Grouping or Grounding?
Cultural District and Creative Cluster Management in Nantes, France

Nathalie Schieb-Bienfait, Anne-Laure Saives, Brigitte Charles-Pauvers, Sandrine Emin, Hélène Morteau

Introduction

The cultural and creative cluster (CCC), as a new organizational form, needs to be empirically investigated. When considering the cultural sector and creative clusters (Chaston and Sadler-Smith 2012), it must be kept in mind that there are significant differences, depending on the labour input of creative entrepreneurs and the wide range of industries involved, such as advertising, architecture, design, software, music, photography, fashion, visual arts and performing arts. Workers in CCCs are located in idiosyncratic environments and develop tacit knowledge. Moreover, they create and interact within intermediary groups such as professional associations (O'Connor 2010). They engage with user communities (Parmentier and Mangematin 2014), to develop new products and services, for instance, and with professional communities in the underground sphere (Cohendet et al. 2010). The clustering practices of creative workers and small companies raise the question of which associated support and managerial processes to choose in managing dynamic and innovative capabilities at the cluster level.

This article examines the genesis of the CCC as a collective system of small or very small companies. We hope to throw new light on management issues in CCCs by drawing on the results of a longitudinal case study of the trajectory of one such CCC, Quartier de la Création (QDC) in Nantes, France, with a specific focus on three geographical groupings of companies within it: Halles Alstom, Karting and Les Olivettes.

We reflect on the management mechanisms in CCCs (i.e., the practices used in mobilizing and organizing collective action (Cars et al. 2002; Dandridge and Johannisson 1996) based on an analysis of management tools. What dynamic/iterative management mechanisms can be adapted to the innovative, productive and sustainable grouping of very small cultural and creative companies – a vertical, top-down approach with distance between actors (cluster-building), or a horizontal approach with collective strategy development (policy-leveraging) (Ebbekink and Lagendijk 2013)?

We first present our theoretical framework by discussing recent developments regarding the cluster concept as applied to the cultural and creative sector. We next describe the methodology and research strategy employed in our in-depth longitudinal case study.[1] We then analyze the trajectory and the challenges faced by the CCC's actors over six years, paying particular attention to identifying the management mechanisms/tools and their evolution. We also discuss the implications of this case for cluster management. We conclude with suggestions for how to better distinguish between the Grouping and Grounding managerial approaches to clustering.

Innovation and Cluster Management: Theoretical Background

Phrases such as "ideas are in the air" (Marshall 1920), "un-traded interdependencies" (Storper 1995), "sticky places" (Markusen 1996)

Nathalie Schieb-Bienfait, PhD (Management Science), is a lecturer and research director at IAE, University of Nantes, specializing in entrepreneurial dynamics and innovation processes.

Anne-Laure Saives, PhD, is a professor of Management and Creativity at the Université du Québec à Montréal specializing in the conceptualization of place and space in strategic creativity.

Brigitte Charles-Pauvers, PhD (Management Science), is a lecturer at IAE, University of Nantes, specializing in organizational behaviour in connection with the evolution of human resources management politics.

Sandrine Emin, PhD (Management Science), is a lecturer at the University of Angers specializing in entrepreneurial dynamics.

Hélène Morteau, PhD (Urban Studies), is a research engineer, ANR Cluster 93.

and "local learning systems" (Lorenzen 1998; Maskell et al. 1998) remind us that the innovation dynamics of CCCs are either misunderstood or approached from a referential framework more suited to the industrial activities of large companies. There are three reasons why this subject is so elusive. Firstly, the predominance of top-down regional strategies, based on a Porterian approach (Porter 1998, 2000), reflects the idea that it is possible to control economic/innovation processes through strategic intervention and by initiating and directing the innovation process. Secondly, we lack an understanding of the entrepreneurial process at work within these small companies and how they function (Menger 2002, 2005), which relies on the development of business opportunities using multi-sourced independent resources. Thirdly, the design and implementation of management mechanisms do not capitalize sufficiently on the interactive and collective dimension of these small companies, or on how they organize resources around social and business exchanges based on personal relations, understandings and mutual trust (Johannisson 2003).

Economists and geographers have underlined the beneficial effects (competitive advantage) of geographic proximity in clusters, which favour a common culture. Recent research has shown that, even in the age of the Internet, the economy depends on the transmission of complex non-codifiable messages. These rely on understanding and trust through face-to-face contact and "handshakes" rather than conversations (Leamer and Storper 2001). Physical proximity is important not only in the case of emergent innovation processes, where information is not codified and formalized, but also when actors have divergent temporalities and reference spaces (Gilly and Grossetti 1993). Gordon and McCann (2000) identify three contexts for theoretically analyzing industrial clusters: the cluster as a single spatial agglomeration (spatial economics perspective), the cluster as a space for industrial relations between collective entities (regional and industrial economics perspective), and the cluster as a space for social relations and social embeddedness (socio-economics perspective).

Recent studies have found that geography is not the only determinant of innovation in clusters (Boschma 2005; Giuliani 2007). Researchers seek to understand how knowledge is developed and enhanced by knowledge workers' mobility and interpersonal relations (Rosenthal and Strange 2004) and how it sustains dynamic capabilities and innovation (Giuliani 2005), such as through networks or knowledge spillovers (Jaffe et al. 1993; Owen-Smith and Powell 2004). All of these issues have led to discussions on the management practices needed to develop intra- and extra-cluster relations.

Despite a slight shift towards a knowledge-based view of clusters, the economics-based view still dominates. Policy interventions tend to be inspired mainly by formal economic theories (in line with the Porterian view of clusters; Porter 1998, 2000). Policy-makers are still being persuaded to use a "cluster toolkit" (Bahlmann 2014; Bahlmann and Huysman 2008). The issue of cluster governance takes on a different aspect when viewed from the knowledge-based perspective (Crévoisier and Jeannerat 2009) because of the complex challenges it poses. Bahlmann and Huysman (2008) assert that "governing knowledge, both in organizations and clusters, involves, at the very least, understanding the rich social dynamics to which the concept of knowledge is subject" (p. 315).

Therefore, following a human and relational geography perspective, we hypothesize that, beyond economies of agglomeration, cluster

ABSTRACT

This study examines the genesis of a cultural and creative cluster (CCC) as a collection of small or very small companies. The authors use the results of a longitudinal case study of the trajectory of a CCC to reflect on the management mechanisms in CCCs based on an analysis of management tools and how they operate to encourage Grounding and/or Grouping dynamics. This six-year study of Quartier de la Création in Nantes, France, confirms the prevailing view of a CCC as a dynamic organization. The CCC shows distinct stages, each with its own governance and managerial difficulties. It reveals challenges in shaping the role of the support organization and in identifying the competencies to be developed. The governance mechanisms and the cluster practices of some localized groupings of very small creative enterprises require a balancing of Grouping and Grounding approaches, as hybridizing is central to cluster dynamics.

KEYWORDS

Cultural and creative cluster, grounding dynamic, grouping dynamic, cluster governance mechanisms, longitudinal case study, cultural district

governance has to develop a "global sense of place" and a "throwntogetherness" (Massey 1994, 2005), over and above the mere vertical practices of Grouping (co-location of actors, geographical clustering) within hierarchical structures. According to our hypothesis, the art of cluster governance lies in the collaborative and participative practices (Andres and Chapain 2013) of co-localized and situated actors. Such Grounding practices depend on both "placenessness" (the feeling of being in a place that counts and has meaning) and "grounded connectedness," a term coined by Massey (2005).

— —

Methodology

In the "appreciative theory" approach,[2] the study of clusters is based on different terms depending on the discipline – industrial and innovation economics, new geographical economics, territorial planning, strategic management – and the perspective (Forest and Hamdouch 2009).

Our research strategy was based on a longitudinal case study (Yin 1984) of different geographical areas within the same emerging cluster, including the cluster organization and the managerial team. The methodological challenge (Forest and Hamdouch 2009) called for an interdisciplinary approach in order to interlink complementary empirical investigative methods (case studies, monographs, network analyses, mappings) and to mobilize data (primary, secondary, qualitative and quantitative), along with different collection techniques (archives, surveys, interviews, press clippings, databases). Our empirical field was a wide range of very small enterprises engaged in different activities (video,

design, architecture, comics, fashion) in three different places (Halles Alstom, Karting and Les Olivettes). We mixed data-collection techniques – interviews, longitudinal observations and questionnaires – in order to obtain a broad range of data (see Table 1). Data collection was aimed at simultaneously characterizing the development process of the cluster and the changes in its management and governance structure (here, facilitating structure). The data were gathered from managerial meetings, strategic plans, and semi-structured face-to-face interviews with managers, entrepreneurs, key employees in firms located in different parts of the cluster and key managers within the support organizations. The interviews were transcribed and manually coded to facilitate description, comparison, and interpretation of governance practices and the place-based work of local creative workers.

— —

Results

Major Stages in the Clustering Process

In order to situate the QDC cluster historically, we looked at some contextual exogenous factors, notably the macro-economic, political, social and demographic environment of the area, including significant periods and dates (Table 2). Figure 1 traces the genesis of the project and the evolution of the cluster. Figure 2 shows the different creative places planned for Île de Nantes (Isle of Nantes).

Various interconnected objectives of the QDC project were expressed more or less explicitly over the years: rehabilitation of a declining industrial space; development of a metacentre for marketing the territory; attracting new consumers (of

RÉSUMÉ

Cette étude examine la genèse d'une grappe culturelle et créative (GCC) en tant que regroupement de petites et de très petites entreprises. En s'appuyant sur les résultats d'une étude de cas longitudinale sur la trajectoire d'une GCC, les auteurs explorent les mécanismes de gestion dans les GCC en analysant les outils de gestion qui y sont utilisés et la façon dont ils sont utilisés pour favoriser les dynamiques d'enracinement et de regroupement. Cette étude du Quartier de la Création à Nantes en France s'est échelonnée sur six ans et confirme l'opinion courante qui veut que les GCC sont des organisations dynamiques. Les auteures identifient des phases distinctes au sein de cette GCC, chacune accompagnée de ses propres difficultés en matière de gouvernance et de gestion. L'étude fait ressortir des défis en ce qui concerne la définition du rôle de l'organisation de soutien et l'identification des compétences à acquérir. Les mécanismes de gouvernance et les pratiques de regroupement de certaines très petites entreprises créatives exigent un équilibre entre les approches d'enracinement et de regroupement, car une approche hybride est essentielle à la dynamique d'une grappe.

MOTS CLÉS

Grappe culturelle et créative, dynamique d'enracinement, dynamique de regroupement, mécanismes de gouvernance des grappes, étude de cas longitudinale, quartier culturel

TABLE 1

SUMMARY OF EMPIRICAL MATERIAL

Phase	Fieldwork	Data collected	Actors
2006–09	• Five interviews with head of Nantes Création • Two ECCE seminars • Three interviews with director of higher education for the city	• Invitations, leaflets, notes, interviews, municipal documents, survey responses	• Researcher as participating observer
2009	• Two qualitative studies of the 50 companies located in Halles Alstom	• Forty-seven interviews	• Five researchers and two trainees
2011	• Study of location of showcase	• Internal documents on the offer	• Second-year master's student
2012	• Study of companies in Karting	• Company monographs	• Two researchers, two master's students
2011–14	• Comparative study of projects in CCCs in QDC; organization of events	• Minutes of meetings, reports, reviews, interviews, roadmaps, external studies	• PhD student in QDC • Five researcher meetings per year
2012–14	• Qualitative study of Les Olivettes	• Forty-six interviews, including four with local facilitators	• Three researchers

culture, tourism and novelties); and development of a new area of specialization: cultural and creative activities.

Over the entire period, the QDC, which has more than one physical anchor, underwent a hybrid process combining emergence with deliberate action, freedom/autonomy with dirigisme, and frameworks with flexibility. The process can be broken down into three phases extending from 2003 to 2014: (1) the genesis phase, under management by the city of Nantes and Nantes Métropole (the urban community); (2) the pivotal phase (transition from district to cluster as an institution); and (3) the cluster as a program managed by SAMOA (Societé d'Aménagement de la Métropole Ouest Atlantique[3]).

Genesis phase: 2003–09

In the period 2003 to 2009 the proto-cluster took shape following reflection on a project for clustering cultural industries by a working group made up of actors from the Nantes department of culture and the mayor's office along with the head of SAMOA and the director of the local school of fine arts. These actors became involved in various activities to ensure the smooth governance of the project. The involvement of the city of Nantes in the ECCE (European Centre for Creative Industries[4]) project reinforced this dynamic and bolstered the project, proving that culture and creative activities could be of value to the territory.

One of these actors, SAMOA, was founded in October 2003 in order to lead and manage all urban development and renewal programs in the Île de Nantes district as well as to test and support the development of spaces dedicated to creative workers and businesses. In parallel, the city of Nantes and Nantes Métropole established Nantes Création, a small (three-person) team dedicated to supporting creative activities in the territory (Table 3).

RESUMEN

Este estudio examina el origen de un conglomerado cultural y creativo (CCC) como una colección de pequeñas y muy pequeñas empresas. Los autores utilizan los resultados de un estudio de caso longitudinal del recorrido de un CCC para una reflexión sobre los mecanismos de gestión de los mismos, basada en el análisis de los instrumentos de gestión y cómo estos operan para favorecer una dinámica de conexión o de agrupamiento, o las dos. Este estudio de seis años del Quartier de la Création en Nantes, Francia, confirma la visión aceptada de un CCC como una organización dinámica, que pasa por etapas diferenciadas, cada una con sus propias dificultades de gobernanza y gestión. Los autores destacan los desafíos para definir el papel de la organización de apoyo e identifican las habilidades que se han de desarrollar. Los mecanismos de gobernanza, y las prácticas de conglomeración de algunos agrupamientos locales de empresas creativas muy pequeñas requieren un equilibrio entre los enfoques de agrupamiento y de conexión, ya que hibridar es central para la dinámica de conglomerado.

PALABRAS CLAVE

Conglomerado cultural y creativo, dinámica de conexión, dinámica de agrupamiento, mecanismos de gobernanza de conglomerado, estudio longitudinal de caso, distrito cultural

TABLE 2

CLUSTERING EVENTS OVER 20-YEAR PERIOD

Phase and key dates	Characteristics	Findings
Cultural events/places		
Late 1980s–early 2000s **1990:** Allumés festival, founding of Royal de Luxe **1995:** launch of Folle Journée festival **2000:** Lu factory becomes Lieu Unique (dance, theatre, music) **2007:** launch of Machines de l'Île **2007**: first Biennale Estuaire **2013**: Voyage à Nantes (cultural festival)	• Decline in industrial and naval activities, new municipal team, involvement/choice of culture to revitalize city • Several festivals • Space for contemporary music • Installation of national stage • Restoration of Château des Ducs de Bretagne • Creation of Chantiers space (with Machines de l'Île, The Elephant, The Gallery) • *Rings of Memory* exhibition	• Development of spaces and areas (some official); proposal for specific artistic and cultural events that favour discovery, artistic activities, and reinforcement of the cultural identity of the city at national and international levels
Urban and economic events/places		
1987: closing of naval shipyards **1999–:** development of urban project **2000:** creation of urban committee to launch rehabilitation process **2003:** reins handed to SAMOA **2005:** ECCE project **March 2009:** launch of ECCE Innovation project[a] **May 2009:** launch of QDC[b] **2011:** reins taken over by city	• Île de Nantes most important European brownfield land • Redevelopment of Île de Nantes – 337 hectares • Rehabilitation project handed over to urban planner • Construction of courthouse and school of architecture • Conversion of old market halls to temporarily accommodate creative activities • Welcoming of institutes of higher education and training oriented to cultural and creative industries	• Creation of contemporary city • Awareness of various spaces to be rehabilitated and redeveloped on Île de Nantes • 2009–: development of an economic cultural and artistic zone in order to open a new development in Nantes/Saint Nazaire • Culture–science balance • Exchange with other ECCE cities

[a] The "ECCE Innovation project promotes the innovative potential of cultural and creative industries to access new markets. It encourages the exchange of knowledge and innovative practices in order to develop new forms of commercial and artistic expertise" (invitation to European seminar on Art and the Enterprise, 12 March 2009).
[b] Attended by the regional prefect and the presidents of Nantes Métropole, the regional council, the departmental council, the chamber of commerce and industry, and the university.
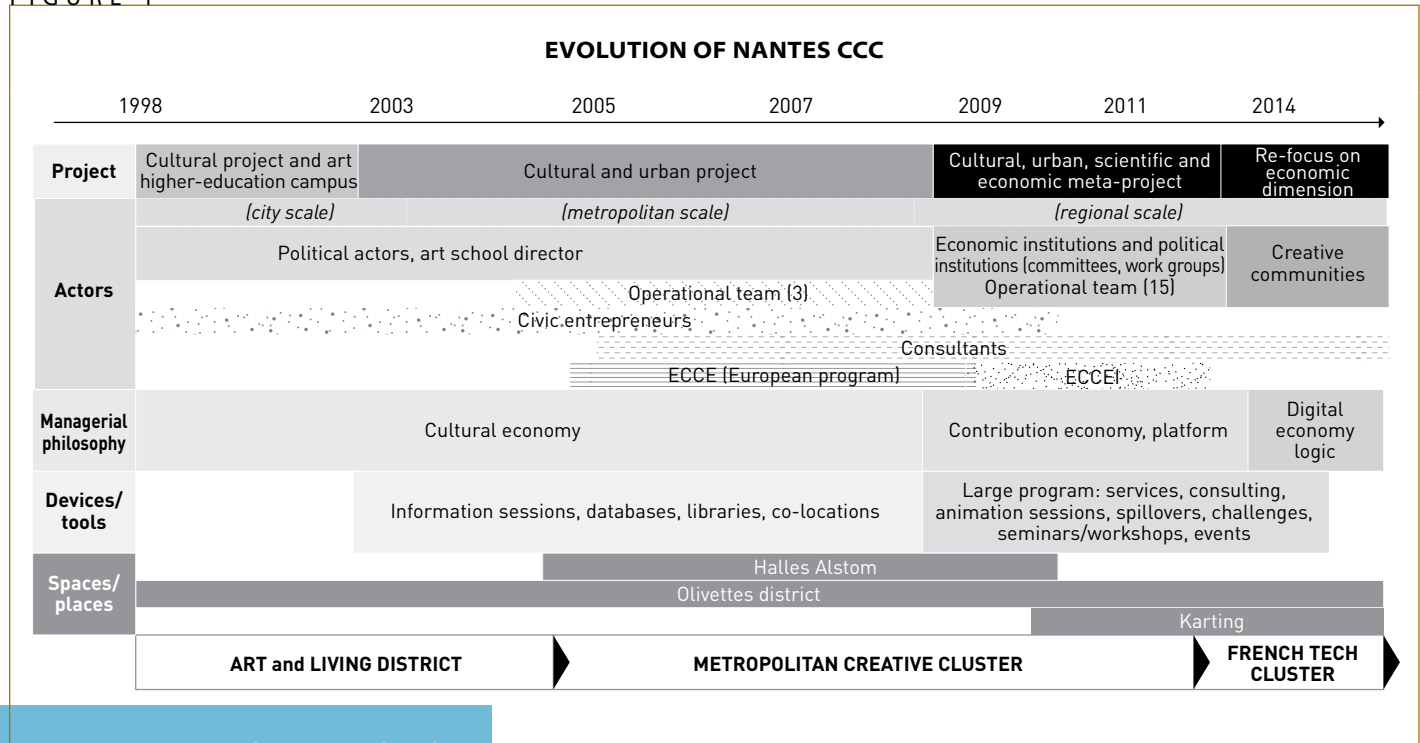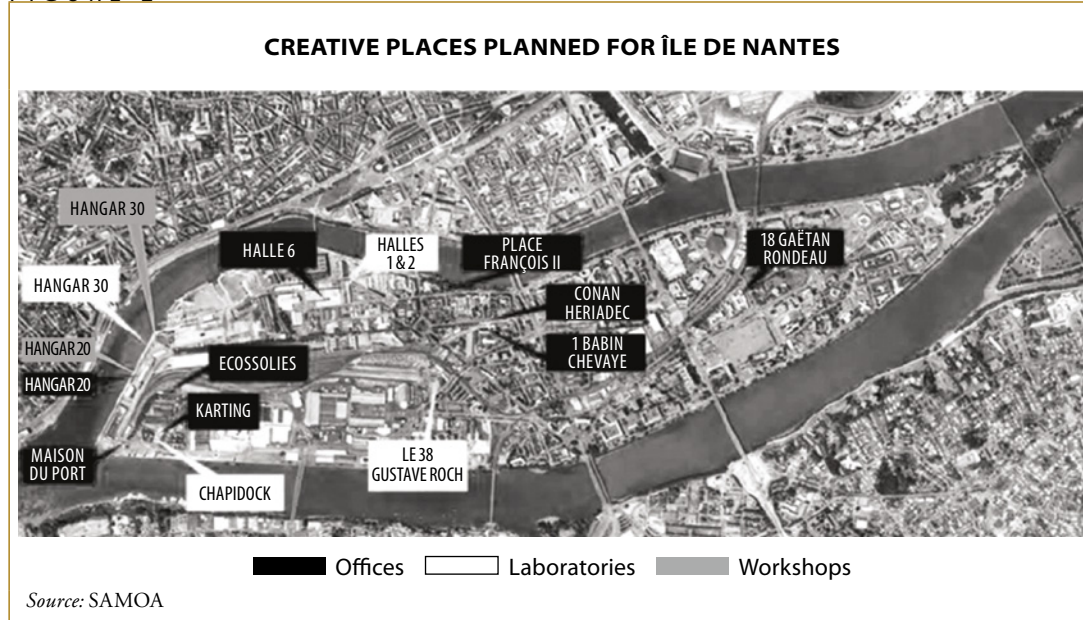
FIGURE 1

EVOLUTION OF NANTES CCC

FIGURE 2

CREATIVE PLACES PLANNED FOR ÎLE DE NANTES

■ Offices   ☐ Laboratories   ▨ Workshops

Source: SAMOA

TABLE 3

PHASE 1: PROTO-CLUSTER INITIATED WITH SUPPORT OF CITY OF NANTES

Actors	Governance	Objectives/mission	Achievements
• City of Nantes and its Nantes Création operational team: 3 employees • Art school director • Political actors	• Department of economic development and international relations • Department of research, innovation and education • Coordination with those involved in research and education programs in field of entrepreneurship	• Try out new uses for brownfield site (Île de Nantes) • Develop interdisciplinary arts campus • Establish cultural and creative resource centre • Advice, support and facilitation for artists and creative entrepreneurs	• Fifty cultural and creative industries or artists located in Halles Alstom • Documentation made available to creative entrepreneurs • Information sessions offered to artists (venture creation, financial and commercial support) • Network established for creativity circles

TABLE 4

PHASE 2: INSTITUTIONALIZATION OF QDC

Actors	Governance	Objectives/mission	Achievements
• QDC team • Director of SAMOA • Urban planner	• Nantes Métropole and SAMOA	• Develop a new creative policy around social cohesion, culture and attractiveness • Set up a stronger multidisciplinary team • Link up creative areas • Structure new premises • Define new governance tools	• Launch of QDC as a specific creative place and urban area • New urban project approach • Information sessions on urban and cultural project • Conferences • Provision of counselling and other services for creative entrepreneurs

The project therefore embraces a very broad vision, described succinctly in a press kit dated 11 May 2009: "Quartier de la Création aims to develop new forms of activity to fuel the emergence of a new means of growth nurtured by the encounter between artists, researchers, students, entrepreneurs. . . . This new dynamic will boost the international potential of Nantes Métropole."

Pivotal phase: 2009–12

The period 2009 to 2012 saw the institutionalization of QDC, highlighted by the decision of Nantes Métropole to hand over to SAMOA the task of managing QDC and the clustering process. A multidisciplinary team was set up and installed in new premises, while governance was enhanced through the use of new management tools.

In 2009 the term "cluster" began to replace "district" in official documents and political discourse. In May 2012 the head of QDC said the cluster had to "invent a creative new public policy . . . on the basis of trial and error . . . in a favourable context due to the stability of the local government" (the mayor was re-elected a number of times); "the city developed a three-pronged approach: social cohesion, attractiveness and culture – with some major cultural events and companies such as Royal de Luxe, the Folle Journée festival, Machines de l'Île, and the Les Allumés festival. It reappropriated the brownfield site with Les Allumés . . . developed a long-term strategy with [SAMOA's director] and [an urban planner] and . . . invented an urban project. . . . We built the city with local actors and partners, and not from a fixed, immutable plan; and there was a spontaneous emergence of entrepreneurs and projects on Île de Nantes."

In 2011 SAMOA was given roles in urban planning, territorial coordination (between the cities of Nantes and Saint-Nazaire) and facilitation within QDC, which is both a place in itself and a link to other creative zones. That year marked a turning point in governance and associated management mechanisms, particularly as QDC was awarded a €1.5 million public service contract by Nantes Métropole to develop a strategy and an action plan and was asked to draw up an annual report on its activities.

Management by SAMOA: 2012–14

In 2012 Nantes Métropole entrusted SAMOA with implementing QDC in partnership with the chamber of commerce and industry, high schools, universities and research institutes. A new, larger team was created for the purpose of (1) facilitating the mechanisms established for the proper functioning of the project, and (2) implementing a shared program of activities and providing assistance with setting up projects and finding relevant resources (Table 5).

In terms of facilitation, a management and governance system was put in place based on "a platform . . . dedicated, supple and reactive . . . Its main purpose is to facilitate the strategic steering of the cluster, in its research, its mission, innovation, and economic development, outreach, and also its differentiation at an international level."[5] The areas involved were urban planning; higher education and research; economic development; cultural, scientific and technical outreach; promotion; and international action.

The team worked closely with a strategic orientation council (Table 6) and was supported by thematic working groups: (1) leading a community of interest where economics, research, training and outreach converge to form a shared vision of the issues and challenges faced; (2) encouraging, proposing and following up on R&D and collaborative projects; (3) presenting an annual action plan to the strategic orientation council.

Sophisticated governance and management mechanisms were established "as a shared facilitating platform, to assist with impetus, coordination and promotion, the management of which was to be shared between all stakeholders in the project. This mechanism functioned as a contribution model according to several guiding principles: the whole is greater than the sum of its parts; a list of initiatives does not make a project; a multitude of projects does not make a strategy; and a strategy is only as good as those who implement it. This governance mechanism was aimed at encouraging all sorts of collective interactions that favoured a creative ecosystem supporting innovation, the development of activity and employment, and the promotion of resources and talents within the territory."[6]

TABLE 5

PHASE 3: CCC AS SET OF COLLECTIVE AND COLLABORATIVE PROJECTS MANAGED BY SAMOA AND ITS QDC TEAM			
Actors	**Governance**	**Objectives/mission**	**Achievements**

• QDC team
• Defined as resource centre – facilitation, impetus, coordination, promotion (10–15 people, including interns) including co-working and exhibition space
	• SAMOA with its QDC team
	• SAMOA as project manager with
	  – chamber of commerce and industry
	  – regional council
	  – departmental council
	  – city of Nantes
	• Creation of steering committee, partners' committee, strategic orientation committee and thematic working parties
		• Encourage all sorts of collective interactions favouring the development of innovative activities and employment and the promotion of cultural, scientific and technical outreach
		• Develop an ECCE devoted to CCCs and oriented towards lifestyle and eco-conception/eco-design
		• Conceive a portfolio of services to test and validate the performance of the CCC, with the aim of deployment over a wider area
			• Cultural events
			• Meetings, exhibitions, speed-dating showrooms
			• Territorial marketing events
			• Creative sessions with students, entrepreneurs
			• Conferences
			• Counselling and other services
			• "Pitch" meetings; calls for projects, creative factory, competitions with innovation actors, start-up factory (as an innovative project accelerator)

GOVERNANCE AND MANAGEMENT DURING PHASE 3

Governance bodies	Frequency	Actors and mission
Steering committee	Once or twice per year	Elected representatives of CCC's partner institutions (Nantes Métropole, regional council, departmental council, chamber of commerce and industry, city of Nantes, university)
Partners' committee	Three times per year	General managers of partner institutions: orientation, coordinating and regulatory bodies, intervening to ensure cooperation between public authorities and funding of projects carried out by CCC management team
Strategic orientation committee	Once or twice	Five groups representing companies, higher education, research actors and external stakeholders: monitoring, notices, recommendations for general orientation of CCC
Thematic groups	Two to three times per year	Meetings of actors to draw up a strategy and shared vision on a theme (such as QDC's higher education offer, creation of a research centre, spillover activity) to manage a community of interest combining economics, research and training

In 2010 a new urban planning team began to develop links between Île de Nantes and the rest of the metropolitan area, strengthening public transport, re-landscaping the banks of the Loire, and preparing the ground for a hospital in the southwestern part of the island.

The QDC area was awarded the government's "French Tech" label in 2014 and is now a showcase for digital start-ups. The companies targeted are more digital than creative. The focus is moving towards the needs of digital companies and their set-up style, such as fablabs and co-working spaces. The challenge now is to unite these different actors and build a link between the target audience (artists, entrepreneurs, researchers) and the different sectors (cultural and creative, digital, etc.).

Analysis and Discussion

The longitudinal study confirmed the prevailing view of CCCs as dynamic organizations. The history of the Nantes QDC indeed shows distinct stages and a distinct lifecycle.[7] Each stage met specific challenges in terms of governance and managerial practices. Regarding the role of the support organization and the competencies to be developed, our analysis revealed some instability and other hindrances to the organization's ability to support creativity and innovation. There were stumbling blocks related to the cohabitation and stabilization of different project dimensions and logics (cultural, urban, economic, social) in the clustering process. Moreover, the management support organization did not take into account and engage the dynamics of both Grouping and Grounding. This situation contributed to the complexity and instability of the management system. There were difficulties concerning the creativity and collective intelligence needed to support Grounding.

Grouping Dynamics

The genesis of the cluster revealed some earlier pockets (Paris 2012) of innovation, activity, and dynamics and interesting creative initiatives by artists and entrepreneurs (e.g., in Les Olivettes; see Figure 2) as well as emergent local cooperative practices among creative entrepreneurs, already visible in Halles Alstom. Nevertheless, in 2009, upon QDC's official opening, the political actors no longer spoke of the cluster as a project. It was almost a "summons to cluster" with an "idyllic vision that paints the cluster as the 'martingale' of innovation" (Hamdouch and Depret 2009, 22). The project was founded on and strengthened by examples from cities abroad, especially through Nantes Métropole's participation in ECCE and ECCE Innovation. It was also influenced by trends: the winds of institutional isomorphism seemed to be blowing through these large, influential European cities, with explicit reference to the dominant Porterian model (Porter 1998, 2000) and an economic approach based on "competitivity" clusters.

In terms of the strategic and practical orientations of the QDC cluster, the Porterian model (Porter 2000) was even more prevalent during the French government's certification of clusters (which had been envisaged by SAMOA and its QDC team). A number of features reflected a willingness to adapt this technological and industrial cluster model to the cultural and creative sectors of Nantes. However, these sectors are characterized by intangible production, small-sized enterprises, particular working methods, and limited human and financial resources.

The QDC team apparently found it difficult to act as a "flexible, dedicated and creative platform" in so far as the cluster is an entity that, organizationally, is intricately cross-linked and structured around actors and groups of actors whose institutional profiles are very different,

polymorphic, dynamic and multi-level (Hamdouch and Depret 2009). Apparently the reality of local dynamics was not sufficiently taken into account and exploited when the management system was designed.

Composite Management System

Cluster governance poses complex questions that we examined through the lens of concrete management structures and mechanisms. Beyond the usual typological approaches (distinguishing between associative and territorial governance, etc.), detailed investigation of management mechanisms allowed us to refine our analysis of the processes in the evolution of cluster governance and to distinguish between Grouping and Grounding.

Following Hatchuel and Weil (1992) and Moisdon (1997), we examined the management system from three angles: types of actor, management philosophy and formal substrate. We looked at how the management tools were constituted and how they operated in the cluster to support an innovation dynamic. Formal substrate refers to the tools implemented (meetings, working groups) and the rules and regulations framing collective action with the aim of promoting the Grouping or Grounding of actors. The management philosophy consists of the intentions of the different actors during the launch and construction of the tools. It encompasses the value systems and arguments put forward in line with the strategy and performance of the cluster and the expected recognition (Table 7).

Types of actor

The different phases saw a succession of actors who influenced both the conception and the implementation of the management system. The first phase was more influenced by actors adhering to the creative economy project and involved in implementing tools intended for creative actors. Traces of the influence of actors encountered under the ECCE framework could also be found. These actors came from the political and institutional spheres (city/metropolitan area). Their approach was based on Grounding, as evidenced by the dynamic seen in Les Olivettes and Halles Alstom. The cluster's initial development was managed in a spontaneous manner by some creatives, the public authority and political actors (particularly the mayor and city councillors).

TABLE 7

MANAGEMENT TOOLS USED IN ALL 3 PHASES			
	Phase 1	**Phase 2**	**Phase 3**
Management mechanisms for . . .	**Grouping** of very small creative enterprises and artists to develop cultural and creative centre of excellence	**Multidisciplinary cluster** to develop new forms of activity and contribute to emergence of new means of growth, stemming from encounters between artists, researchers, students and entrepreneurs	**Cluster to support "French tech" label** Base for developing intelligent specializations in digital cluster

Dominant type of actor	• Informal group of directors of institutes and elected officials	• SAMOA as project manager
		• Enlarged QDC multidisciplinary team
			• Structured and participative governance with institutions
			  – management director
			  – innovation project manager (with a technological profile)
			  – 10-person team of consultants

Management philosophy	• Ad hoc, informal approach • ECCE model cities	• Porterian (Porter 1998, 2000) cluster model • Aggregation and mobilization of talents (Florida 2002) • Stiegler contributive model	• Influence of Cohendet model of creative communities
Technical substrate	• Small (3-person) team • Information meetings • Thematic technical meetings to professionalize cultural structures • Documentation centre	• Database of creative actors • Annual event • Thematic working groups on cultural and creative entrepreneurship	• Dedicated platform (with small exhibition and co-working space) • Restructuring of tools used in previous phase to introduce creative communities around five themes
Areas: **Halles Alstom** **Karting** **Les Olivettes**	• Autonomy; self-organization; dynamics of **Grouping** around occasional projects	• Spread out enterprises: some enterprises installed in shared spaces in different places around the city, including Karting	• Evolution towards digital cluster practices for institutional areas

The second phase was coordinated by the public authority, which institutionalized this endogenous dynamic through political mechanisms/instruments and dedicated financing (to support the cluster project and the arrival of the art schools and research centres).

During the first phase, the location of creative and cultural organizations in diverse geographical spaces led to the formation of commercial and non-commercial relationships. The organizations built interdependencies while preserving their autonomy. Here, a clear distinction can be made between Halles Alstom and Les Olivettes: the former was supported by SAMOA while the latter was more dependent on public actors. However, a number of common traits can be identified: a communitarian mode of functioning and socio-political regulatory practices based on confidence, convention and clan logic (Assens 2003).

Formal substrate

In the first phase, the governance of Halles Alstom and Les Olivettes featured mechanisms and informal social systems going back to the commercial/non-commercial hybrid. Such governance is part of the Grounding approach. The intervention of Nantes Création was ad hoc – a framework rather than a formal strategy. Nantes Création did not wish to impose centralized coordination or a steering strategy. It sought to bring people together, to draw out ideas and have them shared with a wider circle of actors. In the initial phase, as Ehlinger et al. (2007) point out, the dynamic relies on "a collective order that emerges progressively from individual, non-programmed interactions without one of the members necessarily occupying a more advantageous position than the others" (p. 158). Coordination rests on the principle of auto-organization or the mutual adjustment described by Mintzberg (Assens 2003).

The second phase, which marked the advent of the cluster, involved the input of a multidisciplinary team. The model of a Porterian (Porter 2000) cluster was implicitly drawn on in the choice of QDC structuring, governance and action, as evidenced by its aims and the different actors involved (the university and other institutions of higher learning). The other scientific and technical mediation objectives, the spillover approach concerning higher education could be interpreted as a concerted effort to entrench resources and core competencies (Grouping).

The emergence of charismatic entrepreneurs was evident in two spaces/groupings: Halles Alstom and Les Olivettes. These were the sites of initiatives such as creative days and cultural events organized with the input of local residents. They supported the collective by developing relationships with creative entrepreneurs to promote the acquisition of skills and knowledge. The dynamism seen at Halles Alstom was amplified at Les Olivettes, chiefly because of the digital canteen and its manager and a cooperative entrepreneur who co-facilitated a network of very small companies with co-hosting, ad hoc proposals and meeting opportunities that served to develop interpersonal confidence. The small creative organizations' expressed need for better management of their competencies and development of their relations with new enterprises was taken into account by these two entrepreneurs.

During the third phase, structured governance was implemented to bring together actors from different political, institutional and socio-economic spheres. SAMOA came to the fore as the major actor, with its team assigned to QDC. QDC favoured a Grouping dynamic, particularly as SAMOA had numerous brownfield sites to develop both on Île de Nantes and off-island. SAMOA was also seeking an economic model and reproducible accommodation for creative and cultural enterprises.

The third phase was characterized by formalistic evolution in management tools, codification of times and channels for exchange (meetings, thematic groups, official events, speed-dating). This proactive approach was greatly influenced by the governance methods used in competitive and technological clusters (councils, strategic orientation committees) with the objective of developing, assessing and financing new projects. This way of functioning imposed too many constraints on the small enterprises with their time limitations and their modest human and financial resources. The management mechanisms in place did not take such contingency factors sufficiently into account. Thus, there were a number of dimensions that could have served to introduce distinct management mechanisms. These dimensions include the extent of local embeddedness of the actors and the histories of the entrepreneurs and their companies, their small size, the length of time they had been there, and their lack of human and financial resources.

We offer the following illustrations to support our arguments.

Grounding approach. QDC's implementation of thematic groups proved to be ill-adapted and too much time was taken up with unproductive meetings. The support structure failed to consider the characteristics of these small enterprises and their way of working in project mode. This caused problems when entrepreneurs were asked to participate in the cluster's working

groups, handle a rental space or organize an event. The level of demand and pressure was inappropriate in project mode and was underestimated by the cluster's management team. Moreover, these small and often young companies expected more administrative assistance and support, along with help in accessing new markets, competencies and resources. Creative and cultural entrepreneurs felt more and more out of place (mistrust; refusal to take part in get-togethers, meetings and events).

Grouping approach. The fact that the companies were located in an iconic building (Karting) gave the actors the impression that they were being used to legitimize the cluster and support QDC's image as an urban CCC. The idea of a property designed for artists and creative enterprises (grouped in dedicated spaces such as Karting) did not fully consider the particularities and practices of working in project mode. The offer was not well thought out in terms of creative and cultural usage, with insufficient assistance and services to encourage dynamic collectives and to support innovation and collaboration. The model chosen was based more on traditional offers (business incubators, business accelerators). Therefore, the original objective of promoting interaction and collectivity was not achieved, partly for reasons to do with economics (including the costs incurred by the presence or participation of facilitators and organizers, or even the presence of a café or a catering service).

Further, the idea of developing a range of services associated with the property in response to the expectations of the occupants (resource centre; technology platforms; meeting rooms; catering, mail and printing facilities) first emerged in 2011, but it posed economic problems (how to reconcile this range of services with "affordable" rents).

Creativity and collective intelligence to support Grounding

A slight discrepancy was detected between the management mechanisms in place and the socio-economic issues to be dealt with, mainly regarding the management of innovation processes on a collective scale and in particular the exploration process concerning creative and cultural actors.

Analysis of the evolution of the QDC cluster highlighted the difficulties encountered by the management support organization in understanding the issue of creativity on an inter-organizational scale with very small firms. Prior to 2011, the project manager for the economic facilitation and promotion project (the first person hired to address the original aims of Nantes Création) began to develop a space dedicated to creativity, with an appropriate range of services. His models were Cité du Design in Saint Etienne and Cantine Silicon Sentier in Paris. Benchmarking was carried out to establish the new services and uses for this showcase, with a presentation area for creative projects, a reception area, and a work and professional information area (all within a space of 53 square metres).

In 2011 the approach of the new cluster team began a shift towards the work carried out in technological clusters, mainly based on Borie et al.'s (2007) report on cluster evaluation methods and tools applied to technological and industrial clusters, as shown by the structuring of its governance and its facilitation offers.

The move towards more value-added and innovative (potentially high-tech) projects was facilitated by the recruitment of a researcher/consultant who had broken with the practices of technologically competitive clusters with their public tenders. This person was an expert in industrial innovation but a novice in terms of cultural and creative industries. The team encountered problems supporting (inter)organizational creativity.

There was a clumsiness to the management tools used to support the organization of networks and develop creative potential among these small enterprises as well as their links with traditional companies. These mechanisms, which were reliant on occasional events (meetings, events, conferences, pitches or QDC workshops), did not encourage the development of endogenous conditions for creativity. The management philosophy borrowed heavily from the contribution model (influenced by the researcher Bernard Stiegler). This situation, combined with the aggregation and mobilization of talents (as in Florida 2002), served to hinder the nurturing of a proper methodology.

Our findings (with respect to Halles Alstom in particular) highlight the uniqueness of specific resources and assets in certain spaces – social networks and a spirit of cooperation (resulting from/in a "throwntogetherness" and a "grounded connectedness," in the words of Massey 2005, 140, 188) that support knowledge production – and their non-transferable character. The QDC team did not fully explore the topics in terms of these individual or communitarian dynamics. Thus, the role of some entrepreneurs was neglected, even though these people were identified as key actors – connected by means of a strong social network. Influenced by a specific managerial mode, especially the work of Florida (2002) on the influence of creative talents, the team

gave preference to input from exogenous actors (consultants), along with imported ready-made actions and tools (from technological incubators).

Conclusions and Implications

Over the years, as QDC became institutionalized as a CCC, it developed in different spaces in the Nantes metropolitan area and addressed diverse aims and objectives. In a top-down approach the logic of governance and management is complex, as revealed by the change in mechanisms over the six years. The QDC support team, influenced by ambitious political goals, experimented with management tools that could qualify as composite. They tried to link two approaches, Grounding and Grouping, without, however, managing to draw the lessons that might have them reconsider their Grouping approach as applied to small creative companies. In its Grounding approach, the support team chose to use imported toolboxes, which in practice proved to be rather weak. The team borrowed (rather than appropriated) approaches from the spheres of technological innovation guidance, territorial planning and event planning. Moreover, the diversity of actors involved raises issues related to the design and implementation of more contingent management mechanisms. Clustering is possible in an arts context but only to support collective governance or to introduce iterative and participative strategy development. In Table 8 we summarize the main lessons learned. CCC policy, particularly regarding the Grouping dynamic, could be strengthened by increased stewardship (Hubbart et al. 2012) and collective intelligence. The concept of stewardship is based on the mobilization of all available knowledge and energy, through (1) regular redefinition of the stakes, the information likely to inspire and motivate the most people – creative entrepreneurs, artists, researchers, citizens – from diverse networks and collaborative support by means of platforms where people can work together, develop new relationships and explore new avenues; (2) continual renewal of processes to preserve the capacity to adapt to the ever-changing stakes; and (3) preservation of the capacity to learn, restructure and refocus the cluster's perspectives.

These notions led us to recall some specific problems concerning the management of innovation in CCCs (also related to facilitation and governance tools). Various researchers have cited the importance of micro-practices, tacit knowledge and learning stemming from interpersonal interactivity, underlining the extent to which economic development can be advanced by physical contact as well as by cultural and social proximity (Maskell et al. 1998; Storper 1995). Face-to-face contact allows for the creation and transfer of knowledge. However, as pointed out by Johannisson (2003), these arguments in favour of spatially organized economic activity must not lead us to ignore the complexity and the dynamic character of the collective systems of very small creative enterprises and the existence of real barriers to a top-down strategy for regional economic development. Any transaction depends not only on cost but also on other motivational objectives and becomes part of a creative dialogue aimed at generating diverse opportunities, inspiring new projects and encouraging the deployment of network-based resources.

Aside from the cluster's support team, "civic entrepreneurs" (Ebbekink and Lagendijk 2013) or "cluster entrepreneurs" (Wolfe and Nelles 2010)

TABLE 8

LESSONS LEARNED FROM NANTES CCC: BALANCING OF GROUPING AND GROUNDING APPROACHES		
Territorial dynamic capabilities	**Grouping**	**Grounding**
Type of cluster	**Dominant approach in industrial and technological clusters**	**Relevant practices in urban cultural and creative cluster**
Policy rationale	• Cluster-building • Top-down policy	• Policy-leveraging • Flat
Governance type/structure	• Territorial/metropolitan area governance	• Collective and inclusive governance
Governance management tools	• Predesigned management toolkit	• Iterative and participative strategy development • Ad hoc and contingent management tools

Governance practices	• (Official) Leadership
	  – external project legitimization
	  – under-use of expert committees
	  – Porterian optimization of resources/factors
	  – stock rationalization
	  – free/contribution model
		• Stewardship
		  – support collective intelligence
		  – facilitate processual rationality for supporting socializing, envisaging, mediating, "potentializing"

played a role that was often neglected by the governing bodies. The responsibilities of these entrepreneurs included the empowerment dimension, or stewardship as evoked by Hubbard et al. (2012). These actors took a more inclusive approach by bringing together a large number of people. They promoted relational and cognitive synergies while also actively contributing to a form of cluster engineering, albeit one that was less visible, less official and more contingent. Recognition of these actors and their work was a major challenge in the clustering processes. Their work was essential in mobilizing the knowledge and energy generated by creative entrepreneurs and small firms. They participated in (1) the dual task of mobilizing (defining the critical challenges, identifying information likely to inspire, and motivating people from diverse networks) and providing collaborative support; (2) a continual renewal process to maintain the capacity for understanding and addressing the ever-changing challenges; and (3) supporting the capacity to learn, retool, restructure and reframe perspectives.

We can conclude that the governance mechanisms of some groupings of very small creative enterprises require a balanced Grouping/Grounding approach. Governance choices and cluster practices must be hybrid and based on multi-faceted management mechanisms that are likely to act on cluster dynamics.

Notes

1. This study was part of a research project carried out in Nantes between 2009 and 2014 within the framework of a French regional program, Valeurs et Utilités de la Culture.

2. Nelson and Winter's (1982) constructivist approach founded on a permanent exchange between the facts, the hypotheses, theory-making and empirical verification.

3. In English: Company for Redevelopment of the Western Atlantic Urban Area. SAMOA is a semi-public body entrusted by the Nantes urban community in October 2003 with sole responsibility for the management and implementation of the Île de Nantes project for a period of 20 years.

4. ECCE is committed to supporting actors in the creative economy as well as to developing creative areas and spaces in European cities (Aachen, Birmingham, Cardiff, Dublin, Eindhoven, Stuttgart) and the British agency CIDA.

5. Extracted from a public service contract.

6. From a meeting of the management and promotion group, June 2012.

7. The literature identifies five stages: (1) agglomeration, (2) emergence of the cluster, (3) development of the cluster, (4) maturing of the cluster, and (5) transformation towards the birth of new clusters (Andersson et al. 2004).

References

Andersson, T., S. Schwaag Serger, J. Sörvik and E. Wise Hansson. 2004. *The cluster policies whitebook*. Malmö: IKED.

Andres, L., and C. Chapain. 2013. The integration of cultural and creative industries into local and regional development strategies in Birmingham and Marseille: Towards an inclusive and collaborative governance? *Regional Studies* 47(2), 161–82.

Assens, C. 2003. Le réseau d'entreprises : vers une synthèse des connaissances. *Management International* 7(4), 49–59.

Bahlmann, M.D. 2014. Geographic network diversity: How does it affect exploratory innovation? *Industry and Innovation* 21(7/8), 633–54.

Bahlmann, M.D., and M.H. Huysman. 2008. The emergence of a knowledge-based view of clusters and its implications for cluster governance. *Information Society* 24(5), 304–18.

Borie, S., F. Levrel, P. Marlier and E. Waelbroeck-Rocha. 2007. *Méthode et outils d'évaluation des clusters appliqués aux pôles de compétitivité.* Report produced at the request of the Inter-ministerial Delegation for Regional Planning and Competitivity. BIPE, March.

Boschma, R. 2005. Proximity and innovation: A critical assessment. *Regional Studies* 39(1), 61–74.

Cars, G., P. Healey, A. Madanipour and C. De Magalhaes, eds. 2002. *Urban governance, institutional capacity and social milieu.* Aldershot: Ashgate.

Chaston, I., and E. Sadler-Smith. 2012. Entrepreneurial cognition, entrepreneurial orientation and firm capability in the creative industries. *British Journal of Management* 23(3), 415–32.

Cohendet, P., J. Roberts and L. Simon. 2010. Créer, implanter et gérer des communautés de pratique. *Gestion* 4(35), 31–35.

Crevoisier, O., and H. Jeannerat. 2009. Territorial knowledge dynamics: From the proximity paradigm to multi-location milieus. *European Planning Studies* 17(8), 1223–41.

Dandridge, T., and B. Johannisson. 1996. Entrepreneurship and self-organizing: Personal network in spatial systems of small firms. In *Strategic relationship management,* M. Zineldin, ed. (pp. 219–38). Stockholm: Almqvist & Wiksell International.

Ebbekink, M., and A. Lagendijk. 2013. What's next in researching cluster policy: Place-based governance for effective cluster policy. *European Planning Studies* 21(5), 735–53.

Ehlinger, S., D. Chabaud and V. Perret. 2007. Quelle gouvernance pour les réseaux territorialisés d'organisations ? *Revue française de gestion* 170, 155–72.

Florida, R. 2002. The *rise of the creative class, and how it's transforming work, leisure, and everyday life.* New York: Hazard.

Forest, J., and A. Hamdouch. 2009. Les clusters à l'ère de la mondialisation : fondements et perspective de recherche. *Revue d'Economie industrielle* 128(4), 9–20.

Gilly, J.-P., and M. Grossetti. 1993. Organisations, individus et territoires : le cas des systèmes locaux d'innovation. *Revue d'Economie Régionale et Urbaine* 3, 449–68.

Giuliani, E. 2005. Cluster absorptive capacity: Why some clusters forge ahead and others lag behind. *European Urban and Regional Studies* 12(3), 269–88.

Giuliani, E. 2007. The selective nature of knowledge networks in clusters: Evidence from the wine industry. *Journal of Economic Geography* 7(2), 139–68.

Gordon, I.R., and P. McCann. 2000. Industrial clusters: Complexes, agglomeration and/or social networks? *Urban Studies* 37(3), 513–32.

Hamdouch, A., and M.H. Depret. 2009. Clusters, réseaux d'innovation et dynamiques de proximité dans les secteurs high-tech. *Revue d'économie industrielle* 4(128), 21–52.

Hatchuel, A., and B. Weil. 1992. *L'expert et le système.* Paris: Economica.

Hubbard, R., G. Paquet and C. Wilson. 2012. *Stewardship.* Ottawa: Invenire.

Jaffe, A.B., M. Trajtenberg and R. Henderson. 1993. Geographic localization of knowledge spillovers as evidenced by patent citations. *Quarterly Journal of Economics* 108(3), 577–98.

Johannisson, B. 2003. La modernisation des districts industriels : rajeunissement ou colonisation managériale? *Revue Internationale PME* 16(1), 11–41.

Leamer, E.E., and M. Storper. 2001. The economic geography of the Internet age. *Journal of International Business Studies* 32(4), 641–65.

Lorenzen, M., ed. 1998. *Specialisation and localised learning: Six studies on the European furniture industry.* Copenhagen: Copenhagen Business School Press.

Markusen, A. 1996. Sticky places in slippery space: A typology of industrial districts. *Economic Geography* 72(3), 293–313.

Marshall, A. 1920/1979. *Principles of economics* (8th ed.). London: Macmillan.

Maskell, P., H. Eskelinen, L. Hannibalsson, A. Malmberg and E. Vatne. 1998. *Competitiveness, localised learning and regional development.* London: Routledge.

Massey, D. 1994. A global sense of place. In *Space, place and gender,* by D. Massey. Minneapolis: University of Minnesota Press.

Massey, D. 2005. *For space.* London: Sage.

Menger, P.M. 2002. *Portrait de l'artiste en travailleur.* Paris: Seuil.

Menger, P.M. 2005. *Les intermittents du spectacle : sociologie du travail flexible.* Paris: EHESS.

Moisdon, J.-C., ed. 1997. *Du mode d'existence des outils de gestion.* Paris: Seli Arslan.

Nelson, R.R., and S. Winter. 1982. *An evolutionary theory of economic change.* Cambridge, MA: Belknap.

O'Connor, J. 2010. *The cultural and creative industries: A literature review* (2nd ed.). Creativity, Culture and Education Series. London: Creativity, Culture and Education.

Owen-Smith, J., and W.W. Powell. 2004. Knowledge networks as channels and conduits: The effects of spillovers in the Boston biotechnology community. *Organization Science* 15(1), 5–21.

Paris, T. 2012. *Dynamiques territoriales dans les industries de création, l'exemple de l'industrie francilienne du jeu video.* Paris: CDC Research Institute.

Parmentier, G., and V. Mangematin. 2014. Orchestrating innovation with user communities in the creative industries. *Technological Forecasting and Social Change* 83, 40–53.

Porter, M. 1998. Clusters and the new economics of competition. *Harvard Business Review* 76(6), 77–90.

Porter, M. 2000. Location, competition and economic development: Local clusters in a global economy. *Economic Development Quarterly* 14(1), 15–34.

Rosenthal, S.S., and W.C. Strange. 2004. Evidence on the nature and sources of agglomeration economies. In *Handbook of urban and regional economics,* Vol. 4, V. Henderson and J.F. Thisse, eds. (pp. 2119–72). Amsterdam: Elsevier.

Storper, M. 1995. The resurgence of regional economies, ten years later: The region as a nexus of untraded interdependencies. *European Urban and Regional Studies* 2(3), 191–21.

Wolfe, D.A., and J. Nelles. 2010. The role of civic capital and civic associations in cluster policy. In *Handbook of research on innovation and clusters: Cases and policies,* C. Karlsson, ed. (pp. 374–92). Cheltenham: Edward Elgar.

Yin, R. K. 1984. *Case study research design and methods.* London: Sage.