

Lusso, Bruno

## Conference Paper

# The development of the image sector in the Marseille metropolitan area: Historical factors, creative resources and difficulties

50th Congress of the European Regional Science Association: "Sustainable Regional Growth and Development in the Creative Knowledge Economy", 19-23 August 2010, Jönköping, Sweden

### Provided in Cooperation with:

European Regional Science Association (ERSA)

*Suggested Citation:* Lusso, Bruno (2010) : The development of the image sector in the Marseille metropolitan area: Historical factors, creative resources and difficulties, 50th Congress of the European Regional Science Association: "Sustainable Regional Growth and Development in the Creative Knowledge Economy", 19-23 August 2010, Jönköping, Sweden, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/118844>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

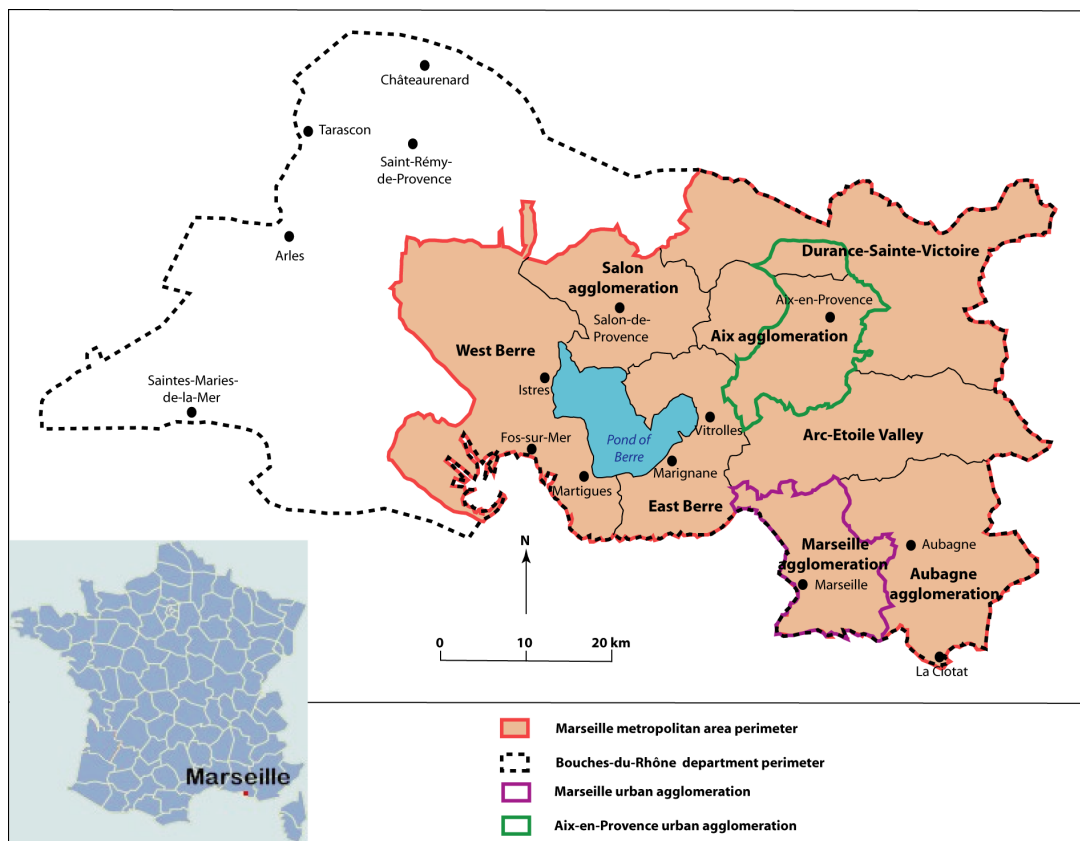
**Special Session on Creativity of ERSA Congress**  
**August 19-23, 2010, Jönköping, Sweden**

**Title: The development of the image sector in the Marseille metropolitan area: historical factors, creative resources and difficulties**

Author: Bruno LUSSO, PhD student, School of Geography and Planning, University of Lille 1 - France

In France, the Paris region is the traditional centre for decision-making and creative functions (Chantelot, 2006). Unsurprisingly, it concentrates most cultural industries – cinema, multimedia, TV, etc. However, some French cities, like Lyon or Lille, have successfully developed their own image sector. The aim of this paper is to study how other French cities, and more specifically a regional medium-sized city like Marseille, could develop this type of activities. Marseille is a city of Provence, populated by 850,000 inhabitants and located in south-east France. It is the capital of the Provence-Alpes-Cote d'Azur (PACA) region, and the prefecture of the Bouches du Rhône *département*. The metropolitan area includes the cities of Marseille and Aix-en-Provence and approximately covers the Bouches du Rhone *département*, with the exception of Arles. This metropolitan area numbers 1.5 million inhabitants. Marseille, the most filmed French city after Paris, is located in the second French region in terms of audiovisual production (accounting for 15% of national production).

**The Marseille metropolitan area**



Today, there is a general consensus on the importance of human capital to regional development, but there is still a debate around two key issues. The first involves the role of education and/or creativity (Rutten and al, 2003 ; Verdier, 2006), while the second revolves around the factors that affect its distribution (Wolfe, 2002 ; Cooke et Asheim, 2006 ; Asheim, Coenen and Vang, 2007). Since we know talent, associated with economic development, is spread unevenly, it is important to understand the factors that account for their varied geography. Most economists conceptualize talent as a stock or endowment, which belongs to a place in the same way that a natural resource might. But the reality is that talent is a flow, a highly mobile factor that can and does relocate. The key question then becomes: what factors shape this flow and determine the divergent levels of human capital and the distribution of the creative class – in terms of education and skill – across regions? We will see in what respect historical legacies and creative resources have determined the settlement of multimedia companies in the Marseille metropolitan area, the third multimedia cluster after the Paris and Lyon regions.

## **1. Inherited activities?**

Ann-Lee Saxenian (1994) has shown the importance of regional culture and heritage in the constitution of an economic trajectory. The pre-existence of links between media, microelectronic or photographic industries and of an intense audiovisual production can support the emergence of essential know-how for the development of a multimedia and image sector (Braczyk, Fuchs and Wolf, 2000).

### **1.1 A strong cinematic tradition**

The diversity of landscapes – from the coast to the picturesque *bastides* around Aix-en-Provence – and the exceptional quality of the light due to the Mediterranean climate, have made Marseille an attractive movie location from the early days of French cinema. Taking advantage of these strengths, the two Lumière brothers shot their early movies in the Canebière, in the Joliette docks or in the city of La Ciotat. They set up one of the first French movie theatres in Marseille, just two months after Paris. The movie industry developed very quickly. Following the success of the movie industry in the United States in the years 1910-1920, several Marseille creators decided to develop this art form. Thus, Marcel Pagnol decided to adapt his own plays and novels for the big screen. Wishing to develop a sort of “French Hollywood”, Marcel Pagnol founded in 1933 his movie production company “Pagnol Studios”. His own movies, as well as movies by Sacha Guitry and Jean Renoir, were shot in these studios. From 1950 to 1970, famous movies like *Centurion* (1966) by Mark Robson or *Adieu l’ami* (1967) by Jean Herman were shot in the Sainte Marthe studios, one of the rare French studios developed outside the Paris region in the 1930s. All of this shows the interest of Marseille for movie directors, be they Frenchmen (Jean-Pierre Melville, Francis Girod, Gérard Pirès) or foreigners (Jean-Luc Godard, Ridley Scott).

There is also a large number of creators, filmmakers and actors who were born in Marseille. They have raised the profile of the city as far as movie production is concerned. Thus, it is difficult to separate the emblematic Fernandel from the city of Marseille, as his reputation was built on Pagnol’s movies and his legendary Marseille accent. However, examples are rare and many actors leave Marseille to work in Paris, like Paul Préboist or Patrick Bosso. The situation is different for movie directors. Some of them have stayed in Marseille and have helped through their work to defend the city’s identity and

to raise its reputation in the movie industry. This is the case of filmmaker Robert Guediguian and his actress wife, Ariane Ascaride, who, in their productions (*Marius et Jeanette*, *Marie-Jo et ses deux amours*, *Lady Jane...*), defend Marseille's identity, for example by repeatedly filming the Estaque district.

However, the city has failed to develop powerful media, with the exception of two daily newspapers, *La Provence* (acquired by the Parisian group *Hersant*) and *La Marseillaise*, and the recent creation of three local TV stations: a general channel, *LCM*, established in 2005, and two specialized channels, the official TV channel of the football club *Olympique de Marseille (OM TV)* and the medical channel *AP-HM TV*. Because of the lack of television producers, the city has been confined to a shooting and decorative function. This explains the weakness of post-production functions in Marseille. Such functions remain largely concentrated in the Paris region. The situation has improved thanks to the creation in Marseille of a regional branch of the French TV channel *France 3* in the 1970s. Since 1975, the directors of *France 3* have decided to develop movie distribution, debates and regional broadcasts. On March 22, 1976, regional television became daily, with regional editions of the *France 3* news and local TV programs (*Méditerranéo*, *La Cuisine d'à Côté*). With the gradual emergence of a more local TV content, *France 3* has decided to build on its skills and on its various regional offices to develop TV movies and TV shows shot in the PACA region and in Marseille, as illustrated by the TV series *Plus Belle la Vie*, which is shot in the Belle de Mai studios in Marseille.

## **1.2 Microelectronics: a real asset?**

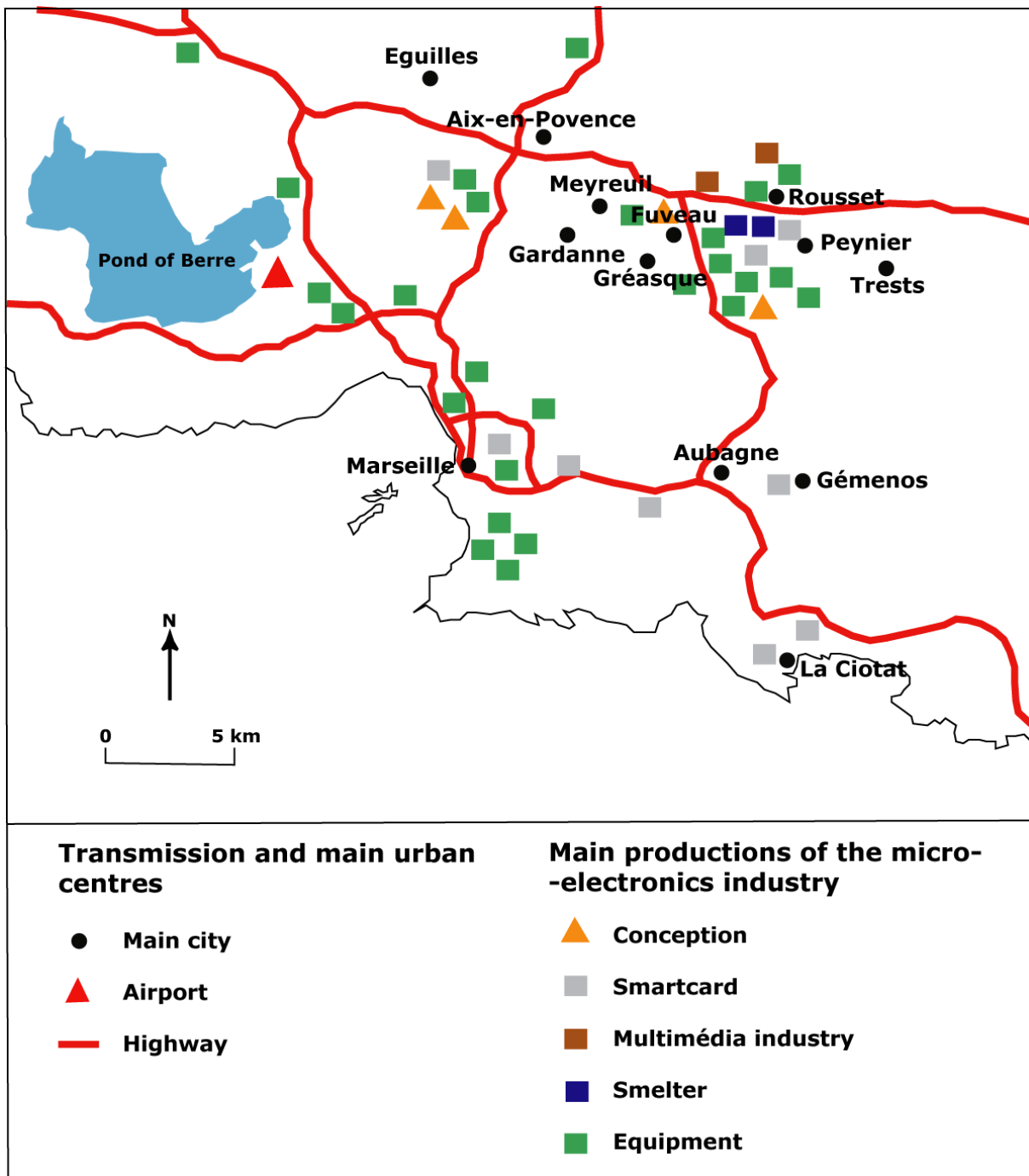
The Marseille metropolitan area has serious industrial advantages. Indeed, Marseille and its Provençal hinterland have approximately 50 firms or 7,000 jobs in the field of microelectronics, of which 43% in the multimedia industries, 26% in the smartcard sector, 11% in the manufacture of special components, process and analysis activities, and equipment suppliers, and 20% in conception (Daviet, 2003). Within this sector, the *ST*, *Atmel* and *Gemplus* firms concentrate 88% of jobs. The existence of a microelectronics industry in this region is a paradoxical reality (Rychen and Zimmermann, 2005). Although it is the symbol of the development of high technologies in Provence, we must recognize that this industry has grown through an autonomous logic. In 1979, the implantation of *Eurotechnique* arose from an exogenous process, that is to say, a decision taken by the state as part of the national plan for industrial and technological development (the *Components Plan*) in order to ensure the reconversion of a former coalfield in Gardanne. This was to be done through a new economic activity which broke sharply with the past, on a technical level (industrial organization with a clear articulation between the local and the global), on a social level (zoning action unrelated to a local scientific and technical potential), and in terms of territorial logic (national planning operation without consultation with local authorities).

Widely supported by public authorities, these successive implantation phases have helped to shape the Provençal industrial system. Thus, Provençal microelectronics is organized around three distinct areas:

- The first area is located to the north of the upper Arc valley and is dominated by the Rousset-Peynier industrial site. It is almost exclusively oriented toward the silicon sector. Two smelters, *ST* and *Atmel-ES2*, produce a significant part of ASICs, micro-controllers and products for smartcard. Around this core, a set of SMEs occupy specific niches in subcontracting operations for European or world silicon producers.

- The second area produces smartcards. It emerged to the south of the Marseille urban area around the *Gemplus* company, established in Gémenos and La Ciotat. Around this large company, many small firms developed which are sometimes partners, sometimes competitors.
- Finally, the third area is more dispersed and produces OEMs. This includes OEMs sales representatives and associated customer services, companies specialized in test cards and metrology. Three local suppliers – *Testinnovation* in Rousset, *Cybernetix* in Marseille and *EISM* in Aubagne – have been able to specialize all or part of their activities to meet the demands of the microelectronics and smartcard industries.

**Provençal microelectronics**



Source: B. Lusso (2010) from Zimmermann (1999) and Daviet (2003)

Although this industry has encountered significant problems of territorial settlement, it has nevertheless contributed to the development of industries using near-related technologies, such as telecommunications, websites creation (an activity which is well-represented in Marseille and which revolves around the *Medmultimed* association), submarine imagery (which is a competitiveness cluster), and the image sector. Indeed, taking advantage of a favorable industrial environment as well as of a pleasant and less expensive living environment, a number of Parisian firms in software, video games and multimedia production have settled in Marseille and Aix-en-Provence, as illustrated by the case of *Lexis Numérique*, but also by creative studios like *Bip Media*, *Exkee*, and the distribution platform *Indeego Games*. In a very few cases, image companies were created based only on microelectronics know-how.

**2. Are training facilities a factor of creativity?**

Yet the presence of major schools in the technical and creative fields can have significant repercussions for the constitution of a creative class (Florida, 2002).

**2.1 Training facilities in the Marseille metropolitan area**

In France, the largest schools which offer training in the image sector are mainly concentrated in the Paris region. However, many schools are to be found in the Marseille metropolitan area, even if there are fewer of them when compared to the two other French cities of similar size, as the following table shows:

**Number and status of training facilities in the Lille, Lyon and Marseille metropolitan areas**

	Lille	Lyon	Marseille
<b>Public</b>	15	17	10
<b>Private</b>	18	21	16
<b>Consular</b>	5	0	1
<b>Total</b>	<b>38</b>	<b>38</b>	<b>27</b>

*Source: L'Etudiant.fr*

The Marseille metropolitan area thus has only 27 training facilities in the image sector, against 38 for the Lille and Lyon metropolitan areas. 10 of them are public: they are mainly high schools or universities which offer a major or minor in arts or moving images. These schools were often created in the 1970-1980s in order to catch up on training in traditional industrial cities (Marseille was a harbor city in crisis and the Aix-en-Provence region was home to the declining Gardanne coalfield). To this must be added art schools, which were often founded in the nineteenth century and are concentrated in cities with a long artistic history (Aix-en-Provence especially). One school, the *Mediterranean Interconsular Apprenticeship Training Centre (CFAIM)* in Marseille, has a consular status and demonstrates, once again, the willingness of the *Marseille-Provence Chamber of Commerce and Industry* to develop the basic skills training that is often lacking in these territories. However, there is a greater number of private training facilities (16 against 10 public schools), often associated with the setting-up of local offices of regional private training groups that have opened

decentralized training facilities in several French cities outside the Paris region. Examples are the *Esupcom* communication school, the *Studio M* audiovisual training facility and the *ARIES* graphic school. The aim is to create a parallel offer to Parisian schools and more specifically to other provincial cities.

## 2.2 Main curriculum

In the Marseille metropolitan area, 123 training facilities are opened to 2,000 students. We notice a very strong correlation between the training offered by these schools and regional economic features, as outlined in the following table:

### The main types of training offered by the schools of the Marseille metropolitan area

	Number in Marseille
Art	26
Audiovisual	27
Infography, video games	15
Telecommunications, visual communication, advertising, design	44
Computer, electronics	11
<b>Total</b>	<b>123</b>

Source: *L'Etudiant.fr*

In the telecommunications, advertising and design sector, courses are the most numerous and represent over a third of the training offer. We can add to this set computer and electronics schools (representing just under 50% of the total training supply). The development of professional training in this specific area is mainly related to the rise in the 1980s of the microelectronics industry and of the need for a skilled workforce. Then, we naturally have audiovisual and art schools (drama, music and dance), which make up for one fifth of the training offer in the image sector, echoing the region's commitment to movie-making. Only the infography and video games sector remain in the background. The Marseille metropolitan area has no know-how in this area and has therefore no significant training needs. This also explains the weakness of the infography and video games sectors in the region.

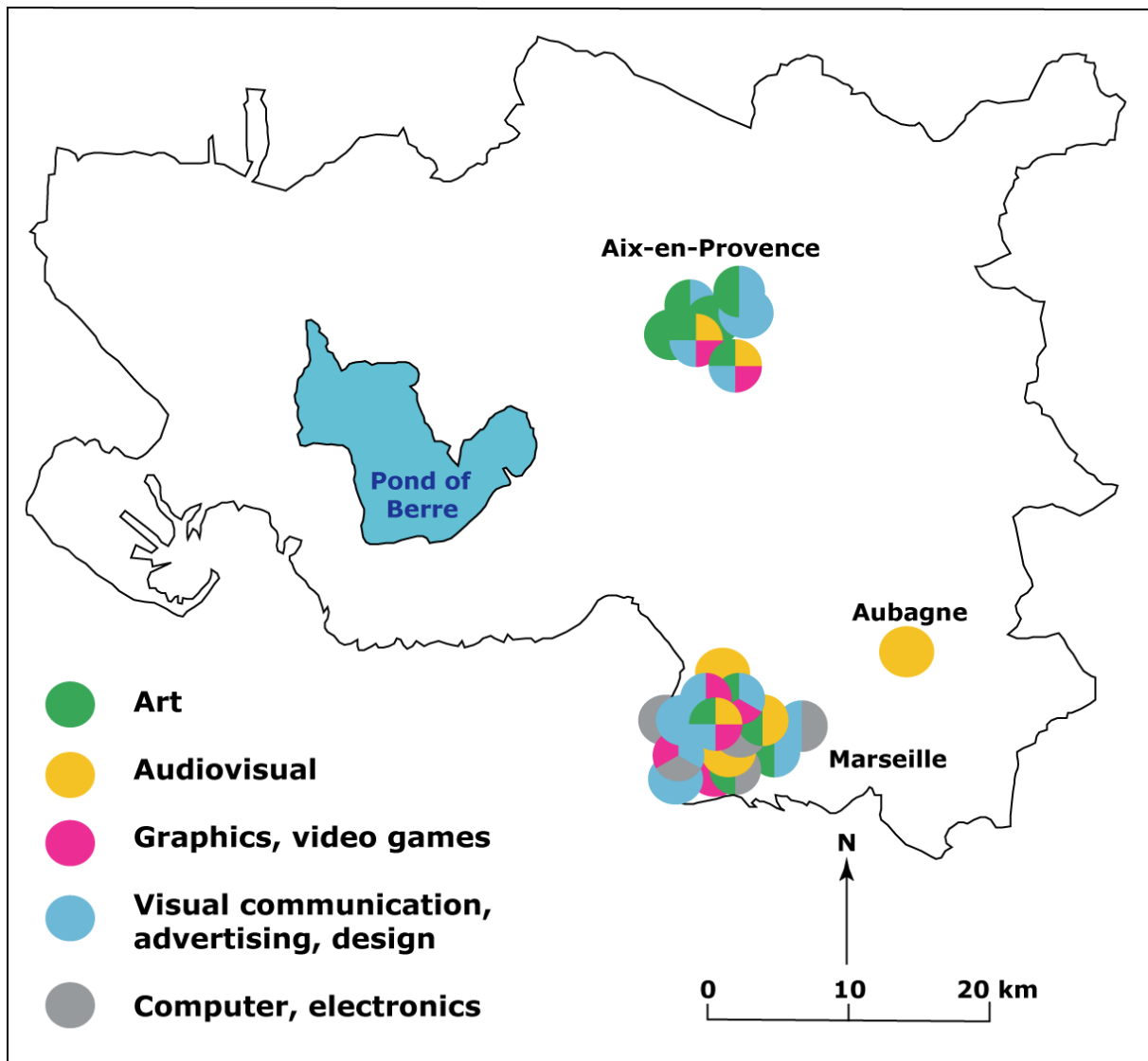
If we analyze the training facilities in the Marseille metropolitan area, we find that 27 schools offer very short curricula (A-levels at the Saint Exupéry and the Saint-Joseph les Maristes high schools; or A-levels +2 or +3 at the *Intuit Lab* school). These are vocational training qualifications (CAP, BTS, *license professionnelle*) specifically targeted at the needs of local firms. Thus, it is hardly surprising that such training is predominantly offered by the private sector rather than by state schools in order to train more quickly the potential labor force and that the training remains very general and does not equip the graduates with any specific know-how. This can be a disadvantage for the development of specific skills in the audiovisual and multimedia sectors. As a result, there are far fewer schools offering an A-levels +5 or A-levels +8 degree (only 15 in the Marseille metropolitan area) and the ratio between the public and private sectors is more balanced. Thus, it should be noted that only universities offer a longer curriculum giving access to the Ph.D. level, as is the case of Aix-

Marseille 1 University. We find a confirmation of these observations in the geographic distribution of the main training facilities of the image sector.

### 2.3 Geographical distribution

As for geographical distribution, it is hardly surprising to notice an intense metropolitanization process, insofar as the main urban centers concentrate the training offer, with Marseille well ahead and Aix-en-Provence following closely. No other city is represented with the exception of Aubagne, where a branch of the Aix-Marseille University is located (Department of Sciences, Image and Sound Arts and Technologies). As far as training for A-levels +2 or +3 is concerned, the domination of Marseille is very clear, with a strong specialization in the audiovisual and telecommunications fields, while Aix-en-Provence is more focused on art schools – and specifically visual arts (thanks to the presence of a picturesque and repeatedly painted landscape) – and visual communication, advertising and design schools (owing to the presence of the microelectronics industry).

#### Policies and company initiatives: the development of technician schools (A-levels +2 or +3) in the Marseille metropolitan area

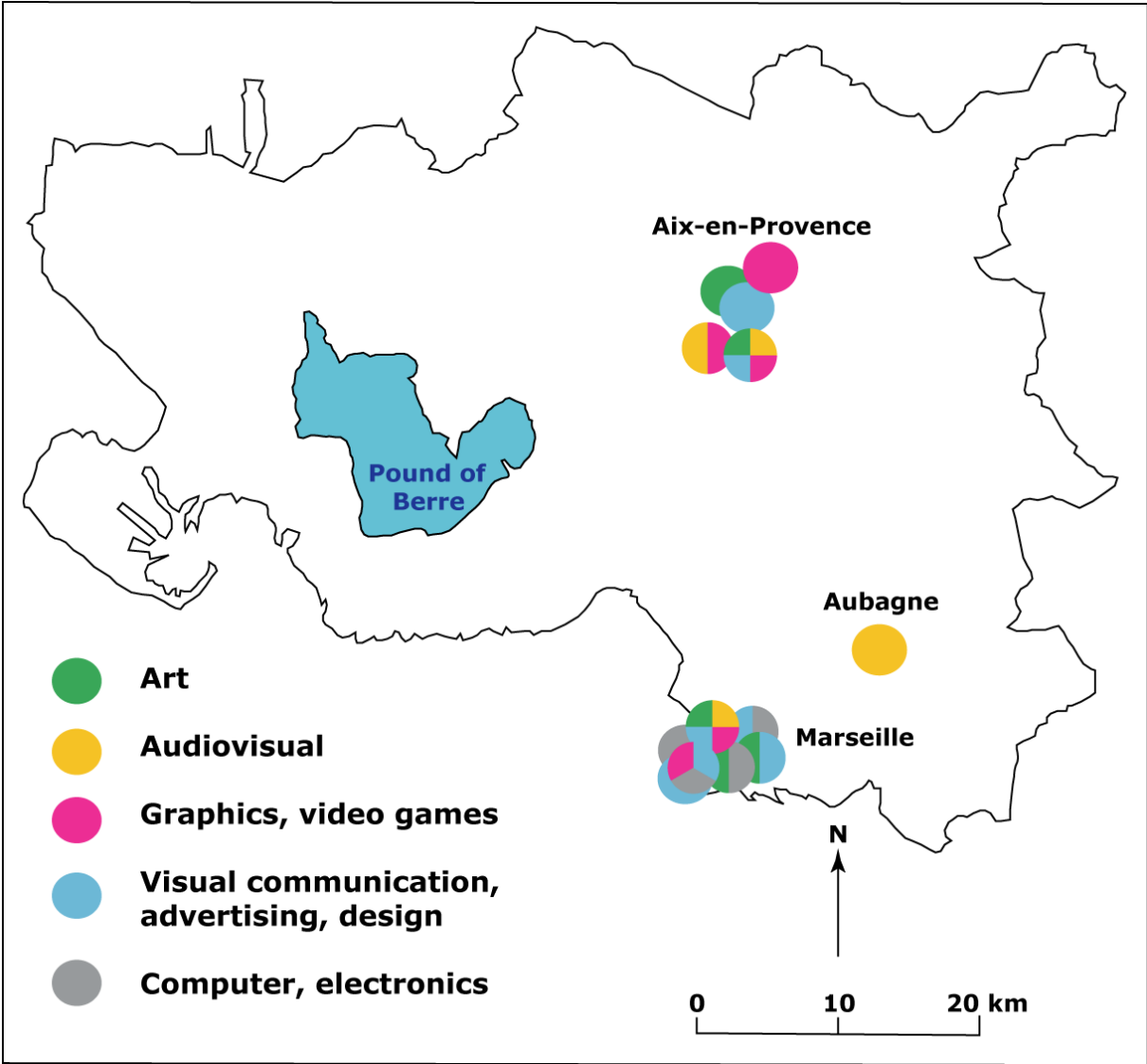


Source: B. Lusso, TVES, Lille 1, 2010, from L'Etudiant.fr



The map for second- (A-levels +4 or +5) and third-cycle (A-levels +8) training shows a real deficit in Marseille, which greatly limits its training offer and reduces its advantage over Aix-en-Provence. By contrast, Aix offers a curriculum which is much more varied and much less exclusively focused on the telecommunications, advertising and design sectors. When comparing the different maps, we also notice a strong segregation between the different parts of these sectors: indeed, the undergraduate training for arts, infography, video games or computer science is often characterized by longer curricula than is the case for audiovisual activities (where the training offer is largely focused on technical aspects and often leads to precarious jobs) or for communication (many BTSs are offered which generally lead to unskilled jobs).

**The upgrading of the training (A-levels +4, +5 or +8) in the Marseille metropolitan area**



Source: B. Lusso, TVES, Lille 1, 2010, from L'Etudiant.fr

The metropolitan area thus offers a rather honorable variety of training in the image sector, with 2,000 students trained each year, representing as much creative potential. What we see is a significant geographical correlation between the location of training facilities, the location of industrial and regional assets, and the concentration of activities related to the image sector

in Marseille and Aix-en-Provence. However, in a region whose telecommunications and cinematographic activities are well developed, but that does not have large firms in the software and video games sectors, we may ask what the future of young graduates is. Do they remain in the Marseille metropolitan area or do they migrate to other regions and countries?

### **3. The creative class and the mobility of graduates**

Most economists conceptualize talent as a stock or endowment, which belongs to a place in the same way that a natural resource might. But the reality is that talent is a flow, a highly mobile factor that can and does relocate. What about the Marseille metropolitan area?

#### **3.1 Graduates leaving the region**

Only 50% of graduates remain in the PACA region and hardly more of them stay in the Marseille metropolitan area. The problem is equally due to a mismatch between the job supply and the real needs of companies as to poor job opportunities in the PACA region. Young students are trained in Marseille and leave the region to go where conditions are more favorable (in Île de France, in the United States and in Canada). Paradoxically, the Marseille metropolitan area suffers from a shortage of talent in the image sector. Moreover, given the “technicization” of the image industry (due to the quantitative and qualitative growth of technical ability and knowledge), hiring now combines the two dimensions, technical and creative, making it more difficult to find an adequate applicant. Thus, in the game industry, the few development studios located in Aix-en-Provence and in Marseille, which are often Parisian (*Lexis Numérique...*) and more rarely local (*Exkee...*), encounter serious difficulties to hire employees, particularly in programming, computer graphics and game design. It is due to the lack of sufficiently numerous and qualified training facilities. For the Parisian studios, the attractiveness of living conditions and the proximity of microelectronics technology might no longer be sufficient, especially since they are struggling to structure the sector around the *Gamesud* association created in late 2007.

In the movie industry, the problem is to employ temporary workers long enough to allow them to collect their unemployment benefits. Indeed, nearly two-thirds of the employees having worked at least one hour in the performing arts in 2005 in the PACA region worked less than 500 hours and are considered as casual workers. This situation does not encourage the creation and maintenance of a sufficient pool of people with skills and experience on which production companies can “draw” when they produce a movie. This sometimes leads some workers to leave the PACA region for the Paris urban area. Marseille suffers from an excess of training when considering the real needs of a region which remains a filming location for French or international directors, who often come with their own teams.

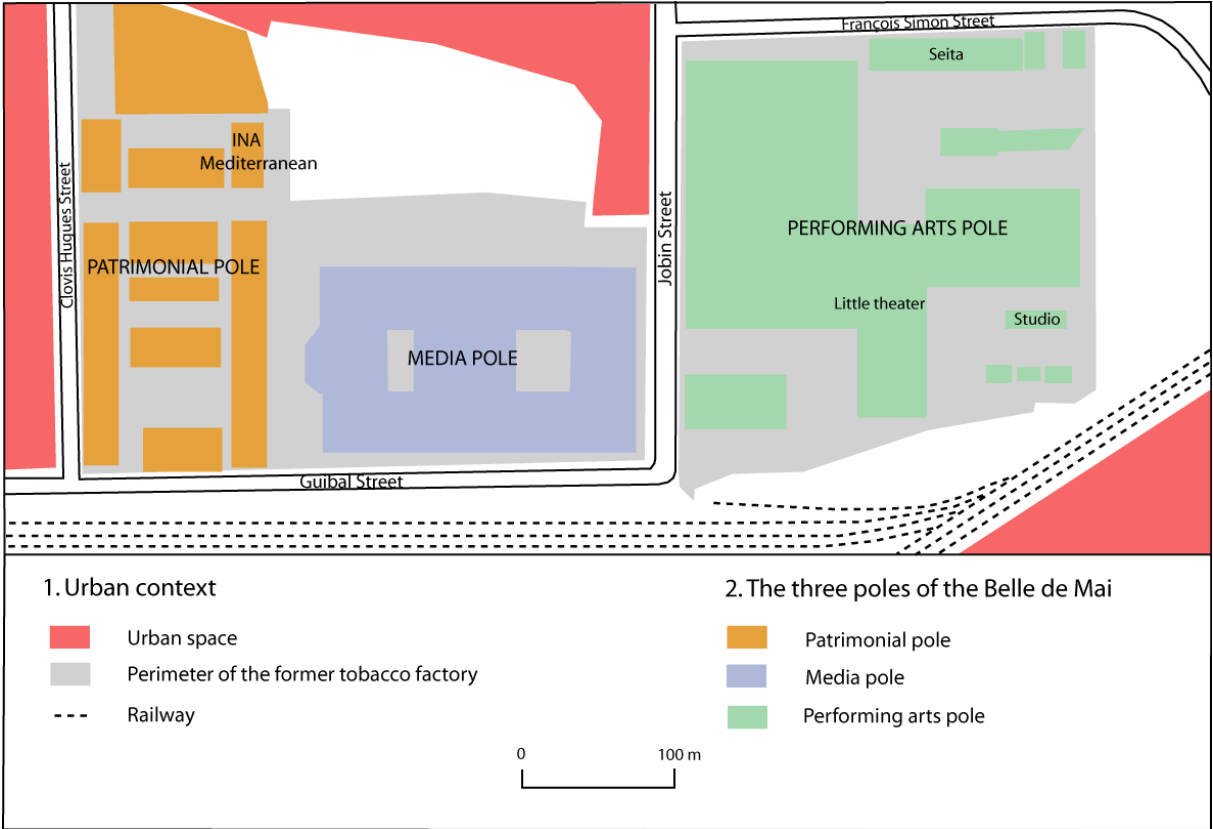
#### **3.2 Public policies to stop the mobility of the creative class**

In order to retain the workforce trained in the region, the PACA Regional Council has launched a support policy for emerging economic sectors. In 2007, it has implemented the *PRIDES* (Regional Clusters for Economic and Social Development), one of which is devoted to movies, the audiovisual, animation, publishing and the distribution of TV programs. It is entitled *Image PRIDES* and is supported by the *Pôle Sud Image* association. This *PRIDES* aims at promoting networks between firms, innovation and training. But *Pôle Sud Image* has hesitated for a long time before including video games activities (which it finally did in 2009

with great difficulties) and the *PRIDES* does not concern the telecommunications, software and Internet activities, which are grouped in another association, *Medmultimed*. *Medmultimed* is one of the associations of a *PRIDES* entitled “Solutions for Secure Communications” which was awarded the competitiveness cluster label in July 2005. The lack of cooperation and the governance difficulties of the different associations have resulted in their inability to undertake concrete actions for the image sector. Thus, with the exception of meetings, no concrete action has actually been taken for the training and employability young graduates.

But the cognitive diversity generated by a social group stimulates creative individual potential (Miliken, Bartel and Kurtzberg, 2003). In 1994, to retain creators in Marseille, public authorities envisaged creating a media cluster in the former tobacco factory of the Belle de Mai. The factory had been closed in 1991 and then re-appropriated by a theater company in 1992, under the guidance of the Marseille town hall. The Belle de Mai Media Pole, which was integrated in 1995 to the *Euroméditerranée* program, is one of the three main elements of a cultural industries complex which also includes a patrimonial centre and a theater pole. In this case, public authorities seek to capitalize on the proximity of theater authors and of audiovisual and multimedia equipment to promote synergies between the cluster’s actors. The purpose is to promote know-how and technology transfers, but also to create a “coopetition” system between the firms in this cluster. In accordance with the “triple helix” (Etzkowitz and Leydesdorff, 1997), the challenge is to bring together in one place companies, public institutions and training and research facilities to foster the emergence of a cluster and attract new and young creators.

**The three poles of the Belle de Mai**



Source: B. Lusso, TVES, Lille 1, 2010

Thus, three studios are located on this cluster which also hosts the local TV channel LCM. Measures are also being taken to attract firms and producers with the commissioning of large office spaces sometimes surrendered to the companies for very small fees. Similarly, the first floor of the Media Pole is reserved for companies like *TSF* or *Moliflex* which provide technical services in the field of images and sound. The challenge is to develop post-production activities, which are otherwise poorly represented in the PACA region. To support the creation and development of companies, an incubator was established in 2000 at the Belle de Mai Media Pole. So as to build connections between schools, research institutes and companies, public authorities have planned to build training facilities on this pole. Within a few years, the Belle de Mai should host a branch of the Art Institute of Aix-Marseille 1 University, offering courses in art disciplines such as theater, film, drawing, design or animated images. The proximity between schools and firms should enable graduates to fit more easily into the professional world and should provide firms with an on-site skilled workforce able to develop innovative projects. Public institutions are also present. The Media Pole of the Belle de Mai is home to the *Observatory for Multimedia Educational Resources* and to the *Pôle Sud Image* association, which was awarded the *PRIDES Images* label in 2007.

### **3.3 The attractiveness of the Media Pole for Parisian firms**

The Belle de Mai Media Pole has been widely supported by public authorities and was granted a 3-million euros subsidy as recently as 2008. The Belle de Mai site has several advantages such as a good TGV access, house prices 30% below the national average, tax-free zones... This explains the settlement in 2004 of a number local firms (*Cyprès, Vidéochroniques, Groupe Dunes...*) and of an even larger number of Parisians groups seeking to escape prohibitive real estate costs (*TSF, Cityvox, Mail Club...*) or of international groups (in 2007, the U.S. group *Expedia* made the largest foreign direct investment in France with over 200 new jobs). Similarly, the Belle de Mai studios have been used since 2004 to shoot the successful soap opera *Plus Belle la Vie*, facilitating the arrival of production and postproduction firms working for *Telfrance Paris*. But can we say that this dynamism will continue if the series came to be less successful? That could well mean a significant loss of studio activities and the departure of Parisian producers. Moreover, the national project for extending the Plaine Saint-Denis audiovisual cluster, located north of Paris, is likely to deter the settlement of firms in Marseille, because of the weakness of both the sector and the networks.

## **Conclusion**

The correlation between urban centres, the location of training facilities, the availability of natural resources (cinematographic tradition, industrial history, attractiveness of the living environment...) in the establishment of a creative class seems sometimes validated, sometimes invalidated, by the example of the Marseille metropolitan area. If the presence of a long-standing movie culture has made Marseille the second most often filmed French city, we must not forget that this balance is very fragile and depends mainly on outside producers and creators, despite the presence of a (too) small local creative class. Similarly, the presence of a favorable industrial context, as in the case of Provençal microelectronics, does not encourage the emergence of a territorial dynamics for graphic arts and video games. Indeed, the Aix and Marseille game industry is just emerging and this process is mainly driven by Parisian firms searching for a better living environment and cheaper costs of living.

If the schools of the Marseille metropolitan area train more than 2,000 students per year, 50% of them still leave the area to find better working conditions. To stop the loss of creators, public authorities have implemented policies to support the image sector, without reducing the dependence of the city toward Parisian producers and companies. Despite the presence of historical legacies and undeniable assets, it seems difficult in a highly centralized country like France, where cultural life is concentrated in the Paris region, to see the development of a powerful image sector. This finding is the same for other French cities, like Lille and, to a lesser extent, Lyon.

## **Bibliography**

Asheim B., Coenen L., Vang J., 2007. "Face-to-face, buzz, and knowledge bases: sociospatial implications for learning, innovation, and innovation policy", *Environment and Planning C: Government and Policy*, Pion Ltd, London, vol. 25(5), pp 655-670.

Alpha Etude, 2007, *Etude monographique sur les implications des pôles de compétitivité dans le champ de l'emploi, de la formation et des compétences*, 327 p.

Braczyk H-J., Fuchs G., Wolf H-G. (dir), 2000, *Multimedia and Regional Economic Restructuring*, Routledge, 448 pages

Chantelot S., 2006. « Une géographie du capital humain créatif en France », *Les annales de la recherche urbaine*, n° 101, pp. 147-153.

Cooke P., Asheim B., 2006, "Constructing Regional Advantage: principles, perspectives, policies", *Report for the European Commission, Brussels*, DG Research, 77 p.

Daviet S., 2003, *Mise en cohérence, fragilités et nouvelles dynamiques de la microélectronique en région Provence-Alpes-Côte-d'Azur*, MDER (Mission de Développement Economique Régional), Marseille, 30 p.

Etzkowitz H., Leydersdorff L., 1997, *Universities and the Global Knowledge Economy: a Triple Helix of University-Industry-Government Relations*, London, Pinter.

Florida R., 2002. *The rise of the creative class*, New York, Basic Books, 434 p.

Liefooghe C., 2008, « Creativity: a Resource for Economic Development in an Industrial Region? A Research Project on Creative Industries in the Lille Metropolitan Area (North of France) », First RSA Research Seminar on Creative Economy, Southampton, 24-25 September, 12 p.

Liefooghe C., 2009, « La créativité : une ressource pour le développement économique d'une région de tradition industrielle ? », XLVIe Colloque ASRDLF, Clermont-Ferrand, 6-8 July, 15 p.

Lusso B., 2009, « La filière audiovisuelle-multimédia, outil des politiques urbaines dans les aires métropolitaines de Lille et de Marseille », *Colloque européen Culture, territoires et société en Europe*, 28-29 May, Grenoble.

Milliken F.J., Bartel C.A., Kurtzberg T.R., 2003, « Diversity and creativity in work groups: a dynamic perspective on the affective and cognitive processes that link diversity and performance », in Paulus P.B. (eds), *Group Creativity*, Oxford University Press

Rutten, R. Boekema, F., Kuypers, E., 2003. *The economic geography of higher education: knowledge infrastructures and learning regions*, London: Routledge.

Rychen F., Zimmermann J-B., 2005, « Du bassin houiller de Gardanne au pôle micro-électronique provençal: reconversion ou mutation? », *Rives méditerranéennes*. URL : <http://rives.revues.org/index75.html>.

Saxenian A-L, 1994, *Regional advantage. Culture and cooperation in Silicon Valley and Route 128*, Cambridge-Harvard University Press.

Verdier E., 2006, “Learning industry against knowledge economy ? Lessons from the french case”, in Lorenz E., Lundvall B-A (eds.), *How Europe's economies learn*, Oxford University Press, pp 256-279.

Wolfe D.A., 2002, “Social capital and cluster development in learning regions”, in: Holbrook J.A, Wolfe D.A. (eds.), *Knowledge, clusters and regional innovation*, McGill-Queen's University press, pp 11-38.