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Title: Emergent multimedia clusters in the Lille, Lyon and Marseille metropolitan areas

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Introduction

Following the rediscovery of Alfred Marshall's academic publications during the eighties, a widening number of research papers - mainly draft in Europe and United-States - concentrate on explaining the ins and outs of the spatial and relational proximities. The unsettled notion of cluster has been popularized from 1990 by Michael Porter which considers cluster as "geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition" (Porter, 1998). "The geographic scope of a cluster can range from a single city or state to a country or even a group of neighboring countries" (Porter, 2000). But the notion of cluster had a coronation within the academic community, instead of the substantial conceptual limits underline by various schools of thought.

Consequently, the concept of innovation cluster blows in the communications of the spatial economists achieving scientific works on high-tech sector. Unlike the classical approach, innovative clusters assert at least three new features: the regional scale, the collaborative process of governance and then the non-immediately-marketable aspect of the relationships undertook within the cluster (Leducq and Lusso, 2011). Thus, the spatial, organizational and institutional proximities play an important part in the success of cluster policy and economic development (Boschma, 2005). If the innovation cluster's outlines are still the subject of a large number of theoretical debates, its spatial relevance dashes within the public policies framework – and thus, at every scales from continental one to metropolitan one passing by the national and regional extents, whatever the country's or Region's development stage is. If the innovative clusters political experiences lead to mixed results, they however demonstrate a stronger resilience of territories confronted with economic restructuring during a period of manifested crisis.

It is therefore important to see what kinds of networks are being developed between the different actors of the Triple Helix (Etzkowitz and Leydersdorff, 1997): firms, training and R&D facilities, and public authorities. In France, the Paris region is the traditional centre for decision-making and creative functions. Unsurprisingly, it concentrates most cultural industries – cinema, multimedia, TV, etc. The aim of this paper is to study how other French cities, and more specifically regional medium-sized cities, can develop this type of activities by the proximities and clusters policies. We will take the example of the multimedia industry in the three French metropolitan areas, Lille, Lyon and Marseille, which are the main regions of multimedia production after Paris and the Ile de France region.

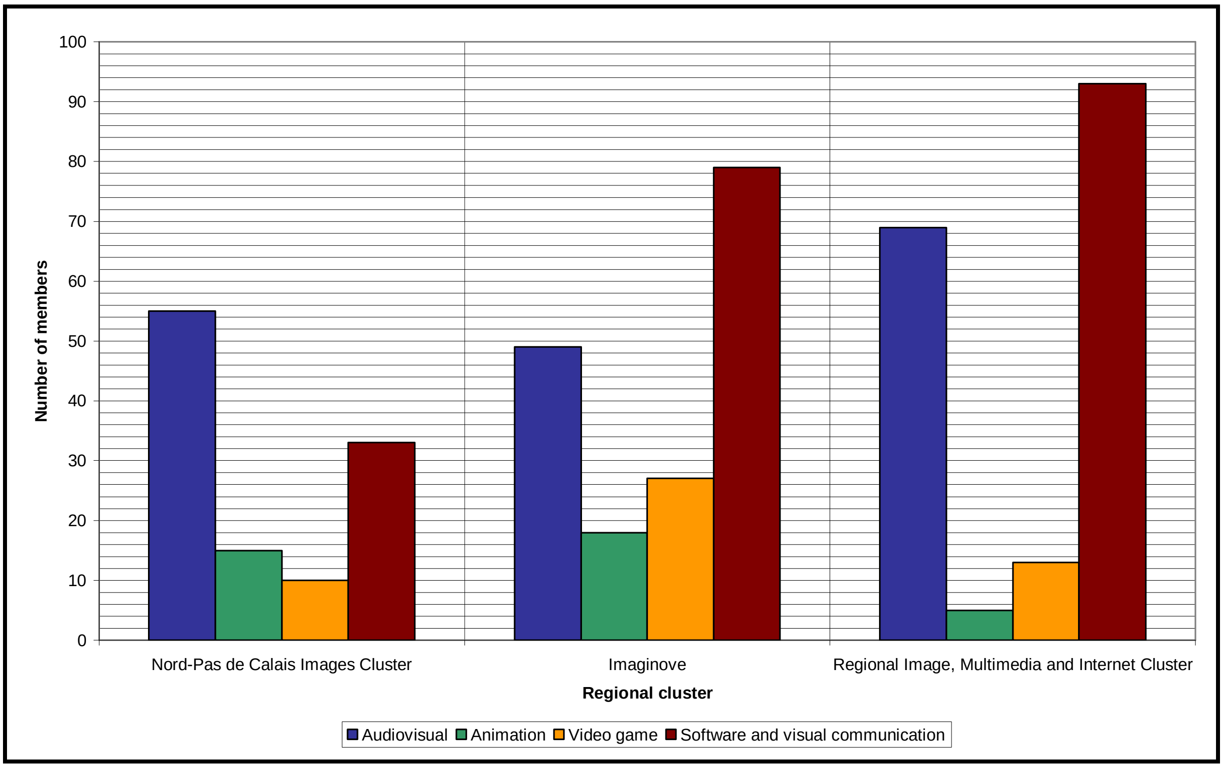
1. The collaborative process of the multimedia sector governance

The dynamism of the social networks is supported by the development of collective governance which associates public and private actors (Maillat and Kébir, 1999). Since the mid-2000s, the development of the multimedia sector in the three metropolitan areas has been encouraged by several associations, which was labelled as cluster by the regional or national public authorities.

1.1 Number and distribution of cluster members

Many of the activities related to the multimedia sector in the Lille, Lyon and Marseille metropolitan areas are grouped in the *Nord-Pas de Calais Images Cluster*, *Imaginove* and *Regional Image, Multimedia and Internet Cluster* associations, which received the label of competitiveness cluster in July 2005 (for *Imaginove*) or regional cluster (the three cases). These associations count 115 members (*Nord-Pas-de-Calais Images Cluster*), 150 (*Imaginove*) and 183 (*Regional Image Multimedia and Internet Cluster*), that are distributed as follows:

Distribution of *Nord-Pas de Calais Images Cluster, Imaginove* and *Regional Image, Multimedia and Internet Cluster* members



Source: B. Lusso, 2011, TVES

The members of this association come from diverse sectors, with their own culture and approach of the creative economy. Producers, technicians and distributors of motion, television or animation pictures are especially numerous: they make up more than half the members of the three structures. Indeed, the audiovisual sector is mainly composed of small independent producers who encounter serious difficulties to distribute their works. Their projects are relatively long (18 months on average) and involve very diverse know-how (a screenwriter, assistant-director, cameraman, editor, etc.). A single person cannot control the integration of the production process. These small independent producers have often been forced into partnerships so as to complete their work. Then come the video game companies that are much less represented. Faced with stiffer competition, the video game industry is more logically made up of companies which do not necessarily want to develop networks, especially since these are less numerous. Furthermore, we see a significant number of non-cultural digital producers: they are essentially communication firms, marketing agencies or companies designing web sites for commercial firms, food companies or hotels. They join this type of association to improve their market visibility, but also to find potential customers.

In the absence of a leader firm, the performance of the system depends closely on the force of the institutional potential (Becattini, 1981). Indeed, we can note that the clusters have integrated a certain number of public institutions which take part in the financing of the image sector. It is the case of the Regional Films Commissions, the development agencies and the local public authorities (Regional Councils, General Councils and urban communities). Indeed, these public authorities bring increasingly important financings in these emergent activities for which they wish a fast return on investment. With this intention, their adhesion at these professional associations aims to weigh on the decision making and the cluster strategic development. So, public authorities seem active members of these professional associations.

Training facilities and research units represent about 10% of three professional associations members. Training facilities are not particularly active members of the association and therefore develop a wait-and-see strategy: their goal is to observe how skills develop so as to adapt their offer, to lure contractors into intervening in their training courses or to present their students and thus increase their employability. However, the geographical origin of members highlights the overwhelming weight of the Lille, Lyon and Marseille-Aix agglomerations, which concentrates more than 70% of cluster members, the rest being shared between secondary centres such as Grenoble, Annecy and Valence (for Lyon metropolitan area), Valenciennes (for Lille), Nice, Antibes, Hyères and Toulon (for Marseille-Aix). This finding is the direct result of the metropolitanisation process, which is characterized by a high concentration of creative activities in the main urban centres.

1.2 History of the creation of the professional associations and type of governance

The *Imaginove* competitiveness cluster was founded by three major associations from the video game industry (*Lyon Game*), the audiovisual and cinematographic industry (*Images Rhône-Alpes*), and the digital and animation industry (*CITIA*) in the Rhône-Alpes region. The birth of *Imaginove* in its current configuration happened through a series of steps. At its inception, the cluster included only the video game industry, the universities and the research units gathered in the *Lyon Game* association. Founded in 1999 by industrialists from Lyon wishing to set up a collective stand at the E3, the annual video game exhibition, this association has supported the video game industry in many ways, by accompanying Lyon's video games firms to major industry events, like the *Tokyo Game Show*, by creating a video games school in 2004 (*Gamagora*), or by organizing events (*Game Connection* in 2002, *Serious Games Sessions Europe* in 2005)... These activities explain why, in 2002, *Lyon Game* received the support of the Rhône-Alpes Regional Council as part of its strategy for supporting regional clusters by granting them the "digital entertainment" regional cluster label. The competitiveness cluster labelled by the government in July 2005 was actually the "digital entertainment" regional cluster. In 2006, under the leadership of the Rhône-Alpes Regional Council and of the main actors of the "moving pictures" sector, the *Imaginove* cluster took its present form. This reconfiguration was the result of the evolving strategic vision for clusters of the regional executive that called into question the concentration of the cluster around the sole video game industry and considered that it was necessary to expand the cluster to others image industrialists present in the Rhône-Alpes region, including the cinema, audiovisual, animation and multimedia industries. Considering that these actors increasingly operate in the same markets, it is essential that they should work together to anticipate the changes which they will face, an idea which was not widely shared at that time.

In the Marseille metropolitan area, the situation is more difficult. Indeed, in 2007, regional associations *Medmultimed* (a multimedia professional association) and *Pôle Sud Image* (an audiovisual association) have labellized cluster by the PACA Regional Council. Nevertheless, in spite of the proximity of their activity sector and the possible convergences – few firms are members of the two structures -, the two regional associations didn't really want to develop partnerships. But, in 2009, *Medmultimed* had budgetary difficulties and *Pôle Sud Image* didn't have president, which had refused the *Pôle Sud Image* development into the video games industry. It was easy for the PACA Regional Council – the main financor of the two clusters - to impose a partnership. Thus, the Regional Image, Multimedia and Internet Cluster has been founded in June 2010. That symbolizes the difficult – but necessary – bringing together – of the *Pôle Sud Image* and *Medmultimed* associations. In the Lille metropolitan area, the situation is very simple. The lack of interfirms cooperation has constrained the director of the Regional Film Commission to create a cross-media professional association. After negotiations with the principal institutional partners and organizations of the multimedia sector (Valenciennes development agency, *Digiport* and *Lille Metropole Communauté Urbaine*), the Nord-Pas de Calais Regional Council decided to launch in 2009 a public association dedicated to the whole image sector, at a regional level : the *Nord-Pas de Calais Images Cluster*.

Three forms of governance (Tremblay and Rousseau, 2005) can be distinguished: public, private and public-private partnership. These new cross-media cluster is an example of a public association. That is entirely financed by the public authorities which plays an important role in the strategic governance of the structure. It isn't the case of *Imaginove* and the *Regional Image, Multimedia and Internet Cluster,* that interfirms networks are existent before the cluster creation. Private actors take part in the decision and the strategy of the professional association, which is largely financed by public authorities. These two cases illustrate a type of public-private partnership governance. The creation of these structures enables the whole image sector actors to develop a strategy in order to structure the multimedia industry.

2. Organisational proximity and image sector structuring

The organisational proximity is related to the institutional proximity. It enables to coordinate knowledge exchanges between actors of the same organization or a different organization. As B. Pecqueur and J-B. Zimmermann (2004), the organisational proximity is space equipped with an operational structure which works out strategies and frames them by actions rules in order to reinforce a positioning (power, interests). By its legal existence, it authorizes a complex collective action, by coordinating the individual members actions around a community of projects. Thus, the place of each organization is determined, structuring relationships. The organisational proximity falls under time and space and makes it possible to accumulate know-how and to reduce related to the economic evolution economic.

2.1 Similar strategies

In the Lille, Lyon and Marseille metropolitan areas, associations which animate and structure the image sectors, are characterized by similar development strategies. In France, regional and metropolitan public authorities and development agencies have often apply the national amenagist thought (Woessner, 2009) which is based on the Porter's clusters theories (Porter, 1990, 1998 and 2000) as shows the example of the Competitivness Clusters policy launched by the French State in 2005. These associations, which are dedicated to the manufacture and distribution of cross-media content (cinema and audiovisual productions, animation, video games, software and visual communication), aims at becoming a European reference within 5-10 years. Since their creation, these associations have anticipated international competitions, changes in media use (dematerialization, mobility…) and the cross-media strategies of international groups in the image sector. The image sector actors must develop synergies between the image sectors by encouraging anticipation and stimulating innovation.

To meet these challenges, the associations *Imaginove, Nord-Pas de Calais Images Cluster* and *Image, Multimedia and Internet Regional Cluster* have launched concrete operations into the multimedia sector, such as:

- Organisation of professional events and meetings,
- Call for projects, which associate firms and research centres,
- Support for Innovation,
- Commercial development,
- International development,
- Training and employment programs.

The aim of the cluster is to assist regional actors facing the dynamics of change, market and trade with simple and concrete support in the field of innovation, business and skills.

2.2 Main projects and action means

In order to facilitate the networks developments, professional meetings are organised by the three associations such as The *48th Week* organised each year in November by the *Nord-Pas de Calais Images Cluster* and devoted to the ICT sector, *The Game Connection*, the rhône-alpin annual video games meeting or the *Top TIC* meeting organised by the *Medmultimed* for the *Multimedia and Internet Regional Cluster*. If these professional meetings enable the image sector actors to know, that doesn't support the partnerships development. This explains why regional associations have launched at regional level call for collaborative projects, which associate firms and research centres.

For example dozen programs linking firm and research centres have been launched since the creation of the *Imaginove* competitiveness cluster. The money invested by public authorities in these collaborative research programmes is important, as illustrated by the *Garden* project developed in the Lyon metropolitan area by three local SMEs (Krysalide, Eden Games, Gamr7) and a research unit (*INRIA*). As part of Atari's new strategy (a U.S. company bought in 2001 by the Lyon company Infogrames), who wishes to become one of the main actors in the creation and distribution of video games for the current (Wii, Xbox360, PS3, PC) or future (PS4, Xbox720, PC DirectX11 NextGen) console generations, the project aims at developing a common and evolutionary technology of video game production for the Atari Group developers, whose partners are subcontractors. This technological progress will allow Atari to get a head start on the video game market, reducing its production costs and increasing direct investment on new projects as regards performance, visual appearance and productivity. So, through this collaboration, Krysalide should have a technology able to meet the needs of publishers and to move from subcontracting activities to developing platform video games. The use of the latest programming and hardware technologies, as well as the use of networks, will be at the heart of the project, which is divided into 11 sub-projects for a total budget of 9 million euros. One third of this sum is financed by public authorities.

A support for innovation is given. In the Marseille metropolitan area, *Medmultimed* has set up the *Labo*, structure taken again by the *Regional Image Multimedia and Internet Cluster*. The aim of this project is to enable the member to reach of mutualized equipments in of the web, audio-visual and numerical fields, with a powerful softwares in order to test and experimentation. Located in the *Belle de Mai Media Pole* (Marseille), the *Labo* is also an antenna of a telecommunications platform telecom carried by the SCS competitivness cluster in Sophia Antipolis. Orange Lab, partner of the platform consortium, will install the first 4G antenna *4G* in PACA related to the *Labo* in the *Belle de Mai Media Pole*. The principle of the structuring device is to enable the SME - few equipped – to access to an high technological equipment. This project is financed by the *DIRRECTE* and PACA Regional Council.

Commercial development programs have launched by the three clusters in order to support to firms willing to try out innovative business approaches. The purpose is to test a new sales model for an existing activity (online broadcasting, direct/indirect, derivatives…). To do this, companies receive financial support and/or coaching support. For example of international development program, *Imaginove* has launched a programme for international development which provides advice and finances 50% of their spending. The programme supported the international development of 25 companies and ten jobs were created. Thus, the *Imaginove* competitiveness cluster has encouraged the firm E-magineurs, which specialises in audiovisual, interactive and event-driven communication, to think of its business development in terms of an international dynamic. This approach relies primarily on a cultural reality. The opening of a branch of the Lyon II University in Dubai and the building of a second *Louvre* museum in Abu Dhabi is a fitting illustration. Advice from a consultancy firm allowed to cross out inadequate countries (Russia, Japan). A target territory was chosen: Dubai. The consultancy firm then created a map of potential buyers. In a second phase, these potential buyers were approached and the firm organized a series of appointments in

Dubai. This prospective phase led to the identification of five major customers who now order from E-magineurs and not from national suppliers. Two trips to Dubai were needed to establish the initial commercial relations. However, this type of programme is reserved for companies which have an adequate size and financial base: such companies are a minority, to be found mainly in the area of multimedia and video games, and much more rarely in the audiovisual sector.

Finally, training and employment programs have launched. *Imaginove Skills* is a training programme which aims at providing professional training adapted to the needs of firms seeking to maintain a high level of expertise and to anticipate changes. However, the main originality of *Imaginove* is the setting up of an unprecedented pooling of training. Based on the experience developed in the video game sector by *Gamagora, Imaginove Skills* offers training for all the sectors in the cluster. A Development Agreement for Employment and Skills (ADEC) has been signed with the Rhône-Alpes Regional Council, in partnership with AFDAS, an organization which facilitates training in the fields of culture. Over the 2007-2009 period, 56 companies and 115 trainees have been mobilised, amounting to 25 courses for 1,900 hours of training. The competitiveness cluster offers a real training plan for employees of companies from the cluster (in language, law, management, information technology, audiovisual and cinema knowledge). The challenge is to contribute, through the pooling of the offer for training courses between the different sectors of the cluster, to increasing the exchange of practices and experiences among employees and executives from various worlds between which convergence is developing more and more.

However, financing by local authorities should become very problematic because of two local government reform projects planned by the Sarkozy government. One project is for the abolition of the professional tax which will deprive local communities of a major funding source; the other project is the suppression of decision levels like the *department* (General Council) and the merging of Regional Councils (from 22 to 15). The problem of developing a coherent innovation policy is as much due to the reluctance of many companies and research units to work together as to inconsistent government policies. The constant redefinition of the powers and responsibilities of local authorities is therefore a factor limiting the definition of a policy based on competitiveness and the emergence of innovations.

3. Emergent networks

Is there a spatial proximity? It is therefore important to see what kinds of networks are being developed within the image sector between the different actors of the Triple Helix (Etzkowitz and Leydersdorff, 1997): firms, training and R&D facilities, and public authorities.

3.1 Are training structures really adapted?

Only 50% of graduates remain in the Lyon and Marseille metropolitan areas, whereas the share is of 70% in the Lille 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 Rhône-Alpes region. Young students are trained in these metropolitan areas and leave the three regions to go where conditions are more favourable (in Île de France, the United States and Canada). Paradoxically, the Lille, Lyon and Marseille metropolitan areas suffer from a shortage of talent in the image sector. Moreover, given the “technicisation” 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, 70% of development studios have difficulties in hiring, particularly in the programming, computer graphics and game design sectors. In the film industry, the problem is to employ temporary workers long enough to allow them to collect their unemployment benefits. For example, out of the 28,750 employees having worked at least one hour in the performing arts in 2001 in the Rhône-Alpes region, 20,000 of them (70%) 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 could “draw” when they produce a film.

3.2 Limited networks between firms

Collaboration between different regional firms was generally low or nonexistent before the launching of the three clusters. If partnerships existed in the audiovisual field between producers and technical teams, it was mostly casual and limited to an 18-month project on average. Finally, the video game industry is dominated by several large publishers, who entrust to their subsidiaries (mainly development studios) the creation and production of finished products and assign to smaller subcontractors units the assembling of the game. The sector is therefore organised as a lobbying system, with the parent company retaining the design functions and entrusting less skilled tasks to its subsidiaries. Companies in the multimedia sector are mainly SMEs who have neither the means nor the culture of international development. They think that international development is reserved for the largest companies. On these different levels, despite real progress, there is yet much progress to make, because collaborations are still very recent, rarely include a cross-media approach and hesitate to develop partnerships with research units.

3.3 Shortcomings of research

The three multimedia clusters are not very involved in research. It must be said that research does not involve identical stakes in the different sectors of the image sector. What explains these differences? In the case of the audiovisual sector, Lille, Lyon and Marseille don’t enjoy the presence of large producers like in the Parisian region. The actors of the audiovisual sector prefer to focus their efforts on high-quality production, especially as regards scenarios, rather than banking on over-the-top special effects. The only innovation that has transformed the sector is the introduction of digital technologies. Furthermore, this sector is characterised by the heavy weight of associations and professional unions. Although they have certainly facilitated the development of networking between the different actors of the sector around mainly technical aspects, this is not the case in the field of innovation.

As for video games, the weakness of collaborations in the field of research lies more in the particular relation that firms have with R&D research units. When a development studio (there are many in the Rhône-Alpes region) does R&D, it is generally not dissociated from the production of a specific film. It applies directly to this film and ends when the production is over. Indeed, the relatively small size of companies does not allow them to develop an autonomous research activity, while larger companies develop their own research programmes. Innovations are rather exogenous and appear as a technological constraint imposed by the upstream actors of the "hardware". It seems essential in this context that content producers make a significant effort to organize R&D internally, so as to offset the exogenous innovation constraint by building on the skills of engineers, designers and creators.

Conclusion

The dynamism of the social networks is supported by the development of a collective governance which associates public and private actors. So, in the Lille, Lyon and Marseille metropolitan areas, initiatives have launched to facilitate strategic governance of emergent regional multimedia clusters. Two forms of governance can be distinguished: public (*Nord-Pas de Calais Images Cluster* in Lille), private and public-private partnership (*Imaginove* in Lyon and *Regional Image, Multimedia and Internet Cluster* in Marseille). These contrasted situations result from internal conflicts in the different industries of the multimedia sector. These structures have launched several similar actions in order to the constitution of social networks. Principles are inspired by the Competitiveness Clusters and Michael Porter's theories (2000). We can summarize them in the following way:

- Interprofessional meetings,
- Pooling of the human resources of the companies from the cluster,
- Training programme for employees and executives,
- Calls for collaborative projects which associate industrial and academic partners,
- Support to firms willing to try out innovative business approaches,
- Support programme for companies seeking to compete internationally.

But, collaboration between different firms was generally low or nonexistent in spite of several regional projects (Einright, 1996). Collaborations are still very recent, rarely include a cross-media approach and hesitate to develop partnerships with research units. Similarly, the three metropolitan areas suffer from the poor adaptation of the regional training offer, which is far too rich and diverse compared to the actual capacities of the regional moving picture economy. Companies, mainly SMEs, cannot hire many people and they hesitate to embark on international missions.

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