

LOCATION FACTORS OF THE CREATIVE AND KNOWLEDGE - INTENSIVE INDUSTRIES IN EUROPEAN METROPOLITAN REGIONS

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Location factors of the creative and knowledge-intensive industries in European metropolitan regions.

The emergence and rapid development of creative and knowledge-based industries is one of the features of both a structural change of the world economy and society as well as the process of advancing metropolitanization. Metropolitan regions are among those where this sector is developing especially dynamically, turning into one of the most important markers of their competitiveness. The identification of mutual interdependences between the process of accommodating creative knowledge and the competitiveness of metropolitan regions within the enlarged European Union has become the subject of an international research project called ACRE, implemented within the EU Sixth Framework Programme. The project's central question is: What conditions (in particular, so-called "soft" factors) stimulate creative urban processes?

Relying on the results obtained under this project, the article focuses on the process of development of the creative knowledge sector in 13 European metropolitan regions which participate in the ACRE project. In particular, it presents:

(a) a general outline of the above-mentioned project in the context of Richard Florida's concept of a creative class and a creative city and (b) an analysis of factors determining the location and development of the creative knowledge sector.

Key words: location factors, creative sector, European metropolitan regions, ACRE project

INTRODUCTION

The year 2009 marks the centenary of Alfred Weber's publication in Tübingen of his landmark book, *Über den Standort der Industrien*, often thought to be the first theoretical approach to the issue of industrial location¹. Weber's unquestioned contribution was the introduction to literature – first economic, then geographical – of the notion of a "location factor" (*Standortfaktor*). This notion has remained in use until today, although its meaning has changed a lot. Hence, by using it as the head of the title of this article, I wish to celebrate the centenary on the one hand, and on the other, to encourage reflection on the present-day meaning of this concept and new kinds of location factors. They apply in particular to creative and knowledge-intensive industries.

The emergence of creative and knowledge-intensive industries (termed also the creative sector or creative knowledge sector – those notions are used interchangeably in the article) is one of the features of both, a structural change in

¹ This is not quite true, as many elements of Weber's theory (Weber 1909) can be found in earlier works (e.g. W. Launhardt 1882 and A. Marshall 1890, to mention just a couple of names).

the global and European economies and societies, and of advancing metropolitanization. Its spatial consequences, however, have not been fully identified yet. Hence, this is a real challenge meriting a geographical debate. This debate is based on different theoretical inspirations and a variety of empirical evidence.

LOCATION FACTORS OF THE CREATIVE KNOWLEDGE SECTOR – THEORETICAL BACKGROUND

In geographical literature, creativity appears as an essential factor of regional development in G. Törnqvist's *Creativity and the renewal of regional life* (1983). There he introduced the notion of a "creative milieu", which he saw as possessing three kinds of resources:

- a) a large body of information readily transferable within such an area,
- b) a body of knowledge based not only on the accumulation of data, but also on the accumulation of knowledge over time, as in university centres, and
- c) expertise in specified types of activity.

The combination of those three types of resources is a condition for the emergence of a fourth, namely creativity, which means an ability to create new forms and values, whether material (e.g. products) or immaterial (e.g. symbolic values, ideas). In the 1980s the "creative milieu" concept found widespread application, especially in Swedish regional studies and theories of regional development (Andersson 1985). In turn, Malecki (2000) highlighted the significance of knowledge and creativity in the formation of regions' competitive advantage (cf. also Musterd et al. 2007, Chojnicki and Czyż 2008).

The discussion about the role of creativity in regional development as well as about the factors determining the growth of a creative sector owes its present animation primarily to the works by Richard Florida, *The rise of the creative class ...* (Florida 2002) and *Cities and the creative class* (Florida 2005a). In his opinion, human creativity is the most significant source of socio-economic development (including the establishment of new firms and the creation of new jobs). Socio-economic development produces a new socio-economic stratification in which an increasingly important position is occupied by the so-called creative class. Its distinguishing feature is the involvement of its members in the type of work whose function, as in Törnqvist, is the formation of significant new forms, and a substantial proportion of the value added of the work is immaterial in nature (Florida 2005a, p. 34). According to Florida's estimates, in the United States the creative sector accounts for about 30% of total employment, but for as much as 47% of the wage-packet, as the mean pay in this group is almost twice that in the manufacturing and service sectors. In turn, the research conducted under a project (run by Asheim and Gertler) "Technology, Talent and Tolerance in European Cities: A Comparative Analysis" shows that in eight advanced European economies (Denmark, Finland, The Netherlands, Germany, Norway, Sweden, Switzerland and Great Britain) the proportion of employment in the creative sector reaches 38% (cf. Boschma and Fritsch 2007, p. 245). In another research project, ACRE (Accommodating Creative Knowledge: Competitiveness of European Metropolitan Regions within the Enlarged Union), on which I shall report in the further part of this article, in the 13 European metropolitan regions under analysis (including East-Central Europe), the employment

rate in the creative sector ranges from 18% in Poznan to 31% in Milan. However, it is advisable to approach all the above figures with a measure of caution because of the different underlying definitions and classifications of the creative sector and different employment statistics. Despite the above difficulties, an increase in the importance of the creative sector in the socio-economic structure of the selected regions seems to be an incontrovertible fact.

Locational preferences of the creative class, whether residential or working, display a distinct tendency towards spatial concentration. Clusters of the creative class can be found in some specific types of area called creative regions, and their formation – Florida claims – is facilitated by factors described as the 3Ts: Technology, Talent and Tolerance. In those regions creative people (such as scientists, artists, architects, designers, experts and analysts, computer programmers) stimulate one another's ventures, while the outside environment, with its openness, diversity, multi-culturalism, tolerance and talent promotion, enhances their work by creating conditions for avant-garde, unconventional patterns of behaviour and daring visions of development and planning conceptions. These areas are highly advanced technologically, feature a high quality of life, and attract talent. Usually, such areas are metropolitan regions.

Florida's theory has attracted some sharp criticism, but on the other hand it has proved a source of inspiration for a host of interesting geographical and regional studies. Their wider discussion can be found in the works by Strykiewicz (2008) and Vorley et al. (2008). It seems that the many theory-related reservations notwithstanding, a discussion about the role of the creative class in regional development or of factors determining the formation of a creative city/region gives geographical studies new impulses and makes researchers look for new topics.

One of Florida's most important and most controversial thoughts on the role of the creative class in the process of regional development is his claim that creative persons display a much higher mobility than average and migrate primarily to places with such characteristics as a tolerant urban climate and openness towards new ideas and newcomers (cf. Florida 2002, 2003 and 2005b). Boschma and Fritsch (2007, p. 244) write:

“A main reason for this preference is that diversity serves as a source of inspiration in the innovation process (Andersen and Lorenzen 2005). In addition, the creative class attaches great values to urban facilities and cultural services such as cinemas, bars, museums, art galleries, restaurants and trendy shops. In other words, Florida places emphasis on the socio-cultural underpinnings of regional development. (...) According to Florida, this type of “people's climate” provides a conducive environment for regional growth. This stands in contrast to conventional beliefs that refer to the qualities of places in terms of “business climate”, such as low taxes or good infrastructure. The essence of Florida's proposition is that places with a good “people's climate” retain and attract creative people who, in turn, induce new economic activities, such as start-ups and high-tech firms. Therefore, the creative class is not attracted to places with high growth *per se*. On the contrary, regional growth is expected to be more of an outcome of the presence of creative people, or in the terminology of Florida, jobs will follow people instead of people following jobs.”

New conceptions of location and regional development seem to be emerging. They propound a combination of the location factors of firms, the quality of life, attraction and behaviour patterns of the creative class, and regional competitiveness (cf. McCann and Sheppard 2003, Clark 2003, Dziemianowicz 2008, Strykiewicz 2009). In general, one can say that cost-related location factors (such as transport costs, labour costs, taxes, etc.) are losing their importance, whereas the role of the quality of human capital is growing. In particular, the following features are essential: creativity, codified and tacit knowledge, high professional qualifications, adaptability to quick changes, openness to new ideas, and ability to co-operate. Crone (2003) states that in the creative sector the flow of ideas is just as important as the flow of physical capital. The differences between traditional and new conceptions of regional development paths are presented in Fig. 1. Naturally, these different development pathways should be considered as complimentary rather than disjunctive.

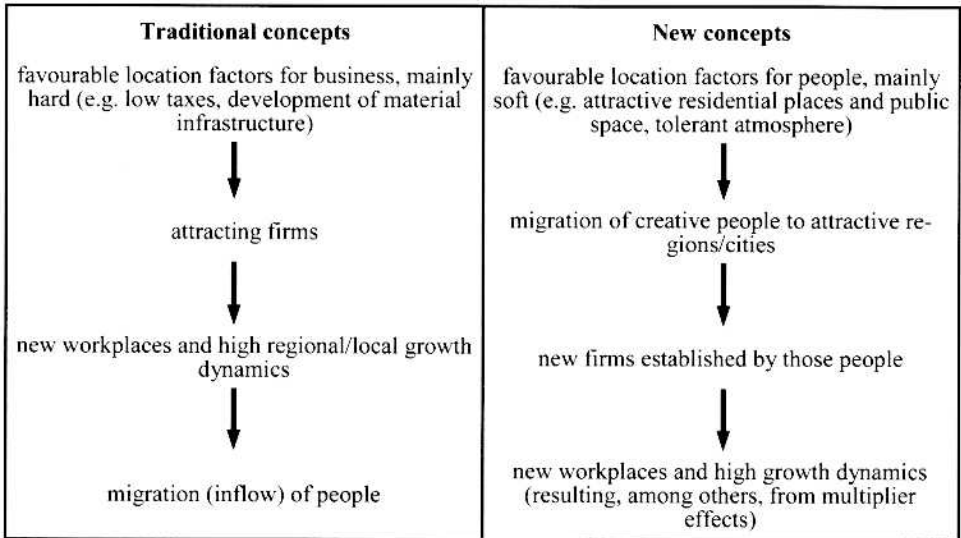


Fig. 1. Change in the concepts of regional development paths

Source: own compilation

The present article seeks an answer to the question of what factors affect the development of the creative sector in metropolitan regions. The analysis is based on the preliminary results of an international research project, ACRE, which will be described briefly below. Paradoxically enough, the attempts at a verification of Florida's hypotheses made so far (e.g. Andersen and Lorenzen 2005, Boschma and Fritsch 2007, Stamet et al. 2008) have largely rested on statistical indices rather than on the opinions of creative people whose behaviour is the direct concern of those hypotheses. That is why the results of the ACRE project presented here deserve special attention – they reflect the preferences and motives of people making decisions about their places of residence and work.

OUTLINE OF THE ACRE PROJECT AND ITS MAIN RESULTS

The ACRE project rests on the assumptions that it is primarily some metropolitan areas that are (or are likely to become) the creative regions of the modern world, and that the development of the creative sector is the chief factor responsible for the growth of their competitiveness. Hence the full title of the project is *Accommodating Creative Knowledge: Competitiveness of European Metropolitan Regions within the Enlarged Union*. The project is financed under the Sixth Framework Programme of the European Union, and the time allotted for its completion is four years (2006-2010). It involves a consortium of 13 partners from various parts of Europe (Amsterdam, Barcelona, Birmingham, Budapest, Dublin, Helsinki, Leipzig, Milan, Munich, Poznan, Riga, Sofia and Toulouse). They represent various types of metropolitan areas, located in the “old” and “new” EU states, with and without the status of capital city, following a variety of development paths, and displaying a long or a short presence of the creative sector. The project is co-ordinated by Professor Sako Musterd from the Amsterdam Institute for Metropolitan and International Development Studies (AMIDSt), and the present author is one of its participants. The scope of the notion of “creative knowledge sector” employed in the project is presented in Fig. 2.

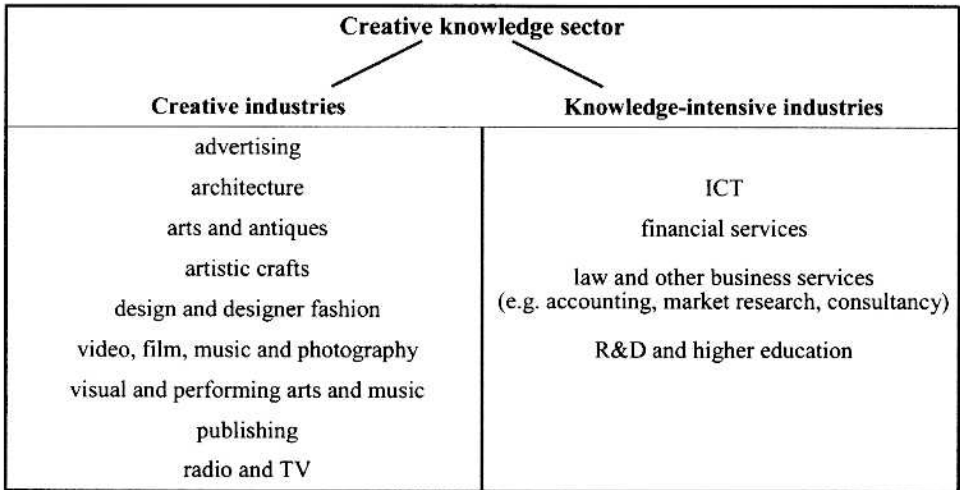


Fig. 2. Classification of the creative knowledge sector employed in the ACRE project

As has already been mentioned, the project's central question is: What conditions stimulate the emergence and development of creative urban regions in the extended European Union? In particular, the focus is on the role of so-called “soft” factors in this process (cultural heritage, ethnic diversity, a tolerant atmosphere, the attractiveness of the residential environment and public space, a feeling of security).

To answer the above questions, a wide-ranging empirical research has been instituted which rests on questionnaires, surveys and interviews, and embraces

the following target groups: higher school graduates, workers and managers employed in the creative knowledge sector, and transnational migrants that have arrived to work in this sector. The research is carried out in all the 13 metropolitan regions according to the same methodology, so as to make the results comparable interregionally. Apart from interregional comparisons, the project also foresees a detailed analysis of processes taking place within the individual metropolitan regions (in terms, for example, of the dynamics of change on the labour market or a change in the core-suburbia relations). For this reason, the results will be of great significance for devising development strategies for the creative sector in the regions under analysis.

The project is implemented in several work packages:

1. A survey of the literature and theoretical output to date,
2. An analysis of the development paths pursued so far and the state of the creative sector (as reflected in the statistics available) in the metropolitan regions concerned,
3. A comparative study, with conclusions about similarities and differences among the regions and an attempt at a classification,
4. Determination of the importance of the selected social groups (graduates of higher schools, employees and managers of the creative sector, migrant foreigners) in each of the regions,
5. An analysis of opinions of the above-mentioned social groups based on questionnaires and interviews prepared along common methodological guidelines,
6. A synthesis of the results of empirical studies: preparation of a report integrating the conclusions of the individual research teams highlighting similarities and differences in the development processes of the metropolitan regions of Western, Central and Eastern Europe,
7. Preparation of guidelines for regional development policies and strategies accommodating the various development paths, and determination of the possible contribution of creative regions to the development of Europe,
8. Dissemination of the project results.

The results of the studies carried out under the ACRE project are published on completion of each stage in a series of English-language reports, also available in an electronic version at <http://acre.socsci.uva.nl>. Preliminary conclusions drawn from an analysis (based on secondary sources of information) of the development paths of the creative sector to date can be formulated as follows:

1. The emergence of creative regions can be of an evolutionary, steered or mixed nature.
2. Creative activities have a tendency towards spatial concentration in metropolitan areas, both at the inter- and intra-regional scale (town planners speak of “creative spaces” or “creative city districts”; these are districts with interesting architecture, readily accessible public space, rich in cultural-entertainment facilities and recreation grounds, location sites of so-called cultural industries like film-making, publishing, radio and TV, etc.).

3. Three types of "success regions" can be distinguished in terms of the development of the creative sector:
 - culture-oriented (Barcelona and Milan),
 - those oriented towards information-communications technology and highly specialized business services (Munich, Birmingham and Helsinki), and
 - those showing a balance between the two (Amsterdam and Dublin).
4. The spatial dimension of the behaviour and the distribution of the creative class are connected, among other things, with the processes of suburbanization and urban renewal. Some firms of the creative sector are happy to locate in the revitalized areas of the inner city, while others prefer attractive sites in the suburban zone.
5. The building of creative regions relies very much on a policy supporting this type of development (at the European Union, national, regional and local levels).
6. Specific features of metropolitan regions in the post-communist states of East-Central Europe include their late entry onto the development path of the creative sector, its relative over-representation in capital cities, and inadequate policy supporting this type of development, especially at the central level. In development strategies emphasis is put on 'hard' factors (understandably enough, considering the long years of neglect, for example, in infrastructure), while factors associated with the development of social and human capital remain in the background (interest in the latter focuses primarily on a quantitative increase in the number of students and the organization of vocational training). There is also a paucity of concrete initiatives in the field of public-private partnership (PPP), which is a crucial factor of development of the creative sector in the advanced Western economies.

VERIFICATION OF SOME OF FLORIDA'S HYPOTHESES ON THE LOCATION FACTORS OF THE CREATIVE AND KNOWLEDGE-INTENSIVE INDUSTRIES

The present article discusses the results of the stage of research under the ACRE project intended to assess the importance of factors attracting the creative class to the given metropolitan region. The assessment is based on opinions of workers in the creative sector as expressed in interviews carried out along identical guidelines in all the participating regions. The interview questionnaire covered the following issues (a full list of questions can be found at the project website cited):

1. Duration of living in the region, previous place of residence, reasons for choosing the region as a place to live and work,
2. Assessment of the natural environment and general living conditions in the region,
3. Assessment of spatial accessibility and transport infrastructure,
4. Assessment of job opportunities, wages, and conditions of work,

5. Assessment of the availability of housing, housing conditions, and neighbourhood links,
6. Assessment of recreation and leisure opportunities,
7. Assessment of the atmosphere of tolerance and openness of the residents and the sense of security,
8. Assessment of the quality of higher-level education,
9. Strength of links with the region as expressed, for example, in the declared intention of staying in it or changing the place of residence and work.

The project assumptions foresaw 200 interviews in each of the 13 participating regions. In reality, the sample of respondents ranged from 196 (Birmingham) to 251 (Riga). A total of 2,751 interviews were carried out. The results of the research that provided the basis of the present article have been published in 13 reports (Bontje et al. 2008, Brown et al. 2008, Dainov 2008, Eastaway et al. 2008, Hafner et al. 2008, Kepsu and Vaattovaara 2008, Kovács et al. 2008, Lange et al. 2008, Martin-Brelot et al. 2008, Mingione et al. 2008, Murphy et al. 2008, Paalzow et al. 2008 and Strykiewicz et al. 2008) listed in the bibliography. Use was also made of an unpublished overview by Grossetti et al. (2008) from the Interdisciplinary Centre of Urban and Sociological Studies in Toulouse and of the ACRE Periodic Activity Report no. 2 (2008).

Because of the very broad scope of the research, an attempt was made to verify only two hypotheses deriving from Florida's conception. One states that mobility of the creative class is a condition for development of the creative sector; the other, that soft factors play a greater role in the development of the creative sector than hard factors. It should be emphasized that the article is a report on work in progress, hence the conclusions may change or be modified on completion of the further stages of the project.

MOBILITY OF THE CREATIVE CLASS

The results of the research among workers representing the creative sector show their mobility to be rather low. As many as 48% of them live and work in the city where they were born. However, there are considerable differences in this matter among the metropolitan regions: in Barcelona, Milan and Poznan this proportion amounts to 60-70%, while in Toulouse, Dublin and Amsterdam it is 23-34%. In turn, the biggest number of foreign-born creative-sector workers can be found in Dublin, at 43% (by comparison, in Poznan, Helsinki and Sofia this figure amounts to 1-2%, with about 10% as the average).

The tendency towards regional embedding (or rooting) of the creative class is even stronger when studied in terms of the spatial relation between its current place of residence and work and the place of study. Here the least "local" seems to be the creative class of Munich and Toulouse. Worth noting are the metropolitan regions of Riga and Dublin, which stand out for their high proportion of representatives of the creative sector who have acquired higher education abroad (in the case of Riga, this high percentage is due to the fact that persons who studied in the former USSR, for example at the schools of Moscow or nearby St. Petersburg, are categorized today as foreign-educated).

Fig. 3 shows the position of the analysed metropolitan regions in terms of the mobility of creative sector workers. It disproves Florida's hypothesis about a high level of mobility of the creative class for most of the regions concerned. It is only the creative sector of Dublin that can boast a nearly 40% proportion of immigrant workers (meaning those not connected with the region through their place of birth or study), while in Amsterdam, Toulouse and Munich they contribute 25%. The regions of the most immobile workers are Poznan and Barcelona.

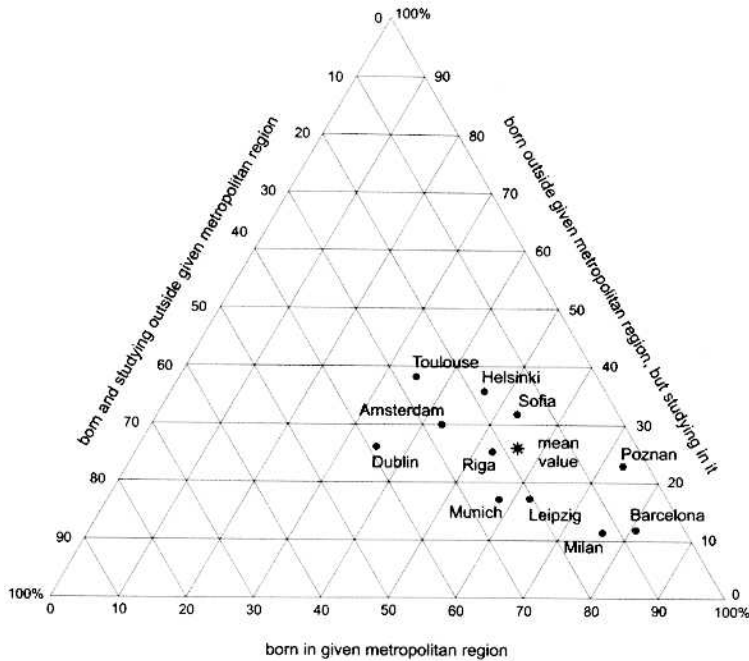


Fig. 3. Position of the analysed metropolitan regions in terms of the mobility of creative sector workers

Source: own drawing on the basis of unpublished material by Grossetti et al. (2008), data from the ACRE project

HARD VS. SOFT FACTORS OF THE LOCATION AND DEVELOPMENT OF THE CREATIVE SECTOR

Both in the ACRE project and in most works on the creative sector, factors of its location and development are generally divided into hard (objectively identifiable and easy to measure, such as size of a city, transport accessibility, wages in a region) and soft (subjectively identifiable and hard to measure, for example availability and quality of housing, attractiveness of the natural environment, safety, atmosphere of tolerance). While in general terms this division seems straightforward enough and hardly controversial, in the case of very detailed empirical studies we find difficulties with ascribing some factors to one

of the dichotomous categories. Moreover, factors featuring very strongly in the ACRE project – apart from those mentioned above and referring to certain features of the metropolitan regions as places of residence and work of the creative class – are of personal character, like an association with the place of birth and study, or nearness of family and friends. Therefore, the following factors of location and development of the creative sector are distinguished in the present article:

- those of a personal nature connected with the dependence of individual respondents on their personal life trajectories, and
- those connected with selected features of a metropolitan region (hard and soft).

An assessment of the importance of the most significant factors affecting the location decisions of creative-class representatives as to the place to live and work is presented in Tab. 1 (personal factors are given in boldface and soft ones in italic). These are average data for all the metropolitan regions analysed.

Tab. 1. Chief factors underlying the choice of a metropolitan region as the place of residence and work by employees of the creative sector (% of respondents listing the given factor as first or second; factors of a personal nature are given in boldface, and soft ones, in italics)

Factor	Rank I	Rank II	Rank I + II
1. Closeness of family	16.6	20.6	37.2
2. Closeness of friends	8.1	27.5	35.6
3. Job opportunities in region (large number of jobs fitting skills possessed)	8.9	26.6	35.5
4. Place of studies	12.1	18.5	30.6
5. Employment in given place by firm	19.1	11.1	30.2
6. Place of birth	17.6	11.2	28.8
7. <i>Rich leisure and recreation offer in region</i>	2.9	20.8	23.7
8. Size of city	3.8	18.1	21.9
9. <i>Cultural diversity</i>	2.9	14.6	17.5
10. <i>Attractive natural environment</i>	2.7	14.1	16.8

Source: the ACRE project

The results of the research only partly corroborate Florida's hypothesis as to the overriding significance of soft factors in the location decisions of creative people. Rather, the factors predominating in the respondents' motives are personal ones connected with their life paths (the closeness of family and friends, ties with the place of birth and study). While the table also lists soft factors associated with the features of a region, like its rich leisure and recreation offer, cultural diversity and an attractive natural environment, they are mentioned after some hard factors, especially job opportunities. Thus, it is attractive jobs that seem to lure the creative class rather than the other way round. Moreover, as follows from Grossetti et al. (2008) research, the above soft factors tend to be mentioned more often by people living in a region for a longer time, which may indicate that, instead of driving the creative class to mobility, they deepen its

embeddedness (rooting) in the region. In the entire sample examined, soft factors were listed in 1st and 2nd places by a mere 10.1% of the respondents, while 22.4% did not mention even a single one. Among the most crucial factors of the location and development of the creative sector, there were none that Florida claims to play an important role. Thus, an atmosphere of openness and tolerance was ranked first by a mere 1.5% of the respondents and second by 8%, while a friendly attitude towards gays and lesbians, by 0.5% and 5.3%, respectively.

It should be noted, however, that the significance of the three groups of factors of the location and development of the creative sector varies highly among the metropolitan regions involved (Tab. 2). The role of personal factors is the greatest in those of East-Central Europe (Sofia, Budapest and Poznan) and the southern states of the “old” EU with their traditionally strong family ties (Barcelona, Milan). Hard factors predominate in the choice of residence and jobs in the German metropolises of Munich and Leipzig, and soft ones, in those of Northern Europe: Riga, Amsterdam and Helsinki. While in Amsterdam soft factors were mentioned in 1st and 2nd places by 18.4% of the respondents, in Sofia – by only 1.1%. In Milan and Poznan more than 40% of the creative-sector workers did not indicate even a single soft factor as a motive for their selection of the city as the place of residence and work.

Tab. 2. Importance of the factors of location and development of the creative sector in the metropolitan regions (% of respondents listing the given group of factors in the first place)

Metropolitan region	Factors of personal nature	Factors connected with place of residence and work		Total
		hard	soft	
Amsterdam	38.5	35.3	26.2	100.0
Barcelona	62.0	27.0	11.0	100.0
Birmingham	55.0	39.2	5.8	100.0
Budapest	70.6	24.4	5.1	100.0
Dublin	49.8	40.2	10.0	100.0
Helsinki	43.7	33.3	23.0	100.0
Leipzig	37.8	47.8	14.4	100.0
Milan	61.3	30.4	8.4	100.0
Munich	29.0	57.0	14.0	100.0
Poznan	59.6	23.8	16.6	100.0
Riga	53.0	15.2	31.8	100.0
Sofia	90.5	9.5	-	100.0
Toulouse	46.9	42.2	10.9	100.0
Mean	53.6	32.5	13.9	100.0

Source: ACRE (2008)

Grossetti et al. (2008) emphasize that in an analysis of locational preferences of the creative class special attention should be paid to the opinions of “strangers”, namely those who have come to the given region from outside and

are not associated with it through their place of birth or study. They can be used to construct a table listing the chief factors attracting such creative “outsiders” to the metropolitan regions (cf. Tab. 3; owing to incomplete data, the creative-sector workers of Birmingham and Sofia are left out). In those opinions, personal factors play a decidedly minor role. In turn, hard factors (job opportunities and high wages) seem equally important as soft ones (openness to other people and cultural diversity). It is worth noting the recurrence of such factors as the availability and quality of housing as well as the quality of higher education.

Tab. 3. Chief factors of attractiveness of a metropolitan region in the opinion of creative persons “from outside” (i.e. not connected with the region through birth or study)

Metropolitan region	City size	Job opportunities and high wages	Convenient transport connections	Availability and quality of housing	Quality of higher education	Weather/climate, attractive natural environment	Recreation and entertainment opportunities	Openness to other people and cultural diversity	Personal factors	Other*
Amsterdam				+			+	+		
Barcelona					+	+		+		
Budapest		+	+	+			+		+	
Dublin		+						+		+
Helsinki	+	+	+	+	+		+	+		
Leipzig		+		+						
Milan		+							+	
Munich		+				+				
Poznan		+	+		+				+	
Riga	+			+	+			+	+	+
Toulouse	+					+				

* In the case of Dublin – possibility of communicating in English; in the case of Riga – safety

Source: own compilation on the basis of unpublished material by Grossetti et al. (2008) and Martin-Brelot et al. (2009); data from the ACRE project

Readily visible in this kind of evaluation are the profiles of the metropolitan regions, which can be divided into four types:

- 1 – those with the predominance of soft factors (Amsterdam, Barcelona and Riga),
- 2 – those with the predominance of hard factors (Leipzig, Munich and Milan),
- 3 – those with a relative balance between the soft and hard factors (Dublin and Helsinki), and
- 4 – those with a poorly developed profile (Poznan and Toulouse).

CONCLUSIONS

The preliminary results of the research carried out under the ACRE project show the factors underlying the development of the creative sector in metropolitan regions to be much more complicated than Florida has ever assumed. The conclusions flowing from the present article can be summed up in four points:

1. There is no single "model" of the location and development of the creative sector. The factors attracting the creative class to the metropolitan regions are largely connected with areas of a specific culture. In those where family and friendship ties are traditionally strong (as in regions situated in Italy, Spain or Poland), personal factors come to the fore. Also, the creative class in those regions typically displays lower mobility. Florida's hypotheses emphasizing the role of soft factors and the mobility of the creative class in the development of the creative sector are borne out primarily in those regions where tradition plays a less important role and where society has been open and multi-cultural for centuries (with Amsterdam as the best example).
2. In most metropolitan regions the factors of a personal nature are predominant (except Munich, Amsterdam, Leipzig, and Toulouse). In particular, these factors prevail in post-socialist cities (Riga and Poznan). Hard location factors play the strongest role in the German cities of Munich and Leipzig. Soft factors are of some importance, but they should not be over-estimated. Their role is most readily visible in Amsterdam and Barcelona (but they still come second to hard factors).
3. The preferences of the creative-sector workers concerning a place to live and work depend on the kind of activity they are engaged in. Pratt (2008) rightly observes that the notion of the creative class embraces a very wide spectrum of activity: from artists (bohemians) and computer programmers (the so-called super-creative core) to legal advisers (creative experts). Florida's hypotheses find the strongest support in the case of cultural industries (such as pattern designing, video, film-making, artistic activity, entertainment), and to a lesser extent, in knowledge-intensive industries (such as designing of computer software, consulting). Thus, one might agree with Pratt (2008) that from the point of view of preference specificity and spatial behaviour, the notion of the creative class should be associated primarily with the cultural industries. A fuller determination of the contribution of those types of activity to the development of metropolitan regions requires further studies. To carry them out in a comparative and dynamic approach, it is necessary to make the terminology, classification and statistics of the creative sector more precise, and on the other hand, to work out more clear-cut criteria of delimitation of metropolitan regions.
4. Negating the traditional (hard) factors of location seems somewhat premature (in particular in relation to the post-socialist metropolitan regions of East-Central Europe). While some soft factors were listed in our research sample as significant, for example, a rich leisure and entertainment offer, cultural diversity, or an attractive natural environment, they still came after the hard factors, especially employment opportunities. Soft factors

seem to be more relevant for emerging creative and knowledge-based industries than for mature ones.

The above conclusions are reflected in the changing regional and locational policies with their growing emphasis on socio-cultural and educational foundations of regional development as well as a stronger relationship between socio-economic development and spatial mobility. Moreover, in spite of all the reservations, the role of soft location factors (such as cultural heritage, ethnic diversity, climate of openness and tolerance, attractiveness of residential areas and public spaces, quality of the education system, subjective feeling of security) keeps increasing. The formation of the so-called creative spaces is becoming a more and more important task of regional and urban policies.

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Tadeusz Stryjakiewicz

LOKAČNÉ FAKTORY TVORIVÝCH A VEDOMOSTNE INTENZÍVNYCH ODVETVÍ V EURÓPSKYCH METROPOLITNÝCH REGIÓNOCH

Roku 2009 uplynulo storočie od publikovania najvýznamnejšieho diela Alfreda Webera *Über den Standort der Industrien*, o ktorom sa často hovorí ako o prvom teoretickom prístupe k téme lokalizácie priemyslu. Weberovým nespochybniteľným príspevkom bolo zavedenie pojmu „lokačný faktor“ (*Standortfaktor*) najprv do ekonomickej a potom aj geografickej literatúry. Tento pojem sa používa dodnes, hoci sa jeho význam značne zmenil, čo platí zvlášť v súvislosti s tvorivými a vedomostne intenzívnymi odvetvami (*creative and knowledge-intensive industries*).

Vznik a rýchly rozvoj tvorivých a vedomostne intenzívných odvetví (ktoré sa tiež nazývajú tvorivý sektor – *creative sector*, alebo tvorivo-vedomostný sektor – *creative knowledge sector*; tieto pojmy sa používajú aj v článku) je jednou z vlastností štruktúrálnej zmeny v globálnej aj európskej ekonomike a spoločnostiach, ako aj v napredujúcej metropolizácii. V metropolitných regiónoch sa tento sektor vyvíja zvlášť dynamicky, pričom sa stáva jedným z najvýznamnejších ukazovateľov ich konkurencieschopnosti. Určenie vzájomných závislostí medzi procesom prijímania tvorivých poznatkov (*creative knowledge*) a konkurencieschopnosťou metropolitných regiónov v rámci zväčšenej Európskej únie sa stalo témou medzinárodného výskumného projektu s názvom ACRE v rámci 6. rámcového programu EÚ. Kľúčovou otázkou projektu je: Aké podmienky (konkrétne, aké takzvané mäkké faktory) stimulujú fenomén tvorivosti v urbánnych procesoch?

Opierajúc sa o výsledky získané v rámci tohto projektu sa článok zaoberá procesom vývoja tvorivo-vedomostného sektoru v 13 európskych metropolitných regiónoch, ktoré

sa zúčastňujú na projekte ACRE. Konkrétne sa zameriava na:

- všeobecný náčrt uvedeného projektu v kontexte pojmov tvorivá trieda (*creative class*) a tvorivé mesto (*creative city*) Richarda Floridu,
- analýzu faktorov, ktoré určujú lokalizáciu a vývoj tvorivo-vedomostného sektoru.

Prvá časť článku obsahuje teoretické východiská diskusie o lokačných faktoroch tvorivých a vedomostne intenzívnych odvetví s dôrazom na práce Törnqvista a Floridu a ich dôsledky pre geografickú diskusiu. Druhá časť opisuje v hrubých črtách projekt ACRE a jeho hlavné výsledky. V tretej sa overujú dve Floridove hypotézy, ktoré sa týkajú (1) mobility tvorivej triedy a (2) významu tvrdých a mäkkých lokačných faktorov.

Výsledky výskumu len čiastočne potvrdzujú Floridove hypotézy, pokiaľ ide o vysokú mobilitu a veľký význam mäkkých faktorov pri lokačných rozhodovaniach tvorivých jednotlivcov. V motívoch respondentov skôr prevládajú faktory, ktoré sú osobné a spojené s ich životnými dráhami (blízkosť rodiny a priateľov, väzby na rodisko a miesto štúdií). Rozdiely medzi analyzovanými 13 metropolitnými regiónmi sú však značné.

Záveru vyplývajúce z doterajšieho výskumu je možné zhrnúť nasledovne:

1. Neexistuje jediný univerzálny „model“ lokácie a/alebo rozvoja tvorivého sektoru. Faktory, ktoré priťahujú tvorivú triedu do metropolitných regiónov sú zväčša spojené s oblasťami špecifickej kultúry. Tam, kde sú rodinné a priateľské väzby tradične silné (napríklad regióny v Taliansku, Španielsku alebo Poľsku), sú osobné faktory v popredí. Popritom je aj mobilita tvorivej triedy v týchto regiónoch nižšia. Floridove hypotézy, ktoré zdôrazňujú úlohu mäkkých faktorov a mobilitu tvorivej triedy pri rozvoji tvorivého sektoru platia najmä a primárne pre tie regióny, kde tradície zohrávajú menej významnú úlohu a kde je spoločnosť otvorená a svojou povahou dlhé storočia multikultúrna (región Amsterdamu je najlepším príkladom).
2. Vo väčšine metropolitných regiónov prevládajú faktory osobného charakteru. Tieto faktory prevažujú najmä v postsocialistických metropolitných regiónoch (Riga a Poznaň). Tvrdé lokačné faktory zohrávajú najdôležitejšiu úlohu v regiónoch nemeckých miest Mníchov a Lipsko. Mäkké faktory sú tiež dôležité, no nemali by sa preceňovať. Ich pôsobenie je najvypuklejšie v regiónoch Amsterdamu a Barcelony, avšak aj tú sú až na druhom mieste za tvrdými faktormi.
3. Preferencie pracovníkov v tvorivom sektore, pokiaľ ide o miesto bývania a práce, závisia od druhu činnosti, ktorej sa venujú. Floridove hypotézy nachádzajú najväčšiu podporu v prípade kultúrnych odvetví (projektovanie, dizajnérstvo, natáčanie filmov a videí, umelecká činnosť, sektor zábavy), a menej vo vedomostne intenzívnych odvetviach (navrhovanie počítačových softvérov a poradenstvo). Presnejšie určenie miery, akou tieto typy činnosti prispievajú k rozvoju metropolitných regiónov, si žiada ďalšie štúdium. Pred jeho realizáciou uplatnením komparatívneho a dynamického prístupu je na jednej strane potrebné vypracovať presnejšiu terminológiu, klasifikáciu a štatistiku mozaiky tvorivého sektoru a na strane druhej jasnejšie formulovať kritériá ohraničenia metropolitných regiónov.

Uvedené závery sa odzrkadľujú v meniacich sa regionálnych a lokačných politikách, kde sa kládie čoraz väčší dôraz na sociálnokultúrne a vzdelanostné základy regionálneho rozvoja, ako aj na silnejší vzťah medzi procesom sociálnoekonomického rozvoja a priestorovou mobilitou. Okrem toho a napriek všetkým výhradám, rola mäkkých lokačných faktorov (ako je kultúrne dedičstvo, etnická rôznosť, ovzdušie otvorenosti a tolerancie, príťažlivosť rezidenčných oblastí a verejných priestorov, kvalita vzdelávacieho systému, subjektívny pocit bezpečia) narastá. Tvorba takzvaných tvorivých priestorov nadobúda v regionálnej a urbánnej politike čoraz väčší význam.