic associated with the active intervention of the government or with activities, which are connected with the spending of public expenditure. They cover also areas of inequalities, dysfunctions, investors, labor market, basic and applied research etc. It can be argued that it is important, which TV news reporting is watched by internal, i.e. local, regional organizations, entrepreneurs, residents, bureaucrats, etc. and external, i.e. domestic and foreign investors, tourists, visitors, professional associations, competitive regions, etc. target groups of territorial development.

REGIONS WITHIN TV NEWS REPORTING IN THE CZECH REPUBLIC

The next part of the article is focused on the relationship between TV news broadcasting and regions in the Czech Republic. We utilized the same procedure as in previous case. We will test the following research hypothesis:

H2: Independence between regions and TV news reporting variables can be assumed.

Pearson chi-square test of independence reflects that significant dependency of observed categories exists (Table 3). Hypothesis *H2* can not be rejected at the level of significance α=0. 05. Cramer's coefficient of contingency V shows very similar value as in the previous case.

Table 3 Measures of dependence in contingency table – TV news broadcasting and regions

Description	Value	df	Asymptotic Significance (2–sided)
Pearson Chi-Square	192.807[a]	36	0.000
Cramer's V	0.098		
N of Valid Cases	6692		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 24. 83.
Source: author calculation, SPSS

Relationships between 13 regions and TV news broadcasting of 3 TV stations are vizualized by scatter plot at the Figure 2. The symetrical normalization was used too. Figure 2 contains two dimensions too. Correspondence analysis captures

94.5% of information from the original contingency table. This value can be considered very high. The first dimension covers 72.7 % of inertia and the second dimension 21.8%.

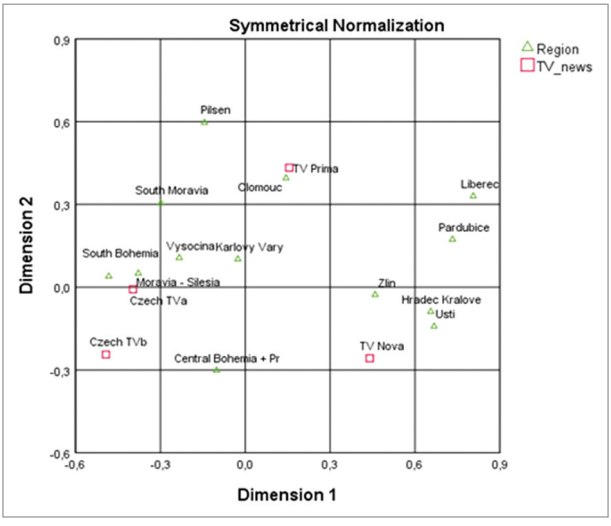

Figure 2
Scatter plot for both TV news broadcasting and regions
Source: edited by the author, SPSS

With the help of Figure 2 we can identify, which regions are more accentuated than others within particular news programs of the biggest TV stations in the Czech Republic. The public news reporting (Czech TV), which can be found on left side of the Figure 2, accentuated primarily regions with the largest population size, such as Central Bohemia + Prague, Moravia – Silesia and South Moravia. These territories concentrate more than 45% of the population in the Czech Republic. It should be mentioned that there are located the biggest towns in the Czech Republic, which represent main economic and institutional centers of the country. The main organizations, including universities, research centers, major corporations and banks are located in this areas. It shoud be noted, that regional branches of the public Czech TV are located in Brno (South Moravia region) and Ostrava (Moravia-Silesia region). The presence of branches can have a positive effect on the amount of news published about these territories. The commercial news program (TV Nova, TV Prima), which can be found on right side of the Figure 2, are more interested in smaller region in terms of their population size. This relationship is apparent especially in case of TV Nova.

VIRTUAL CHARACTERISTICS OF REGIONAL ECONOMIES – SELECTED ASPECTS

Virtual portrayals of regions are investigated in the last part of the article. We examined the following research hypothesis:

H3: We expect independence between region and economic information variables.

The results of Pearson chi-square test are shown in Table 4. Based on the results we can state that statistically significant independence between regions and categories of economic information does not exist. The hypothesis *H3* can not be rejected at the significance level α=0. 05. Cramer's coefficient of contingency V shows the highest value in comparison with previous cases. Nonetheless, the value of Cramer's V is low. Thus, the virtual portrayals of regions are relatively similar.

Table 4 Measures of dependence in contingency table – regions and economic information

Description	Value	df	Asymptotic Significance (2–sided)
Pearson Chi-Square	424.296[a]	36	0.000
Cramer's V	0.145		
N of Valid Cases	6692		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 20. 96.
Source: author calculation, SPSS

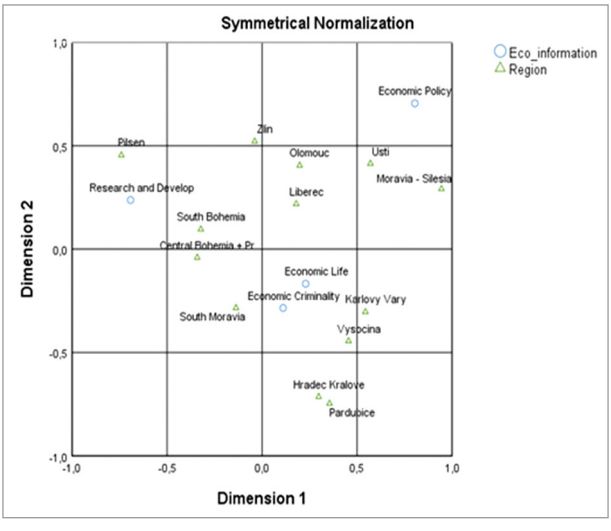

Figure 3
Scatter plot for both regions and economic information
Source: edited by the author, SPSS

Relationship between 13 regions and 4 categories of economic information are vizualized by scatter plot in the Figure 3. The symetrical normalization was applied. Figure 3 contains two dimensions. Correspondence analysis captures 97 % of information from the original contingency table. This value can be considered as high. The first dimension covers 78 % of inertia and the second dimension 19%.

Some relationships can be at least partly revealed on the basis of the results of the correspondence analysis (Figure 3). The most straightforward relationships will be mentioned and interpreted due to the limited scope of the paper.

It is clearly possible to observe the mutual proximity of the category of economic policy with the Moravian-Silesian and Usti regions. In terms of news frequencies, they are the territories attracting media attention. The proximity with category of economic policy can be derived from the thematic strutcture of the published contributions. In sum, information about labor market, unemployment, strikes and taxes, including environmental taxes, belong among the most frequent news in this category. Moravian-Silesian and Usti regions can be perceived as the problematic territories from the economic point of view. They are traditional industrial regions with inappropriate economic structure, long-term problems on the labor market and the low quality of the environment at the same time. It is legitimate to assume that the published contributions have a rather negative bias. On the other hand, one specific event with positive connotations caught the attention of the media in the Moravia-Silesia. This involved a large investment of Hyundai automotive. A lot of attention was given to this event mainly in 2005 and 2006.

Contrary to that, one event with strongly negative connotations is evident in case of Pilsen region. Pilsen region is in close proximity to the thematic category of research, development and education. Significant media attention was attracted the scandal at the Faculty of Law in Pilsen. This scandal is related with a phenomenon when students accelerated their course of study to complete degree requirements in extraordinarily short times (for more information see Sucháček *et al.*, 2016). In sum, the thematic category of research, development and education has become the most frequented within all studied categories in Pilsen region. Obvious is also the largest percentage share of this category compared with the all regions in the Czech Republic. However, this condition does not correspond to the physical infrastructure or real expenditures on research and development in the Pilsen region. Thus, the resulting media portrait is questionable compared to the real characteristics of this territory (see Vyskočilová and Urminský, 2017).

Some elements of gatekeeping, such as negativity, threshold or unexpectedness can be observed in the above mentioned events. On the basis of the results obtained above, we can claime that one event, it does not matter whether positive or negative one, can significantly affect the composition of the whole thematic category. Moreover, one event can significantly affect the overall media portrayal of the territory at the same time.

CONCLUSIONS

The importance of the positive territorial image in the minds of the target groups, both internal, i.e. local and regional organizations, entrepreneurs, residents, bureaucrats and external, i.e. domestic and foreign investors, tourists, visitors, professional associations, competitive regions etc. is also perceived by the responsible managements of the regions, towns and municipalities in the Czech Republic. A lots of strategies and program documents contain active creation of the positive image of the particular territory. Of course, currently there exist some tools how to influence image of the territory within both real and virtual environments. On the other hand, creating the image is not only in hands of territorial managements. There are many channels of communication, via which each target group receives information about particular territory. The mass media enabling mass communication play a very important role in this context. This concerns primarily external target groups located outside the territory. For these target groups, mass media and their products, such as news reporting, are one of the most basic information sources.

It can be stated that it matters, which news in TV broadcasting are particular actors and target groups watching. The reason is that the thematic structures of the information about regional economies are different. The news reporting of commercial TV coverage emphasizes information about common economic events (*category - economic life*) as well as economic crimes (*category - economic criminality*). Contrary to that, news reporting of the public Czech Television accentuated rather information about research and development activity (*category - research, development and education*) in the regions and also information about governmental activities within economic system of the regions (*category - economic policy*).

Differences are observable also in the regional pattern. The news reporting of the public television, contrary to their commercial counterparts, more accentuated regions with the largest population size, in which the biggest towns in the Czech Republic are located. They represent the most important economic and institutional centers of the Czech Republic at the same time.

Naturally, some regions are more connected with some specific thematic area of the economic information. This is apparent, for example, in case of the traditional industrial regions of Usti and Moravia-Silesia. These regions are more accentuated in the area of economic policy. Problems with the economic structure of regions persist, mainly on the labor market.

It should be noted that in some news it is possible to observe elements of gatekeeping, such as negativity, threshold or unexpectedness. The large investments accomplished with the help of investment incentives have attracted the attention of the media in the Moravian-Silesian region. A typical example of an event with negative connotations is a scandal in the Pilsen region. It is possible to claim that virtual portrayals may not correspond to the real characteristics of the territories.

Acknowledgement

The paper was supported by the VSB-TU Ostrava under the SGS project SP2018/92 and research grant KEGA 011PU-4/2017: *Integration of teaching and increase of the content coherence of the related disciplines of the specialized module of Regional development and regional policy*.

REFERENCES

AMIN, A., THRIFT, N. (1995). Institutional issues for the European regions: from markets and plans to socioeconomics and powers of association. *Economy and Society*, 24, 1, 41-66.

BAČÍK, R., MIHAL, J., FEDORKO, R. (2015). The analysis of the impact of selected communication channels on the selected city population' opinion. *Polish Journal of Management Studies*, 12, 2, 7-13.

BELLAZZA, F. S. (1983). The spatial-arrangement mnemonic. *Journal of Educational Psychology*, 75, 6, 830-837.

CANTER, D. (1977). *The Psychology of Place*. London: Architectural Press.

CRAND, M. (1998). *Cultural geography*. New York: Routledge.

DE FLEUR, L.M., DE FLEUR, H.M. (2009). *Mass Communication Theories: Explaining Origins, Processes and Effects*. London: Routledge.

DEARING, W.J., ROGERS, M.E. (1996). *Agenda-Setting*. London: Sage.

DOWNS, M.R., STEA, D. (1977). *Maps in Mind: Reflections on Cognitive Mapping*. New York: Harper and Row.

FRANKLIN, B., MURPHY, D. (1991). *What news? The market, Politics and Local Press*. London: Routledge.

GALTUNG, J., RUGE, H.M. (1965). The Structure of Foreign News. The Presentation of the Congo, Cuba and Cyprus Crises in Four Norwegian Newspapers. *Journal of Peace Research*, 2, 1, 64-91.

GIDDENS, A. (1990). *The consequences of modernity*. Standford CA: Stanford University Press.

GOULD, P., WHITE, R. (1986). *Mental maps*. London: Routledge.

GREENACRE, M. (2007). *Correspondence Analysis in Practice*. Boca Raton: Chapman and Hall/CRC.

GREGORY, D., JOHNSTON, R., PRATT, G. et al. (2009). *The Dictionary of Human Geography*. London: Wiley-Blackwell.

HAQ, M. R., RAHMAN, H. S. (2015). Role of reality TV as a consumer-socialization agent of teenagers in a developing country. *International Journal of Emerging Markets*, 10, 3, 598-618.

HARVEY, D. (1989). *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Oxford: Basil Blackwell.

HIRSCHFELD, O. H. (1935). A Connection between Correlation and Contingency. *Mathematical Proceedings of the Cambridge Philosophical Society*, 31, 4, 520-524.

JAKUBOWICZ, K. (2001). Rude awakening social and media change in central and eastern europe. *Javnost - The public*, 8, 4, 59-80.

JAKUBOWICZ, K. (2004). Ideas in Our Heads: Introduction of PSB as Part of Media System Change in Central and Eastern Europe. *European Journal of Communication*, 19, 1, 53-74.

JIRÁK, J., KöPPLOVÁ, B. (2003). *Média a společnost: stručný úvod do studia médií a mediální komunikace*. Praha: Portál.

KARLSSON, Ch., PICARD, G.R. (2011). *Media Clusters: Spatial Agglomeration and Content Capabilities.* Cheltenham: Edward Elgar.

KITCHIN, M. R. (1994). Cognitive maps: What are they and why study them? *Journal of Environmental Psychology*, 14, 1, 1-19.

KLAMÁR, R., HRIŇÁKOVÁ, A., GAVAĽOVÁ, A. (2015). Development of regional disparities in the Prešov self-governing region at the beginning of 21st century. *Folia geographica*, 57, 1, 26-51.

KRIPPENDORFF, K. (2012). *Content Analysis: An Introduction to Its Methodology*. Thousand Oaks: Sage.

KUTSCHERAUER, A., FACHINELLI, H., SUCHÁČEK, J. et al. (2010). *Regionální disparity: disparity v regionálním rozvoji země, jejich pojetí, identifikace a hodnocení*. Ostrava: VŠB-TU Ostrava.

MATLOVIČOVÁ, K. (2008). Place marketing process – Theoretical aspects of realization. Folia geographica, 12, 195-224.

McCOMBS, E.M., SHAW, L.D. (1972). The Agenda-Setting Functions of the Mass Media. *Public Opinion Quarterly*, 36, 2, 176-187.

McLUHAN, H.M. (1994). *Understanding Media: The Extensions of Man*. London: The MIT Press.

McQUAIL, D. (1994). *Mass communication theory: An introduction*. London: Sage.

MELOUN, M., MILITKÝ, J. (2004). *Statistická analýza experimentálních dat*. Praha: Academia.

NORTH, C. D. (1990). *Institutions, institutional change and economic performance*. Cambridge UK: Cambridge Univesity Press.

POTTER, W. J. (2012). *Media Literacy*. Thousand Oaks CA: Sage.

RENCHER, A. (2002). *Methods of Multivariate Analysis*. New York: Wiley.

ROTTIG, D. (2016). Institutions and emerging markets: effects and implications for multinational corporations. *International Journal of Emerging Markets*, 11, 1, 2-17.

RIJNKS, H. R., STRIJKER, D. (2013). Spatial effects on the image and identity of a rural area. *Journal of Environmental Psychology*, 36, 103-111.

SAARINEN, F.T., MACCABE, L.CH. (1995). World Patterns of Geographic Literacy Based on Sketch Map Quality. *The Professional Geographer,* 47, 2, 196-204.

SHOEMAKER, J.P., EICHHOLZ, M., KIM, E. et al. (2001). Individual and Routine Forces in Gatekeeping. *Journalism & Mass Communication Quarterly*, 78, 2, 233-246.

SHOEMAKER, J.P., VOS, P.T. (2009). *Gatekeeping Theory*. New York: Routledge.

SUCHÁČEK, J., SEĎA, P., FRIEDRICH, V. et al. (2014). Media Portrayals of Regions in the Czech Republic: Selected Issues. *E+M Ekonomie a Management*, 17, 4, 125-140.

SUCHÁČEK, J., SEĎA, P., FRIEDRICH, V. et al. (2015). Regional Dimension of Security and Accidents and their TV Reflection in the Czech Republic. *Transformations in Business and Economics*, 14, 3C, 544-563.

SUCHÁČEK, J., SEĎA, P., FRIEDRICH, V. et al. (2016). From Regional to National Clouds: TV Coverage in the Czech Republic. *PLoS ONE*, 11, e0165527.

TUAN, Y. F. (1975). Images and Mental Maps. *Annals of the Associaton of American Geographers*, 65, 2, 205-213.

URMINSKÝ, J. (2018). Economic criminality in regions as a media topic. In Brno, Klímová, V., Žítek, V. ed., *21st International Colloquium on Regional Sciences proceedings of the international konference*. Brno: Masaryk University, pp. 774-781.

VANHOVE, D. N., KLAASSEN, H.L. (1987). *Regional Policy: A European Approach*. Avebury: Aldershot.

VYSKOČILOVÁ, Š., URMINSKÝ, J. (2017). Media Portrayals of Regions in the Czech Republic in the Sphere of Science, Research and Education. In Klímová, V., Žítek, V. ed., *20th International Colloquium on Regional Sciences proceedings of the international conference*. Brno: Masaryk University, pp. 215-221.

YELLAND, M. P. (2010). An Introduction to Correspondence Analysis. *The Mathematica Jounal,* 12, 1-23.