Nikodemus Solitander

Designing Creativity Through Clusters
A periodisation of cluster discourse

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Key words: clusters, development, creativity, creative economy, discourse

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The road has its own reasons and no two travelers will have the same understanding of those reasons. If indeed they come to an understanding of them at all... The shape of the road is the road. There is not some other road that wears that shape but only the one. And every voyage begun upon it will be completed.


Like all long voyages this one ends with you locked into the passenger cart with a rambling nonconformist who has an urge to share something that you are unsure you want to hear. Despite what you have read in a dozen prefaces it is not about the journey. It is about the deconstruction of the journey as a metaphor for the thesis process. The actual journey is quite irrelevant, you won’t remember much of that – the fast changing scenery, the crammed seats, the atrocious meals. Rather, it is the time and places that embed the journey that you will remember. Preparing for the journey, the drawing of maps in Chinese ink; the checking of time tables on savvy ipads; the dreams of exotic destinations and the imagined fame of discovering unnamed places. The anxiety of travel, waking up in the middle of the night feeling sick to the stomach, the creeping realization that you’ve been sold a ticket to Disneyland and it’s a coach party. The sinking feeling that you’re a commuter and not a nomad. Getting humiliated in customs, stripped to the bone by some sadist border guard, ‘We cannot let you travel, sir, you seem to be missing the right documentation’, the ridiculous queues to the check-ins, the annoying peddlers in the tax free shops, ‘You should try our new fragrance, sir’, the feeling that your every move being followed on the other side of that two-way mirror glass, the filling in of bureaucratic forms and waiver applications, ‘Have you ever been arrested for an offense involving moral turpitude or have you ever been a member of the communist party?’, the standardized and scripted safety demonstrations. But more than anything it is about getting lost on the way, realizing that the map you drew is only worth the Chinese ink you drew it with. It is only then that you have to lift your gaze from the map and leave the hackneyed tips of the tourist guides behind, notice the shape of the road, face you fears, open your senses, approach the locals, understand the reasons of the road. So, if the quote from ‘The Crossing’ did not convince the reader, then hopefully the irrelevancy of the preceding paragraph have convinced her that the journey is not a fitting metaphor for the thesis writing process.

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Helsinki, April 2011

Nikodemus Solitander
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1 INTRODUCTION AND BACKGROUND

“We have a community of language, custom, belief; but a society for purposes of business, travel, or scientific knowledge. Commercial partnerships are of particular importance; but even though a certain fellowship and community may exist among business partners, we would hardly speak of a ‘commercial community’. And it would sound quite revolting to make the linguistic compound ‘joint-stock community’.” (Tönnies 2001 (1887), p.18)

The above quote is taken from Ferdinand Tönnies’ seminal work within sociology “Community and Society” (1887), and may serve as an example of, on the one hand, meanings that we consider so natural that we cannot imagine them otherwise, and on the other hand, that no matter how naturalised and institutionalised these meanings are, they are always in danger of being undermined by competing ascriptions. Today “joint-stock communities” and other forms of corporate communities have seemingly shed their revolting connotation. There is seemingly nothing unnatural about the relation between the corporation and community. In the globalising era the ‘communal feature’ of the corporation is branded and traded as a solution for innovation, creativity and with those, possible higher earnings and financial gains for the individual (cf. Brown and Duguid 1991; Wenger 1998). Contrastingly, in the increasingly industrialised society that shaped Tönnies’ texts, the communal feature of corporations was not so evident, thus he made a distinction between Gesellschaft and Gemeinschaft. His notion of Gemeinschaft (community) came loaded with notions of common language, traditions, a sense of “us”, kinship and friendship. As an almost binary opposition to industrialisation, it took the form of an idealised representation of the local: tight-knit, caring communities inherently rooted in (geographical) place. With Gesellschaft (society), on the other hand, Tönnies identified particular fleeting roles and service provision. With its emphasis on self-interest and individualism, it was considered artificial, segmented and superficial as compared to Gemeinschaft. Gesellschaft, with its standardised, rootless and placeless practices, was embodied in the dynamics of industrialisation. In the discourse of Gemeinschaft, concepts of ‘local’ and ‘place’ were invoked as focal units of resistance in the struggle against the increasingly dominant industrial discourse. With the increased dominance of industrialisation discourse, the naturalised understanding of the word community in relation to corporations changed. Today there is little contradiction in constructing business or organisational communities in the search for individual profit and self-interest. Where does that leave geographical place and its relation to the corporation?

Place, with its infinite symbolic value, has historically been relentlessly mobilised in and for political argument (Massey 2005). Equally important has been the symbolic value of an imagined imminent erasure of place, a deterritorialisation1 of, above all, the economy (Ley, 2004, Elden 2005). At the end of the 20th century, with the rise of globalisation and the Network Society (Castells 2000a) there was an articulated threat against place. This threat constituted a discursive erasure of place (Escobar 2001b) and with that a declining interest in place-bound communities (Zukin 1991). Central to globalisation discourses is a focus on increased and accelerated circulation of people, corporations, capital, commodities and images (Brenner 1999). Geographical places, hopelessly immobile and unable to circulate are less valued in this language of modernity. But much like the increasing domination of industrialism might have changed the way place was perceived; it did neither erase it nor dramatically alter its importance in economic discourse. Much like community, the meaning of place/the

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1 ... deterritorialization [is] utilized to describe a cultural process, where the break between the social and the geographical heralds a new age of unplaced human interaction. (Elden 2005,p.9)
local has changed: rather than being understood in opposition to fleeting identities, entrepreneurialism, self-interest, or competitiveness as it used to be in Gemeinschaft inspired articulations, its meaning increasingly became constructed through such words. Their meanings were gradually reshaped. Meanings, and systems of meaning are constituted through the relation to an outside, to what they are not. Communities were not previously understood in relation to business. But at the same time, as the example of Gemeinschaft shows, meanings that we consider 'natural', those that become institutionalised, are always under flux and in danger of being disrupted by competing ascriptions (Laclau and Mouffe 1985). In other words there is an ongoing struggle over meaning.

Economic geographic research has been instrumental in reformulating the relationship between place, place-bound communities and the economic practice. When new information and transport technologies enabled an understanding that implied an imminent death of geography and a discursive erasure of place (c.f. Cairncross 1997, O’Brien 1992), economic geographic research, with tooth-and-claw, contested such understandings. This contestation involved a rearticulation of geographical places in relation to (economic) signs. This rearticulation invested a new meaning to geographical places. In the knowledge economy discourse the mobile actors, most visibly the multinational corporation, gravitate towards places that create and animate the “sources of competitive advantage” (Porter 1990). In his influential book “The Competitive Advantage of Nations”, Michael Porter suggested that such a shift in geographical scales “represent a new way of thinking about national, state, and local economies” (Porter 2000, 16). This shift would “necessitate new roles for companies, for various levels of government, and for other institutions in enhancing competitiveness” (ibid, p.16). This suggested above all a more active and explicit role for the multinational firm in spheres of society that are not (yet) solely confined to the economic (c.f. Harvey, 1989; MacLeod, 2002).

With this perspective followed the understanding that globalisation was not discursive eradication of geography, but rather shake up of the territorialisation process, the scales we observe are “no longer spatially co-extensive with the nationally organised matrices of state territoriality” (Brenner 1999, 435) that had for so long been the naturalised understanding of capitalism’s economic geographies. To give an example, a strategy report on the Helsinki Metropolitan Area states that the evolution of cities “...depends on their international competitiveness. Earlier, urban areas were “subordinate” to national policies of growth and competition – policies mainly based on manufacturing. Today, institutional, knowledge-related and financial instruments are being crafted with the primary aim of helping to develop innovative and internationally competitive urban centres of growth. In line with these trends, Finnish urban regions, too, such as Oulu and Tampere, are specialising in internationally competitive expertise to create a unique and sustainable role in the international scramble between urban regions.” (Kulkki, 2004, 19)

By combining elements of the regional discourse with neoliberalism and entrepreneurialism, the local was increasingly understood in relation to economic development and economic competitiveness (Brenner 2005). In various (geographical) concepts such as innovative milieu (Camagni 1991), industrial districts (Piore and Sabel, 1984), clusters (Porter, 1990, 2000), and world/global cities (Friedmann, 1986; Sassen, 1990), are all constituted in relation to competitiveness. This all-pervasive, yet abstract quality has become a hegemonic category that usually refers to ‘the capacity of a firm to compete, grow and be profitable in the marketplace’ (Bristow 2005, p.287). When applied to regions, as has increasingly been the practice, competitiveness

*It also allocates new roles and subject position for the individual, but I will return to this later.
becomes even more abstract. Yet with its naturalised acceptance the competitiveness-argument becomes almost impossible to question: “There is virtually no counterargument available to the simple claim that ‘doing X will make us uncompetitive,’ whatever X and whomever ‘us’ might be” (Schoenberger 1998, p.3). Consider the following citation:

The competitiveness of territories thus emerges as a central issue, in order to secure employment stability, benefits from external integration, continuing growth of local well-being and wealth...Both attractiveness and local competitiveness depend on similar common factors, which are not only found in physical externalities, accessibility or environmental quality, but also in relational capital and the learning capacity expressed by the territory (Camagni 2002, pp2395-2396) [emphasis added]

As can be seen above in the excerpt, the languages and processes of globalisation are altering the understandings of the relation between geographical place and the economy. Camagni’s text also illustrates how the language of mainstream economics is combined with ‘softer’ elements (learning/relational capital) in the economic geographic discourse. This is typical for the idea of soft capitalism, wherein it is assumed that economic success emanates from ‘soft’ characteristics, such as knowledge, learning and creativity, rather than straightforward technological or cost advantages (Heelas 2002, Ray and Sayer 1999, Thrift 2005). A reoccurring critique against the dominant understanding of the relationship between competitiveness and regions, most notably the form popularised by Porter (1990), has evolved not least around the inability to reconcile the respective and reciprocal roles of local standard of living with firm competitiveness (Bristow, 2005, Schoenberger, 1998). But such critique is increasingly appropriated through the fusion of the economic, social and cultural landscape into the language of capitalism. This can be seen as performative capitalism (Thrift, 2005, 4), wherein a defining feature is capitalism’s ability to be highly adaptive and a constantly mutating formation. This includes adopting the language of its critique (ibid.). The recent focus on learning and more recently, creativity, with its strong associations to arts, individual artists and the cultural sphere in general, are a case of the point. Competitiveness is still a key signifier, but other “softer” signs are positioned in relation to it. Further, territory itself is ascribed agency in the processes of soft capitalism, i.e. ‘learning capacity is expressed by the territory’. Soft capitalism increasingly manages the production and exchange of knowledge ‘through the production of theories, texts, and practical protocols like seminars which stabilize them, embody them in subjects’ (Thrift 2005, p.46). Such discursive processes serve to naturalise our understandings of the relationship between place and economy.

In this thesis I concentrate on one of the most naturalised articulations of the relation between geographical place and the economy, clusters, here loosely defined as internationally competing place-bound economic system of production in related industries. Cluster discourse represents the subnational region as a system of production, and as a means for international competitiveness. Its reproduction in theories has become one of the most prolific exports of economic geography to other disciplines and for policy making (Grabher 2006). Arguably the combination of the a) competitiveness b) innovation/learning/creativity and c) place has had an enormous impact on industry and governments alike. But the ‘clusterisation’ of the economy, with its idolizing of the region is not a natural process; rather it is a deeply political process. The territorial manifestation, lest it be called region, nation or cluster, is not an object in an empirical category, but also an ontological category (Ek 2003). Reassigning the concept of a ‘region’ or ‘city’ to the category of ‘cluster’ changes the ontology of the concept - from a place to a process or mental state of international competition.
Clusters need to be understood as a political and historical process, which is continually being produced and reproduced. This understanding has inherent implications for analytical tools deployed in this thesis, one that calls for perspectives that are both philosophically informed and overtly political (Willmott 2005). I will return to discussing the epistemological and ontological grounding of this thesis more in-depth later (Chapter 2), but will first look a bit closer at the historical process that is clusters.

1.1. Clusters as discourse

“...authoritative discourses of innovation construct particular scales as appropriate for the planning and pursuit of innovative activity, whether it be the locally networked city-region or the global coordination of dispersed processes... authoritative writing about innovation, including academic research, cannot be divorced entirely from the innovative process itself since such work contributes to the shaping of subsequent strategies, policies and perceptions.” (Bunnell and Coe 2001, pp.583-584)

An initial starting point of this thesis is not to consider the territorial configuration of clusters as natural constructions. I see them as concept-dependent (Sayer 1992), not least through the dependence of competitiveness as a main tenet. By stressing their concept dependency I wish to emphasize that by this assumption, clusters are not seen as impervious to the meanings that theory ascribes them. Theories are thus, in this thesis, treated as texts to be read and interrogated, rather than ascribing it a privileged position (Barnes 1992). Adopting a broadly constructivist perspective on the production of place I argue that so called policy clusters are in no way less ‘authentic’ than the industrial clusters that are seen as ‘organically developed’ (Enright 2000, p.116). Like place itself the construction of clusters has more to do with materialisation and representation of discourse than with physical location or territorial expression (Harvey 1993). In whatever form, clusters are thus seen as social constructs. Understanding space as social construct might be more overt in anthological research (Harvey 1990a) but not less significant for economic geographic reasoning of clusters.

Treating clusters as discourse, warrants an asterisk on how other researchers have used the term discourse in connection to clusters. Influential cluster researchers Malmberg and Power (2006) suggest a tripartite distinction of geographical3, functional4, and discursive clusters. The suggestion in such a division is that the former two are somehow more impervious than the latter to the meanings and content that cluster and innovation theory and discourse ascribe them. In the above division, discourse could be substituted with policy (clusters). It becomes implicit that there are clusters that are outside of the political.

In my thesis space is not seen as a scientific object that can be revocable from ideology and politics (Lefebvre 1976; Soja 1980). Geographical clusters are thus seen as an organised space, which in turn is a social product arising from purposeful social practice. In this view there are no “natural” clusters that are permeated by an atmosphere of apolitical and nonstrategical essence. Clusters, like space itself, is inherently political and ideological. By acknowledging the political, I consider the knowledge created by research (on clusters) not to simply expose the social world, but alter its nature and steer it into new directions. Thus my position following Barnes (1992) is that there cannot be a one-way correspondence between theoretical category

3 A geographical cluster refers to a geographical agglomeration of firms in a particular industry and related economic activities.

4 A functional cluster refers to national industrial systems where the actors are linked through horizontal and vertical relationships.
and geographical reality because the text of the territorial configuration partly emerges from the act of theorising about it. Interestingly, there have been very few critical discourse analyses done in regards of clusters and the learning discourse that they rely on, with the notable exception of Martin and Sunley (2003) and Bristow (2005), especially if compared to the number of analyses done of the discourse of cities (c.f. Castells 1977; Czarniawska and Solli 2001b; Harvey 1973; Soja 2000).

Inspired by discourse theory (Laclau and Mouffe 1985) and some of its derivatives (Jørgensen and Phillips 2002), the thesis tries to steer on the path “between a fetishistic, reified economics that naturalises economic categories and a soft economic sociology that focuses on the similarities between economic and other socio-cultural activities at the expense of the specificity of the economic” (Jessop and Oosterlynck 2008).

1.2. Research Problem: The soft voices of stern capitalism

One point of departure for this thesis is the issue of how cluster theory/policy is tied to the values that are embedded in the discourse. In order to expose the hidden values we need to track and position the emergence and development of the dominant discourse. Understanding the position of ‘learning’ and ‘creativity’ in the cluster discourse is in this context important, albeit often not applied in research on clusters. Positioning and analysing cluster discourse in relation to other discourses is needed, especially considering that emerging cluster projects include firms with their own internal learning and innovation agenda, which at times can be inconsistent or even adverse with a position of the learning region. From the perspective of learning and innovation, cluster theories draw on many elements from learning discourse, which a) emphasizes the communal feature of innovation b) relies on the manageability of communities, and to a certain extent of the production of cohesion among its members. This thesis deals with these aspects from the perspective of geographical clusters and their discourses. The focus is especially on the emergence of the cluster, because I argue that there is nothing inherently natural about its emergence. Although neglected in theoretical accounts of cluster formation, the emergence relies just as much on a discourse of normative managerialized learning and managerialized community formation, as does its growth, stagnation and ultimately its decline.

Another research problem tied to contemporary cluster discourse concerns its suggested ‘unorthodox’ organisational and learning characteristics. According to Cooke (2002, p.2):

“...clusters are crucial to economic imbalance... they rest upon collaboration of a generally non-market-destroying type that is simply essential for modern economic organization, and... have systemic organizational characteristics that go against much economic orthodoxy.”

In few instances is this proposed unorthodoxy more evident than in the creation of ‘cohesion’ or the commodification of creativity for the purpose of achieving competitive advantages, both which are central propositions of cluster discourse. In cluster policies it is often societal wealth that is strived for, which can stand at odds with the competitive advantage of the firm, something that is highlighted in the age of quarter-economies and short-term gains. The same is true for community formation since non-market behaviour can be argued to go against the basic framework of economic rational and capitalism (Stewart 2002). Tied to the notion of an industrial atmosphere, the notion of cohesion based on physical proximity continues to elude and delude the cluster paradigm. The element of cohesion is rooted in a communitarian paradigm and
the promotion of diversity, yet the discursive practice of clusters creates exclusive and excluding places (Massey 2005). Cohesion and the communitarian paradigm can in this context be seen as particular values that the discourse promotes.

As out-of-date as it first may have seen, we are confronted with Tönnies' vocalisation on the perversity of imagining and portraying firms as communities or as community enablers. Such confrontation is all too often left unproblematised by the current discourse. The other related paradox emanates from planning; in an era characterized by anti-planning, where the authoritative voices of cluster theory draw on the discourse of anti-planning (for example Florida's (2002b) appropriation of Jacobs' (1974) critique of urban planning's detrimental effects on urban communities), it simultaneously breeds practices of master planning and scientific management as well as imagined cluster paradigms. These two paradoxes are inherently tied to the role of the firm, which as an entity does not figure prominently in the application and development of cluster theory. In a time when urban development is increasingly tied to the evolution and development of clusters, the discourse allocates firms with a paradoxical role of increasing involvement in developing and planning for not only the economic dimension but also the social and environmental, a role that is not short of ambiguity. Although researchers like Florida (2002b) and Asheim (2005) call for a shift in focus from business atmosphere to a ‘people atmosphere’, it is questionable if a cluster-bound theory or planning initiative will be able to initiate such a shift – or if it will have other, unintended consequences. The danger is that the unorthodox elements and the critique is appropriated and repackaged and fed into the “feedback loop which is intended to keep capitalism surfing along the edge of its own contradictions” (Thrift 2005, 6). Thus in a reflexive manner (encountering the familiar as unfamiliar) the thesis is concerned with the discursive apparatus that legitimises, diffuses and normalises certain discourses – what Nigel Thrift has referred to as the cultural circuit of capitalism (ibid), foremost consultants, management gurus and the spaces where such actors converge such as business schools and agencies for innovation systems (e.g. VINNOVA in Sweden and SITRA in Finland).

1.2.1. Public culture and private creativity

These paradoxes and problematisations remain largely in the background of discussion and are increasingly marginalised in the discussion about of clusters. This question of the dividing line between firms and society becomes even more distinct when cluster discourse turns to include the habitat, increasingly so through the ‘urban turn’ of economic geographic research. I argue that this annexation of people, habitat and the social into the inherently economic cluster discourse is questionable, and that it does not redirect efforts away from business towards people as has been suggested by some proponents of the learning region perspective (c.f. Asheim 2005, Morgan 2004, Morgan 1997, Cooke 2002) and the creativity paradigm (e.g. Florida 2002b, Bathelt, Malmberg, Maskell 2004, Boschma R. & Fritsch 2009, Smith & Warfield 2008, Scott 2010, Jansson & Power 2010, Törnqvist 2004a; 2004b).

I use that term the 'creative cluster' (see Figure 1) discourse to signify the emerging hegemonic cluster discourse, which naturalises the idea of elite places that, if 'correctly' constructed and deregulated, will attract multinational capital back to deindustrialised
western regions. The discourse produces social practices of “animating” and “constructing” places as business friendly, urban atmospheres that are tailor-made for the needs of big multinational firms. I posit that the increased dominance of such discourse facilitates firms’ possibilities to ‘harness’ and ‘monetize’ learning, knowledge, culture and creativity, as these act as ‘glue’ for slowing down the gravitation of said firms towards regions with cheaper and less regulated labour. Further, the emerging discourse appropriates some elements of radical theories and positions such as communities of practice and the Italian district theories (while leaving out other subversive elements and implications) while reproducing neoliberalist ideologies and managerialism.

![Figure 1](image)

**Figure 1** The domain of cluster discourse: Creative Cluster Discourse as an appropriation of competing discursive perspectives (Source: Author)

It is in such discourse that we can observe a combination of concepts with apparent tension and contradictions. An example of such a repackages discourse would be for example the Finnish Innovation Fund (SITRA) seeks to base Finnish competitiveness simultaneously on “efficiency” and “empowerment”. I use the term creative cluster discourse to signify the emergent cluster discourse, which through hegemonic intervention appropriates various key signifiers of competing discourses, and fix their meaning to particular understandings. Signifiers such as “learning”; “community”; “cohesion”; “creativity” are increasingly understood in terms of their relation to competitiveness. It also captures the integration of the habitat into the development of clusters, and the challenges that this poses both for research, firms and policy makers. In a metaphorical sense it also captures the increasing effort to see clusters as natural (constructions), and thus accepting, without further questioning or contestation the appropriation of among other things, public space, learning and creativity in order to create ‘a good business climate’ and through that, international competitiveness.

I see the creative cluster discourse as problematic, not least because of how seductive it is – ‘who can be against creativity?’; ‘But innovations are inherently good for society!’ are question and remarks I have encountered many times during the writing of this thesis. While this is true and I do not position myself as anti-creativity, anti-innovation or anti-technology, but through the research I have carried out I am increasingly
worried about the lack of reflexivity around the creativity and innovation imperatives that stand as basis for regional development programs.

Summarising the main research problems: (0) The nature of (creative) clusters: My position is that they are (discursive) constructions, inherently intertwining the suggested innovation/creativity process with authoritative writing - thus rejecting a tripartite distinction of functional, geographical and policy-clusters 1) The managerisation clusters: The paradoxical fusion of planning and anti-planning into one discourse, and 2) the gradual assimilation and appropriation of the values and meanings articulated through the a) communitarian and b) the creativity discourse; 3) the expanding meaning of clusters, referring to the gradual assimilation of the social and environmental dimension into the previously dominantly economic focus. This three areas form the basis for the research questions and the operationalisation of the thesis, which will be discussed in the following section.

1.3. Aim and research questions

The overall aim of this thesis is to, through problematisation and critical analysis, enhance the understanding of how meaning systems and strategies are created, accepted and naturalised in cluster discourse, and how this affects individuals, the economic landscape and society at large.

In form of research questions I ask:

R1. Which discourses do the articulations of clusters draw on, and what discourses are reproduced and which are challenged and transformed? (Addressed in all papers)

R2. How is the cluster concept mobilised and legitimised? (Addressed specifically in papers 2, 5, 6)

R3 Which understandings of clusters are excluded and what alternative understandings can be envisioned? (Addressed specifically in papers 2, 5, 6, and the latter part of the question – envisioning alternative futures is made explicit in the Discussion and Implications section of the 'Kappa')

By answering these questions and analysing the discourse of innovative clusters this thesis seeks to make further conceptual advances in regards of innovative clusters in the context of economic and corporate geography. This is also where I most firmly root the suggested contributions of this thesis.

1.4. Delimitations

One of the most important delimitations of the thesis concerns the question how to decide where the cluster discourse that I analyse “ends”. For the project to be manageable, feasible and for the study to produce meaningful results analyses have to be delimited to study a limited amount of discursive articulations. My starting point is the practice and theory of clusters in the knowledge economy. In terms of articulations I am focused on the discursive reproduction within the field of economic geography.

The researcher needs to establish the so called order of discourse (Jörgensen and Philips 2002, Fairclough 1995, 2000), meaning the establishment of which discourses compete over meaning in the same terrain. The order of discourse is defined as “a
complex configuration of discourses and genres within the same social field or institution" (Jörgensen and Philips 2002, 141). Jörgensen and Philips (ibid) note that as it would be almost impossible to map the entire order of discourse, the researcher usually needs to delimit further – and that within discourse study that delimitation is “determined strategically in relation to research aims” (ibid, 143-144). While this means an understanding that discourses are constructs rather than objects that actually exist in this delimited form in reality, it does not mean that anything can be called a discourse or an order of discourse. It is up to the researcher to show that the delimitations are reasonable. While the establishment of the order of discourse is discussed more in-depth in section 2.3.4 of the summarising part of the thesis, I have established the order of discourse loosely as discourses that are situated in the domain of “the relationship between agglomeration and development”. The delimitation is further established through the periodisation of the cluster discourse, wherein I trace the discursive roots of contemporary cluster discourse and recognize certain discursive roots to be more important than others, and thus I focus to analyse in-depth three specific discourses within the order of discourse, what I refer to as the Competitive Cluster Discourse, the Collective Cluster Discourse and the Creative Cluster Discourse and how they relate to one another.

The other delimiting factor is that as I am especially interested in the legitimisation and reproduction of cluster discourse by the discursive apparatus that Nigel Thrift calls the cultural circuit of capitalism. The cultural circuit of capitalism refers to “business schools, management consultants, management gurus and the media” (Thrift 2005, 6) that legitimise certain virtual notions (such as networks, clusters, knowledge economy, the creative class) and embody them into various guises of consulting solutions that in turn (re-)produces the reality that they posit to depict. As I look at clusters as practice I am especially interested in economic geographic theory and practice after the popularisation of clusters as practice within the policy domain – temporally meaning after the 1990s. The thesis thus aims to mainly contribute to the corporate geographic and economic geographic field and its practice.

1.5. Structure

Each of the papers of this thesis approaches cluster discourse, its developments and its naturalisation of meanings, through two dialectics that are at the very essence of establishing meaning to clusters: mobility/place and culture/economy. These are key signifiers of all articulations of cluster discourse. When these key signifiers are combined with other signs, they establish meaning through discourse.

Each paper corresponds with one of the three periodisations (see Table 1) that I identify in cluster discourse: the Competitive Cluster (Paper1, 2); the Collective cluster (Paper 3,4); and the Creative Cluster (Chapter 5,6). I label these stages as different articulations, even though it is clear that they compete in the ‘same terrain’ (what Fairclough (1995) refers to as ‘order of discourse’), their boundaries are fleeting as they share several concepts and meanings. It should be noted that while I identify different periods, that the temporal development of cluster discourse is not completely linear; it is not as if one discourse would precede the other at one specific point in time. For example, the periodisation I refer to as the Community Discourse, while dominant in the mid-1990s heavily draws on the industrial district approach which was developed in the late-1970s. The three periods can also be seen to cohabit with one another, one building on the other, what changes is the meaning of central concepts. Thus, there is some fluidity in the borders, and as is the case with all delineations of historical periods
is always somewhat arbitrary (Skålén et al 2006). However, as will be argued a periodisation is a very useful tool for understanding how cluster discourse has changed (over time), which in turn is crucial for understanding how the cluster concept has been mobilised and legitimised. The main point here is that the meanings and understandings, which the discourses produce, are different, as they are constituted through how they relate and combine different signs, and there is a temporal element to which understanding is more dominant. I have labelled the papers by signs that I identify as central to the discursive organisation of meaning in each articulation/periodisation (see Table 1). These elements in cluster discourse are central to establishing meaning to clusters, mainly through their relation to the local/global and economy/culture dialectics.

Table 1  Structure of thesis

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Periodisation</th>
<th>Key elements/moments</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 1</td>
<td>Competitive cluster</td>
<td>mobility, networks, competition, productivity, flexibility</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Paper 2</td>
<td>Competitive cluster, Collective cluster, Creative cluster</td>
<td>mobility, community, creativity</td>
<td>Creative/Knowledge Economy</td>
</tr>
<tr>
<td>Paper 3</td>
<td>Collective cluster</td>
<td>Competitiveness, learning, innovation, community, embeddedness</td>
<td>Fabergé</td>
</tr>
<tr>
<td>Paper 4</td>
<td>Collective cluster</td>
<td>Competitiveness, learning, innovation, community, embeddedness</td>
<td>Motorsport Valley</td>
</tr>
<tr>
<td>Paper 5</td>
<td>Creative cluster</td>
<td>Competitiveness, individuality, industrial design, co-creation, consumption, apolitics</td>
<td>Creative class</td>
</tr>
<tr>
<td>Paper 6</td>
<td>Creative cluster</td>
<td>Competitiveness, individuality, industrial design, co-creation, consumption, apolitics</td>
<td>Finnish design industry/ Arabianranta</td>
</tr>
</tbody>
</table>

For each stage I also look at the operationalisation of these articulations in the context of knowledge/creative industries. Even though I am interested in cluster discourse generally, in order to delimit myself and to be able to make the examples comparable I focus on particular territorial manifestations (cases) of cluster discourse. So, in each paper I analyse the operationalisation of the identified discourse by examining clusters (Table 1).

My argument is that an analysis of the cluster discourse will reveal how elements of each articulation, most notably agglomeration, learning, creativity and urban space are increasingly understood through their relation to international competitiveness. The emergent discourse, which I call creative cluster discourse is becoming increasingly dominant and increasingly engineered towards the managerialisation of all aspects of society.
As this is a composite thesis, before the individual papers are presented in section 4 I present some reflections about the research approach, a general discussion about the theoretical positioning of the thesis, and last in the summarising section I then present conclusions beyond the specific papers presented.

The individual papers encompassing the thesis are as follows:


- Paper 2 (single-authored) Geographies of Competitive Fear – Between solid place and liquid imperatives, Unpublished


1.6. Some key concepts

Cluster discourse In this thesis I consider cluster discourse to cover various competing discourses (order of discourse) in the same terrain – the ‘terrain’ being the relationship between place, proximity and development. Within cluster discourse I differentiate between three main periodisations: Competitive Cluster Discourse; Collective Cluster Discourse; and Creative Cluster Discourse. Cluster discourse as used in this thesis refers both to theory and practice.

Competitive Cluster Discourse Refers to cluster discourse that links clusters to international competitiveness, and where competitiveness is a central node. In my thesis I argue that contestation of competitiveness is currently very difficult because of the naturalised understanding, the partial fixation, of competitiveness in relation to productivity. The discourse is closely related to the writings of Michael Porter (1990, 1998a, 2000).

Collective Cluster Discourse The collective cluster discourse refers to the 2nd periodisation of cluster discourse wherein the monofocus of economic imperatives attached to Porter’s cluster concept was supplemented by a focus on innovation and knowledge production. This shift also saw an increased influx from management
related disciplines, drawing on discourses of learning and communities. This also meant a focus on the soft aspects of the economy and an increased appropriation of the language of the critique. The discourse has a more geographical and regional focus than the Competitive Cluster discourse. The discourse draws on concepts such as Marshall’s notion of industrial atmosphere, learning regions and communities of practice. While transforming cluster discourse not least through an increased focus on knowledge transfer and innovation the discourse is not able to challenge the sedimented understanding of competitiveness, and thus enables its critique to be appropriated so that the learning region becomes understood through its relation to international competition.

It can be noted that Nordic research has been very prominent in its contribution to cluster literature and theory, especially in terms of defining clusters in relation to innovation and, to a lesser extent community. Noteworthy recent contributions to cluster literature have come from what can be labelled as the Lund School (see e.g. Asheim 1996, 2001, 2009, , Coenen, Moodysson & Asheim 2004 Vang-Lauridsen 2007, Edquist 2005, Chaminade & Vang 2008) and the Uppsala-school (see e.g. Malmberg 1996, 2002, Power 2006, Hauge, Malmberg & Power 2009, Mattson 2007, Power & Jansson 2004). The Uppsala school has contributed with various updates and developments of Porter’s functional clusters by articulating it around innovation, learning, and more recently creativity, but also by giving a more visible role to the state and state led agencies and public institutions, with an focus on high-tech and cultural industries. The research of the Uppsala school is closely connected to the Centre for Research on Innovation and Industrial Dynamics (CIND), and many of the contributions can loosely be seen as policy-driven.

Another Nordic cluster school has emerged around the University of Lund and the Centre for Innovation, Research and Competence (CIRCLE). The Lund school has been developing the cluster concept drawing on insights from Regional Innovation Systems, and manifested in various conceptualisations of learning regions and localized learning. Research has also been leaning towards what for a lack of better terminology could be called policy-driven, but in comparison to the Uppsala school there has been more emphasis on peripheral regional innovation and shares many nodal points with the industrial districts literature. Close to the work on clusters by the Lund and Uppsala schools is also the cluster research emanating from Aalborg University in Denmark (Maskell1999, 2001, Maskell & Lorenzen 2004, , Maskell & Malmberg 1999, Lundvall 2001, Lundvall & Johnsson 1994, Lundvall et al 2001) and the Danish Research Unit for Industrial Dynamics (DRUID). The construction of an understanding of clusters is similar to the Swedish schools, with a clear influx from ideas around national systems of innovation (NIS) and the resource based view of the firm in the construction of competitiveness.

**Creative Cluster Discourse** The 3rd periodisation of cluster discourse that I identify takes the language of soft capitalism one step further – by an increased focus on the individual. While embodied in the writings of Richard Florida (2002, 2005, 2006), I also see the urban centred concept of local buzz and global pipelines (Bathelt, Malmberg & Maskell 2004, Cohendet & Simons 2008, Moodysson 2008, Maskell, Bathelt & Malmberg 2009) to be inherently tied to this discourse. The geographic emphasis is on urban places, which are strongly connected to creativity. The discourse draws on a number of discourses that all serve to erase the borders between culture/economy and private/public. A central vehicle for its mobilisation is the concept of industrial design. By focusing on the individual the discourse also gains
legitimisation in a different way that previous periodisations, the emphasis is on
governmentality – government by freedom.

**Cultural circuit of capitalism** The cultural circuit of capitalism refers to the
discursive apparatus “business schools, management consultants, management gurus
and the media” (Thrift 2005, 6) which has made capitalism itself into a theoretical
enterprise in which virtual notions (such as networks, clusters, knowledge economy,
the creative class) are “able to take flesh as, increasingly the world is made in these
notions’ likeness through the power of consulting solutions” (ibid.). Academic
disciplines, such as economic geography itself, are increasingly important in the
legitimisation of certain discursive elements as facts, uncontestable and
unquestionable. Influential transmuting academic/consultant subject such as Michael
Porter and Richard Florida are well positioned as nodes in the cultural circuit of
capitalism, “which through its continious production of propositional and prescriptive
knowledge, has the power to make its theories and descriptions of the world come alive
in new built form...this form of capitalism has become a remarkably powerful
formation in a remarkably short time and is now a permanent feature of capitalism”
(Thrift 2005, 11).

**Governmentality** One of the most useful analytical tools for understanding the
methods of acting upon others to produce subject effects is the concept of
governmentality (Thrift, 2000b), which I see as a central technology of government
especially in the Creative Cluster Discourse. The semantic linking of ‘government’ with
‘mentality’ implies a fusion of new technologies of government with a new political
rationality (Clegg et al., 2006). In his essays on governmentality, Foucault (1991) looks
at what he calls the ‘conduct of conduct’, i.e. ‘all endeavours to shape, guide, direct the
conduct of others’ (Rose, 1999: 3). Governmentality aims to create common
sensemaking frames wherein people voluntarily delegate moral autonomy and
responsibility to a moral force external to the self (Clegg et al., 2006). But as Rose
(1999: 4) observes: ‘To govern humans is not to crush their capacity to act but to
acknowledge it and to utilize it for one’s own objectives’. By governing through the
population, governmental powers operate by facilitative rather than prohibitory
mechanisms (Clegg et al., 2006): ruling thus is seen as a reflexive activity. People
govern themselves and others towards what they see as the ‘truth’ and what they see as
ethical. In contemporary society the true behavioural norms and conventions are
mainly developed within human and behavioural sciences, which prescribe how people
in the domains addressed by these sciences should constitute themselves (see e.g.
Townley, 1994). This emphasizes the strong coupling between power and knowledge;
practices of government; and practices of the self, a coupling that enables the formation
of a discursive totality. A central aim in the analysis of government hence lies in
interrogating the governmental rationality that is embedded in discourse and that
produces subjectivity (Dean, 1999; Rose, 1999).

**Reflexivity** While reflection about cluster discourse is not enough and it needs to be
supplemented with engagement and practice, yet reflection is a necessary foundation
for the momentum of change, as reflection exposes underlying tensions
(Antonacopoulou 2010). Reflection, however, is not enough for change – there needs
to be reflexivity. Reflexivity is here defined in terms of the “ability to encounter the
familiar as new (unfamiliar) as a central quality to reflect on one’s reflections”
(Antonacopoulou 2010, 7). Reflection involves giving order to situations, while
reflexivity means unsettling conventional practice (Cunliffe & Easterby-Smith 2004).
Cunliffe (2009, 98) separates between A) self-reflexivity; the recognition that we shape
and are shaped by our social experience, involving a self-dialogue on our values and
assumptions, questioning of core beliefs; and B) critical reflexivity, which means the examination and unsettling our own assumptions, actions and their impact. This thesis deals very much with reflexivity, not least because the writing process has not been linear, and the reflexive aspect becomes more apparent over time (comparing the level of reflexive action in e.g. Paper 1 & 3 to Paper 4 & 6. Reflexivity as practice is also what I return to in the summarising and concluding section of this thesis.
2 SEARCH, RE-SEARCH AND OTHER REFLEXIVE JOURNEYS

This thesis project and especially the choice of discourse as the object of analysis cannot be understood, argued for or made explicit to the reader without some insights of the research process itself and the development of my understandings and ontological as well epistemological assumptions. With this I do not want to create a self-referential project, where I analyse my own texts – rather I want to create a short introduction to the role of discourse in the constitution of the world, and use my own research process as a case of point. This short introduction also functions as a reflection about the role of the analyst in discourse analysis and, which is central to many forms discourse analysis (Jörgenssen and Phillips 2002). The researcher is part of the culture that they study and apparatus of the production of knowledge (Thrift 2005) yet modern science rarely takes into consideration the researcher's own cultural and historical conditions of possibility. Doing so, i.e. taking into account the social and cultural location of the researcher, will produce what Harding (in Jörgenssen and Phillips 2002, p. 202) refers to as strong reflexivity: by accounting for where the researcher's knowledge comes from, he can produce a more objective representation of the world.

I have not kept a research diary from the very beginning of this project something that I in hindsight regret. Yet there are traces that I can analyse – such as early working papers, notes and paper drafts, in order to be able to describe and reflect briefly why the discursive apparatus and its production of knowledge about clusters became the central object of research and how I became more reflexive seeing the familiar (cluster discourse) as unfamiliar. It has not been a linear process, which means that I have not written paper 1 first then moved on to the second paper and so on. When I first started researching clusters I did not see them as socially constructed, rather their meaning was naturalised through my position as a researcher and lecturer within the discipline of corporate and economic geography. This is most evident in paper 1 and 3, whereas in paper 2, 5 and 6 the positioning within poststructuralist thought is more evident.

When I started my research some of meanings of clusters were naturalised to me, such as the relation between knowledge, innovation and agglomeration, while other meanings were excluded, for example issues of power. These meanings had become increasingly hegemonic through various concepts, ideas and theories, and their embodiments in policies and practices. I had never observed a cluster: its meaning was always mediated by systems of meaning in the form of discourses. It was not until I started to try to situate cluster theory in history, revealing some of the social processes and contexts that have constructed the common truths of clusters that I tried to distance myself from some-of-the-taken for-granted knowledge. By engaging with other academic disciplines throughout the writing process (e.g. Critical Management Studies, development studies, postcolonial, and gender studies) but also by analysing economic geographic research historically, I became especially interested in questions of silences in the current dominant cluster discourse, and issues of marginalisation. It was also though this reflexive process that I found discourse theory to be a useful tool to interrogate the silences.

Before I further elaborate on some of the underpinnings of using discourse theory to critically analyse clusters, I outline another understanding that do not see clusters as social constructs or fully discursive in order to position my research in relation to the dominant view in economic geographic research.
2.1. Geographical, functional and/or discursive clusters

It should be noted that not much has been explicitly written in terms of the epistemological assumptions of cluster research or the ontological status of clusters. A notable exception is Malmberg and Power (2006), considered among the authoritative voices within economic geographic theory on clusters, and subsequently I use their writings here as a point of reference, specifically their categorisation of clusters. My intent is not to critique such a division of clusters, or its ontological assumptions, but rather use this division as a point of departure and comparison to explain what stance on “discourse” I adopt and how it differs from what can be seen as a mainstream understanding within economic geography. This discussion also serves as an introduction to the social constructivist perspective and the framework of Discourse Theory (Laclau and Mouffe, 1985) that I utilize for analysing clusters in this thesis.

Malmberg and Power (2006) categorise clusters into three different forms: Geographical Clusters- those clusters characterised by their relation to geographic propinquity; Functional Clusters- those clusters characterised by their relation to industrial systems; and something referred to as Discursive Clusters - which in my understanding refers to clusters created by “specific policy programmes” (p.57), which are connected to “conscious development”. Discursive clusters “might or might not have a resemblance with the functional or geographical dimensions...In our view, cluster based policy programmes could preferably be referred to as cluster initiatives...the stricter we define clusters, the smaller number of real world cases...conform to the definition” (p.57). This understanding of clusters suggests that “real” (functional or geographical) clusters exist in the empirical world, and are not (discursive) creations or constituted, unlike discursive clusters.

Malmberg and Power argue against a narrow definition of clusters, but for the distinction between planned clusters (discursive clusters) and geographical/functional clusters. The discursive, institutionally developed clusters become defined in terms of the level of conscious planning and governance. This would suggest, at least from an ontological perspective, that clusters are not classified within a tripartite distinction but a dual one. Clusters are divided in term of being objective (natural/ecological) or contested (political). We can push this thought experiment towards an empirical realm by asking what kind of “real world phenomena” would be classified as a discursive cluster by this conceptualisation. Malmberg and Power are not specific about what meaning is inscribed into the word “planned”, so some assumptions have to be made in order to position different clusters into such categorization, thus I turn to other authoritative academic voices who have attempted to define a meaning of “planned clusters”: Manuel Castells’ and Peter Hall’s concept of technopole (Castells and Hall 1994) could be a likely candidate of what Malmberg and Power refer to a discursive clusters. Technopoles are described as places that are constructed at the edge of urban areas and branded with prefixes like Techno- and Science-, or with suffixes of -Valley, -Plaza, -Polis, or –topia. Their function is clear: “to generate the basic materials for the informational economy” (Castells and Hall 1994, p.1)

Technopoles are stressed not to be seen as “accidents”, “recent trends”, or “passing fads” diffused by academics or consultants, yet they are described in terms of planned and constituted polices and projects. A representation of such a discourse could be seen to be manifested in texts such as ‘Planning for Clusters’ (Department of the Environment 2000), in policy-driven theories such as the Ideopolis (Cannon et al. 2003), and territorially manifested in science park, technology park and business park
initiatives. In contrast to the discourse reproduced by “mainstream” economic geographic research such park-projects are more normative and the wording more managerialized, and the focus is most clearly on property and real estate development rather than processes of innovation. The park initiatives are often operated by private organisations and focused solely on firm activities and the development of local supportive institutions, providing the companies with the necessary economic private space, “boosting their competitiveness and resources to succeed in international markets” (www.technopolis.fi), the local premises being at the core.

But it is not only Western regions that turn towards the construction of clusters: Other park-like spaces that draw on cluster discourse are Special Economic Zones (SEZ) and even to a lesser extent Export Processing Zones (EPZ) in developing regions, tax free production zones that are often rationalised by cluster effects. E.g. a report released by the Taiwanese government states that the “major tasks of EPZs in the future will be to maintain their processing zone advantages while developing their industrial cluster effects” (The Investment Environment of the R.O.C. on Taiwan 2005, p.34). Generally, however, in mainstream economic geographic research and theory neither EPZs nor maquiladoras are generally used to illustrate clusters or drawn upon by the dominant cluster discourse as illustrated within economic geographic writing.

But even in the case of parks initiatives meaning is not limited to a clearly defined geographical space. The linking of “international competitiveness” and the parks is made possible by the construction of the fleeting boundaries between discursive and functional/geographical clusters. For example, Technopolis, which is the largest science park operator in Finland, present one of their premises as “a unique cluster of some 4,000 top experts, with almost two hundred companies working closely together. The area is one of the most important centres of technological development in Finland… (the Technical Research Center of Finland) and the University of Oulu are in its immediate vicinity”8 another park is described in terms “operating…in the heart of Finland’s largest and globally best-known technology cluster” 9 The region itself, functional and geographical clusters are being attached to the parks, as the parks are portrayed as the central places of functional/geographical clusters- usually either through the organic metaphor of “heart” or the technological metaphor of “engine”. Organisations such as Technopolis “construct” and “build” clusters, the formation of particular places-at least in meaning- into clusters is their core business. In this sense these are clearly planned spaces.

For Castells and Hall (1994), while acknowledging the fleeting boundaries between planned, semi-planned and unplanned, use the word “planned” for projects that aim to replicate successful innovative (geographical) clusters. For them the true “unplanned”, innovative clusters are embodied in the imagined giant (old) metropolises, such as Tokyo, Paris and London. The Dictionary of Social Sciences (Calhoun 2002) defines a city as: “A dense zone of human habitation where economic activity is highly differentiated and primarily nonagricultural in character.” Compared to the classical definition of clusters- “geographic concentrations of inter-connected companies and institutions in a particular field” (Porter 1998: p.78), a notable difference is that economic activity within clusters is understood as more homogenous in regards of industry and economic activity. Another differentiation is the aforementioned aspect of planning. Clusters are-to various degrees- seen as orchestrated locales that aim to reach competitive advantages based, on among other things, agglomeration of industry. The

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main process within clusters is concerned with the production of economic value. Economic activity is of primary concern; the social is of secondary concern. Writers within urban planning such as Hessler (2003) have differentiated metropolises and cities from technological parks and clusters on basis of planned development. But these boundaries are becoming increasingly fuzzy as the discourse of clusters is increasingly articulated around the urban landscape. Concepts such as entrepreneurial cities (Jessop and Sum 2000), creative cities (Gertler 2004; Landry 2000), knowledge cities, Ideopolis (Cannon et al. 2003), airport cities (Kasarda 2001b) are testimony of this development. Here the meanings of city and geographical clusters become increasingly intertwined, and the city is reproduced as an example of a “natural cluster” one outside of the political realm of the “discursive cluster”. It is also a testimony that there is no fixed meaning of clusters, meaning is never fully closed and there is an ongoing struggle for meaning. It is towards this struggle I turn my attention, the changing articulations, and the dominant and excluded meanings.

In comparison to the perspectives and classification attempts outlined above, I have come to adopt a more social constructivist view of clusters. I see (all) clusters as discourse. I consider the meanings of representation of clusters as an object of research are real, but its meanings are mediated and constituted through language. As implicated by the label ‘discursive’ cluster, the ‘truth’ of clusters is made inside of texts, not outside them (Barnes and Duncan 1992a). Our access to reality is always through language (Jörgensen and Phillips 2002). Laclau and Mouffe’s (1985) discourse theory does recognize that objects exist independent of language, but that objects/reality only acquire meaning through discourse. This also sets their perspective apart from realism /realist ontologies (Bridgman and Willmott 2006, 115). Bridgman and Willmott explain this stance on discourse by the following illustration “existing material phenomenon, such as an earthquake, can be articulated—rendered meaningful within diverse discourses (e.g., geology, theology: act of God)—but for Laclau and Mouffe, that does not put into question its existence as matter.”

Agglomerated economic activities exist, even though they are not “natural phenomena”, but they only gain meaning through discourse. As soon as researchers attempt to ascribe meaning to an agglomeration it is no longer outside of discourse. Changes to discourse, through what is referred to as discursive struggle (Laclau and Mouffe 1985), changes and reproduces social reality. Thus, following for example Mumby and Clair’s (1991) conceptualization of organisations, I confer to the view that clusters exist only to the extent that they are created through discourse by actors/members with stake in clusters. This is not to suggest that agglomerated activities are nothing but discourse, but that discourse is the foremost means that clusters are rendered a unified social reality. If we are to make a distinction of discursive clusters versus functional/geographical then unwittingly we are exposed to the dangers of granting a privileged and less interrogated position for geographical/functional conceptualizations of clusters. As we have seen above, the meanings are inherently intertwined, fleeting and most importantly changing and in constant flux.

Thus all forms of clusters are seen to be created by the current theoretical economic landscape, rather than merely corresponding to it (Barnes 1992). If related to the previously referred to classification of clusters, in terms of geographical and functional clusters, geographical and functional clusters will partly emerge from the act of writing and theorizing about them. This does not imply that there exists no ‘brute facts’ or ‘bedrock’ reality (Barnes 1994) but that all three classifications of clusters involve interpretations, and that all three exists within texts. Research and the knowledge it creates do not simply serve to expose the social world, but will overtly or covertly alter
its very nature and steer its development in new directions (Gibson and Klocker 2004; Giddens 1990). This position also explains why I treat clusters as texts. This serves to ensure that no conceptualization or theory of clusters is ascribed a privileged position that cannot be read or interrogated.

2.2. On methods, methodology, epistemology and ontology

Having in previous section laid down some initial arguments and observations about the problems and paradoxes lodged in the very meaning of clusters, I will in the following section further elaborate on how and why to critically analyse discourses. I argue that there are interesting and valuable insights to be gained by analysing clusters through discourse theory, and that they can be approached methodologically through the analysis of texts on clusters, be they e.g. theory, marketing material, policy documents or architecture.

An initial assumption of discursive approach to clusters is that the term as such has no intrinsic meaning. Instead, by drawing on social constructionism and poststructuralism, the discursive approach assumes that places, firms, individuals, and actions get a meaning through discourse (Fairclough 1995; Phillips and Hardy 2002). Post-structural thinking and discourse analysis is by no mean new or even uncommon within the geographic disciplines and research (see e.g. Barnes & Duncan 1992b, Barnett 2004, Lees 2002). Especially the so-called “cultural turn” of economic geography brought in new approaches from other fields, among them discourse analysis. Some cluster researchers such as Mattson (2007, p.359) while adhering to other epistemologies and ontology, acknowledge that “[discourse] influence, often covertly so, what (we think) we want or do not want; what (we think) we can, cannot and cannot not do. Therefore [discourse] need to be incorporated in a theory aimed at understanding knowledge production as desires/strategies/projects struggling to be satisfied/carried out/fulfilled within certain time spatial constellations’. But in cluster research, like in the case of Mattson (2007) these ideas on discourse and social power, as well as questions about what kind of subject positions are made available and valuable by the very cluster discourse they are reproducing, are little more than asterisks.

The aim of discourse analysis is the analysis of the relationship between discourse and social practices, analysing how discursive meaning systems and strategies are created, accepted and naturalised, and how they affect individuals, the economic landscape and society at large. Unquestioned acceptance of dominant paradigms can be detrimental both for research and society at large. Discourse analysis tries to reveal a “hidden motivation” behind a text or theory, and discusses why certain concepts, theories and discourses have been naturalised and achieved an unquestioned status and how that affects how we think and act (Schoenberger 1998). By making assumptions explicit, the analysis will enable the researcher to view the problem from afar and gain a comprehensive view of the problem and myself (my role as a cluster researcher/economic geographer/corporate geographer etc.) in relation to the problem. By providing an increased awareness of the hidden motivations in others and ourselves will, however, enable the solution of concrete problems, not by providing unequivocal answers, but by making us ask ontological and epistemological questions (Alvesson and Karreman 2000; Doel 2003; Schoenberger 1998). The purpose of discourse analysis is not, however, to get behind the discourse in order to discover a reality behind it (Jørgensen and Phillips 2002). As the starting point for discourse analysis is that
reality cannot be reached outside discourses, it is the discourse itself that constitutes the object of analysis (ibid).

When analysing discourses that are an inherent part of the researcher’s own academic discipline, it becomes difficult to treat them as discourses. As the researcher is part of the studied culture, he or she will share many of the naturalised understanding manifested in the analysed material, thus making it difficult to consider them discourses; socially constructed meaning-systems that potentially could have been altered and could look different (Jörgensen and Phillips 2002). The main difficulty in this is that the task of the researcher is to investigate how these common sense, naturalised understandings and statements are created, accepted and naturalised.

2.3. Discourse theory

When considering the methods and the choice of discourse analysis, one has to recognise that it is difficult to give a single definition discourse analysis as a research method. Rather than considering it a particular method, discourse analysis can be characterized as a means of approaching and thinking about a problem. From this perspective, discourse analysis is neither a qualitative nor a quantitative research method, but an approach of questioning the basic assumptions of research methods, a project, or in the case of my thesis, a theory. Indeed discourse analysis does not in the traditional sense provide a tangible answer to problems based on scientific research; on the one hand it enables access to the ontological and epistemological assumptions (Jörgensen and Philips 2002), but more importantly it enables an exposure of the discourse in revealing the effects which discourses produce and exposing the complex and competing forces shaping the discourse. Particularly interesting is also examining the silences of the discourses, and the effects of these silences (Martin 1990).

There exists several approaches to discourse analysis each with its own understanding of what constitutes discourse and the focus of analysis lies (for a review see e.g. Diaz-Bone et al 2007). The field of foucauldian discourse analysis, that is analysis that is in a way or other informed by Michel Foucault’s notion of discourse, is not an integrated paradigm and there is a real heterogeneity in the approaches (Diaz-Bone et al 2007). What the field shares is that all of them are based on social constructivism. That means that they share some central tenets that for clarity’s sake are worth repeating (Jörgensen and Philips 2002, p.5):

1) The field of discourse analysis takes a critical approach to taken for granted knowledge, naturalized understandings and objective truths. Our knowledge and representation of the world is products of discourse.

2) Our knowledge of the world is historically and culturally situated and contingent. The notion of contingency is central to discourse analysis, it indicates what is possible- but not necessary. Our identities and perception of the world could have been different, and they are not fixed, they can change over time. Discourse is a social action that is part in the production of the social. Knowledge, identities and social relations are constructed socially and thus not pregiven or determined by external conditions. The field of discourse analysis is anti-essentialist.
3) There is a strong link between knowledge and social processes. Knowledge is created by social interactions by which some truths are naturalised, and by which there is a struggle over what is “true” and “false”.

4) There is a strong link between knowledge and social action. Within some discourses some forms of action will be naturalized while other forms of action will become unthinkable and marginalized. The construction of knowledge will thus have clear social consequences.

From the field of discourse analysis Jörgensen and Philips (2002) identify three major approaches to social constructionist discourse analysis: critical discourse analysis (CDA), discursive psychology and discourse theory. Discursive psychology is predominantly concerned with the everyday practices, whereas the other two approaches are more concerned with overarching patterns and societal structures (figure 1). In this thesis I specifically draw on Laclau and Mouffe’s (1985) discourse theory and its development and supplements by Jörgensen and Phillips (2002) to analyse clusters. The discourse theory of Laclau and Mouffe has been described as “avowedly post-Marxism and infused with Foucault’s theory of discourse” (Sutherland 2005, p.186). Sutherland (2005) also argues that as a basis for case studies discourse theory introduces some heuristic order into in this case diversity of theoretical perspectives. Although drawing on and combining elements of Fairclough’s (2005; 1995) CDA, especially the notion of order of discourse, which will be discussed later in this chapter, my understanding of the role of discourse in the constitution of the social world (Figure 2.) is more in line with Laclau and Mouffe’s approach although the different papers have a different emphasis in terms of what kind of discourse is studied. Laclau’s and Mouffe’s approach aim at more abstract mappings of discourse (Jörgensen and Philips 2002, 20, trying to catch overarching patterns at particular moments in time rather than mapping more ‘personified discourses’, which is more typical for other discursive approaches such as discursive psychology (Figure 2).

![Analytical focus](Jörgensen and Phillips 2002, p.20)

Unlike in Fairclough’s critical discourse analysis (CDA), which makes a, in poststructuralist terms, clear distinction between discursive practices and non-discursive social practices, discourse theory does not reserve the concept of discourse to only texts and other semiotic systems. In the perspective I adopt discourse can be seen as constituting also the material, rendering technical and economic objects such as infrastructure, institutions and organisations as discursive. Discourse is seen as constitutive of the social, rather than (see figure 3) subsumed or derived from other social mechanisms (Dyrberg 2004). There is no rhetoric that is untangled from action, no discourse that is untangled from action, unlike in discourse analysis. In fact, Laclau (in Bhaskar and Laclau 2002) suggests that the notion of discourse could be replaced by practice.
Such understanding of discourse does not mean that discourse theory is inherently
deal- e.g. that changing the discourse is equivalent to changing the world- as is often
the one of main points of critique against post-modernism (Willmott 2005) Laclau and
Mouffe (1987) recognise that there is a difference between the existence of objects and
their articulation within discursive totalities. Social realities exist before brought into
being by discourse (Willmott 2005). However, their position is that claims about the
existence of objects are discursively identified. The representation, transformation,
production and reproduction of social realities are reached through articulatory
practices

My research has started off somewhere towards the centre and moved
towards the right-hand side.

Laclau and Mouffe’s discourse theory
Critical discourse analysis
Discoursive psychology Foucault
Historical materialism

Figure 3 Discourse as constitutive/constituted

5) The role of discourse in the constitution of the world (Jørgensen and Phillips
2002, p.20)

My position is thus that clusters do not constitute an objective description of economic
development or society at large, but that it is part of a discursive strategy (Schoenberger
1998) that constructs a very particular understanding of reality that in turn is
manifested in actions and material practices. Discourse is thus seen as constitutive.

Discourse theory is particularly focused looking at articulations-practices that establish
relations between elements of discourse, as well as the question of what meanings are
being established and what meaning potential they exclude. The proposition is that
articulations can be investigated in relation to particular discourses by addressing two
central questions (Jørgensen and Phillips 2002, 30-31): What discourses do
articulations draw on- i.e. what discourses are being reproduced? ; Does the
articulation challenge or transform existing discourse by redefining the meaning of
signs? Further, discourse theory provides on the one hand a philosophically informed
basis for studying clusters, but also an overtly political basis for doing so (Willmott
2005), it is described to be guided by “a self-consciously ethical political project from
which ontology and epistemology are derived”. Willmott compares discourse theory to
critical realism, stating that whereas the latter is concerned with knowing the world
based upon a realist philosophy of objective knowledge production, the latter is mostly
concerned “by the question how to change it” (Willmott 2005, 753)

2.3.1. Texts

In this thesis discourses are seen as constellations of knowledge and practice, through
which the world we live in is given a material incarnation (Doel 2003). Texts are

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10 Articulatory practices (articulation) refer to all efforts to establish meaning to particular signs (Jørgensen
intrinsic of the larger term of discourses. Discourses are frameworks that represent particular narratives, ideologies and signifying practices, each relevant to particular realms of social actions (Jörgensen and Philips 2002). Discourses comprise standpoints that are defined by their relationship to other discourses. Texts of economic geography are thus not impervious from the context in which they originate (Barnes 1992). They are practices of significations that provide the framework to understand the world. The limits set by the discourse is not set, and are under constant subject of transformation and negotiation (Barnes and Duncan 1992b).

Following Barthes (1971), and within geography, Barnes and Duncan (1992b), this thesis adopts a expanded conceptualization of texts, one that includes not only printed textual accounts but also other cultural productions such as maps, landscapes, and architecture. Thus, following a broadly postmodern view, these cultural productions are seen as practices of signification rather than referential mimicry of reality. Nonetheless, cultural productions do embody other cultural texts and are thus communicating and producing meaning. Following Barnes and Duncan I argue that the method of textual interpretation is relevant. Place, which is the object of study in this thesis, is inherently intertextual as texts and discursive practices are deeply inscribed in their landscapes and institutions. Thus “textual processes cannot be confined within the bindings of the book” (LaCapra in Barnes 1992, p.119).

When analysing texts that are focused on the interconnectedness of clusters and creativity and the meaning it produces, I follow the position of geographers such as Barnes and Duncan (1992a) that writings on these reflect prior interpretations. Within literary studies this is referred to as intertextuality (Bahtin 1984; Kristeva 1986), Laclau and Mouffe refers to it as articulation. Intertextuality does not refer to ‘influence’, as that implies intention, e.g. ways in which a researcher refers to or quotes to others. “When we read texts intertextually we immediately go outside of them in our search for meaning, since a text considered intertextually has no inside or, to be more specific, a text’s inside comes from that field of meaning (cultural discourses) which exists on its outside.” (Allen 2005) Intertextuality implies both change and reproduction: every reproduction of discourse involves an element of change, no matter how minimal (Jörgensen and Philips 2002). In this context it should be underlined that Laclau and Mouffe make a distinction between articulation (intertextuality) and discourse: discourse can be seen as an abstract fixation of meaning, whereas articulation is a specific action that either reproduces or transforms the discourse. Each of the papers in this thesis is an articulation of discourse – they are not apart from the discourses they analyse. The notion of articulation and its distinction from discourse, also underlines that whereas Laclau and Mouffe do not distinguish between discursive practices and non-discursive social practices, a certain distinction is almost always made to some degree in empirical studies.

The social and historical context helps us to understand the contingency of textual representations (Ekegren 1999). Jameson (1981) gives the example of rather than analysing artistic choices in purely aesthetic terms, one should recast such discourses in terms of historical practices and norms, in an attempt to develop an inventory of the constraints they imposed on the artist as an individual creative subject. History, another focal point of this thesis, is largely accessible to researchers in textual form (Barnes and Duncan 1992a; Ekegren 1999). History is interpretation, but the issue and connected problems of interpretation remains neglected not only by historians themselves but within social science at large (Ekegren 1999; White 1978). An example from cluster literature is the interpretation of Marshall’s wording “as it were in the air, and children learn many of them unconsciously” has been read as and appropriated as
an understandings of “knowledge spillovers” and as a defence of place within economic geography. Barnes (1992) notes if the current theoretical economic landscape within economic geography is created, rather than corresponding to, interpretive theories, then theory needs to be read and interrogated as a text instead of granting it a privileged position. Arguably it is not only theoretical economic landscapes that are created, but also the economic landscape at large. As Barnes argues, “the text of the landscape partly emerges from the very act of theorizing about it” (Barnes 1992, p.119).

Among scholars of history on the other hand “anachronistic shortcuts” (Rehn 2006, p.72) wherein the researcher’s affinity for generalisations creates “Big Stories” out of the chaos of history, are commonly viewed as signs of mental laxity (ibid). While acknowledging the problems associated with imposing modern understandings on historical economic projects and business ventures, I concur to Rehn’s (2006) position that what is needed is not necessarily a more rigorous analysis of history, but rather an increased problematisation of history, recasting its relation to the foundation of modern theory. By attempting to read historical clusters (Paper 3) to understand the ‘new logic’ of clusters I wish to further counterpoint the dichotomy between the ‘new economy’ and the ‘old economy’. Creating an understanding from past conditions may lead to insights to present and future conditions, which are most likely produce a particular directions of change, however, if strategies and developments are to be effective it also requires understanding of the present (Miles 2002).

2.3.2. Hegemonic discourse and discursive struggles

When attempting to critically analyse particular disciplines, perspectives or concepts, a fundamental problem is that these are all functions of particular epistemologies and ideologies (Massey 1977). From the social constructivist perspective there are no, in the positivistic sense, complete, real or true forms of social organisation. Rather the notions of truth are seen to be ideological constructs, they are contingent and they can be refined (Sutherland 2005). Theories are outcomes of historical developments and are contingent, but as some theories and perspectives become naturalised (objective) it will mask the contingency and in doing so suppresses alternative possibilities and understandings (Jørgensen and Phillips 2002).

Contingency, what is possible but not necessary, is the philosophical foundation and the analytical essence of Laclau and Mouffe’s (1985) discourse theory. The discourse analyst’s task is to map the struggles to fix meanings and to naturalise perspectives, while at the same time looking at those possibilities that are excluded and by that, identifying the social consequences of particular discourses. (Jørgensen and Phillips 2002) Similar to language, society and identity are, however, never completely fixed and always open for contestation.

The struggle of fixing meaning can be understood through Gramsci’s (1971) concept of hegemonic acceptance. Gramsci defines hegemony as the achievement of social consensus (Gramsci 1971, p.151). Hegemony is the manufacture and organisation of consent (Barrett 1991). In discourse theory hegemony (Jørgensen and Phillips 2002, p.48), or rather hegemonic intervention (p.36) is the process that falls between what we see as natural (objectivity) and what is contested (political). The boundary between what is seen as natural and what is contested is not fixed; this is the premise of discourse theory. By looking at the construction of meaning processes, discourse analysis tries to map how reality is created in a way that it appears objective and neutral. Discourses where contingency is ‘forgotten’ or masked are referred to as
objective. Objectivity, also referred to as sedimented discourse, is a historical outcome of politics and struggle. But objectivity, what appears to be unchangeable, can at any time enter the realm of politics and thus be problematised through new articulation (Jørgensen and Phillips 2002, 36). Politics is central to discourse theory, but herein politics is not understood not in a narrow understanding of activities associated with the governance of a nation, but the way we constitute the social in a way that exclude others (Torfing 1999). Recall that signs acquire meaning through the exclusion of other meanings, and discourses are the attempts to create unified systems of meaning. But politics has primacy: political articulations determine how we think and act and how society is organised.

One can hardly mention politics and hegemony without reference to power. For Laclau and Mouffe, following Foucault’s conceptualization, power is not seen as a possession or an inscribed capacity that can be exercised by some people over others\(^{11}\); rather power is something that produces the social in particular yet contingent ways (Jørgensen and Philips 2002). Power produces possibilities: knowledge and identities are produced by power, yet at any given time they could have been different, i.e. they are contingent. Jørgensen and Philips (2002, p.39) put it well when they state that “Power is not something you can make disappear: we are dependent on living in a social order and the social order is always constituted in power. But we are not dependent on living in a particular social order, and the exclusion of other social orders is also one of the effects of power... power produces an inhabitable world, and...it precludes alternative possibilities”. Yet power is here seen as a “relational effect of social interaction” (Allen 2003, p.2), it is a relation and not a thing, and is thus not seen as a property that can be held by someone or something (Clegg, Courpasson and Phillips 2006, p.223). According to Allen (2003, p.9) power is “practiced before it is possessed”, while “people are placed by power” (ibid,p2), they experience power through “the rhythms and relationships of particular places”, rather than understanding it as a facile notion of “a shadowy force lurking in the murky recesses” (p.9). What is of interest in discourse theory is the “modalities of power” (ibid.2), acts that affect how people are put in their place, and how they experience power - be it through domination, authority, seduction, manipulation or coercion.

It can be useful to position this understanding of power in relation to Lukes (1974) categorization of power, not least because it is closer to a foucauldian understanding of power than that of Gramsci and the traditional Marxist conception of power, both which have been influential in economic geographic research. Lukes gives an account of the three dimensions of power (the white box in Figure 4). The liberal one-dimensional view of power focuses on accounts on different preferences that actors hold and how these are settled empirically - the observable actions and concrete decisions of actors in conflicting issues and how these are settled through political action (Clegg et al. 2006). The second, two-dimensional view of power expands the focus to not only observable things but also the intentions that social action is based on (ibid). When strategic choices are made some areas will remain in a zone of non-decision rather than decision, thus remaining latent – as will potential (future) conflicts: “Some issues are organized into politics while others are organized out” (Gaventa 1980, p.9). To this Lukes adds the three-dimensional, radical view, of power. Here, policy preferences are related to real interests. These real interests are defined as objective, different from the interest people think that they have while expressing

\(^{11}\) For further readings on how power is conceptualised in human and economic geography see for example John Allen’s 1997 article “Economies of power and space” in R.Lee and J.Wills (eds.) Geographies of economies, London Arnold
themselves as if they had them (Clegg et al. 2006, p.211). With this Lukes moves away from a behavioural focus, towards including social forces such as embeddedness. With the third dimension of power Lukes suggests that power is distorting communication, it is prohibitory and restrictive. It relates strongly to Gramsci’s notion of hegemony. The uneventful routines of the knowledge taken for granted “attain naturalness and are reproduced as if they were natural in such a way that they are rarely if ever challenged” (Clegg 2006, p.212). But Lukes suggest that under “extraordinary conditions” these routines will break down and people may “pierce the veil of their everyday consciousness’ and grasp their real interests” (ibid, p.212, emphasis added). According to Clegg et al. (2006) the alternative discourses that would make this possible are usually identified as discourses that define themselves as being against ruling orthodoxy, e.g. feminism against patriarchy, socialism against capitalism etc.

Figure 4 The four dimensions of power (Clegg et al. 2006, p219)

In a foucauldian conception of power the notion of “real interests” and these not being realised are entirely alien (Clegg et al. 2006, p.218). Clegg et al. (2006, p.218-219) thus add a fourth dimension to the diagram, which suggests that there is a fourth dimension shaping the subjects’ subjectivities. The subject is not a given but produced by power/knowledge:

“the subject is socially produced by the system of power which surrounds it and is a socially constituted, socially recognized, category of analysis, one with multiple and fragmented identities rather than the one suppressed identity of a real interest that is unexercised, unknown and unrealized” (Clegg et al 2006, p.218)
What Laclau and Mouffe’s discourse theory in turn does, is to put an end to the discussion of “real” interest by positing that interests are never given, instead subjects are “the effect of the play of contingent discursive possibilities...how we see ourselves in the discursive possibilities that determine how we, as subjects, constitute ourselves as ‘the’ subject with specific sets of interests that relate to other subjects with other interests” (Clegg et al. 2006, p220).

2.3.3. The tools of discourse theory

I will herein introduce some of the cornerstone concepts of discourse theory, this is not to be seen as all encompassing or detailed in explanation on how these concepts are visible in cluster discourse but rather as an overview and introduction of some basic concepts. Each will be revisited in later chapters and their meaning will be elaborated more throughout the chapters.

Laclau and Mouffe (1985) are not specifically overt in explaining how to carry out a detailed analysis of the empirical, in their book *Hegemony and Socialist Strategy* the focus is clearly discourses as abstract phenomenon. But as subsequent research such as Jørgensen and Phillips (2002); Willmott (2005); and Skålén et al (2008) show, this does not mean it cannot be used for empirical analysis. Especially Jørgensen and Phillips convincingly demonstrate how to use discourse theory as a framework for analysis.

Analysis based on discourse theory looks at the processes and struggles by which some fixation of meaning is conventionalised and naturalised in discourse. In discourse, signs derive meaning from their difference and relations to each other. Discourses are established as signs are fixed as moments (Jørgensen and Phillips, p. 26) through their relation to other signs, thereby creating unified systems of meanings, i.e. discourses. Unified systems of meaning are foremost created by exclusion of other possible meanings. A moment is an undisputed sign, a fixation of meaning (ibid), making them central building blocks of discourse. It is then the practice of articulation that establishes particular relationships between moments, and thus gives meaning to signs.

According to Skålén et al (2008, p39) what constitutes a particular discourse is “the total structure and network of relationships between moments established by articulations that fixate the meanings of moments”. According to them such understanding of discourse is what sets it apart from other “indistinct usages of discourse as language in general” (39). But as Laclau and Mouffe acknowledge, the fixation of meaning is always contingent – possible but not necessary. Contingency is based upon the notion of elements, signs whose meaning has not yet been fixed (Skålén et al 2008, 40), they are not in the words of Laclau and Mouffe (1985, 105) “discursively articulated”. Articulatory practice tries to turn elements into moments, thus fixing the signs of the discourse (ibid). Discourse is thus seen as a temporary closure of meaning, but the closure is never complete and always contingent. Discourses are attempts to dominate and “arrest the flow of differences, to construct a centre” (Laclau and Mouffe, 112). Identifying such centres is central to discourse analysis- and an evident starting point also in this thesis.

Jørgensen and Phillips (2002) suggest that a starting point for research using discourse theory is to identify key signifiers in the social organisation of meaning. Once these are identified the researcher can begin asking questions on how discourses, identity and social space are organised discursively. Nodal points are privileged signs around which
other signs are ordered and through which other signs acquire meaning. Nodal points give partial stability to the fixity of meaning (Bärenreuter 2005), with this is meant that nodal points act as a centre of discourse, as any discourse is constituted as an attempt to dominate any other discourse that compete in the same terrain, to “arrest the flow of differences” (Laclau and Mouffe 1985, 112) in meaning. Nodal points organise discourses. But in themselves the nodal points are empty signs until inserted in discourse. For example “regional competitiveness” gains meaning through combination to other signs such as “productivity” and “international competition”. In this sense nodal points are floating signifiers, elements of discourse that are especially open to attributed meanings. The distinction between a floating signifier and a nodal point is that the former refers to a struggle of meaning between different discourses, whereas a nodal point refers to the arrangement of meaning within a single discourse (Jörgensen and Phillips 2002). Floating signifiers are signs that at the same time are part of several (antagonistic) discourses, and can thus have distinct meanings within each of them (Skålén et al 2008). The two can coincide and a nodal point of one discourse can be redefined or changed from the outside (through hegemonic intervention).

To give an example, the word “development” is a sign that is simultaneously a floating signifier and a nodal point in the discourse of neoliberalism, it’s meaning being constituted through its relation to elements such as “economic growth”, ”deregulation” and “privatization”. However, “development” is not uncontested or exclusive to neoliberal discourse. Within other, competing discourses such as human development discourse “development” is also a central sign – a nodal point - but here it is understood in terms of its relation to capacitisation and enlargement of people’s choices (Power M. 2003, 94). Development is thus also a floating signifier, part both of neoliberal discourse and human development discourse, its meaning distinct to both.

Investigating the investment of key signifiers with meaning is facilitated by the concept of chains of equivalence. Chains of equivalence are a process of articulating and linking together diverse elements into structures of equivalence (Schostak 2005, p.34). This means investigating the chains of meaning, how e.g. “clusters” links to and is understood in relation to “competitiveness”, “international competition”, “innovation”, “places” and “economic growth”.

### 2.3.4. Delimitations- order of discourse

Studies have to be limited to analysing a limited number of discursive utterances in order to be meaningful and in order to produce meaningful results. Here, following Jörgensen and Philips (2002) I draw on order of discourse, a concept from CDA, to delimit the number of discourses analysed. Order of discourse refers to a limited range of discourses that compete over meaning in the same domain. This can be contrasted to the field of discursivity, which refers to all possible but excluded constructions of meaning. The order of discourse is the “common platform of different discourses, and the discourses are the patterns of meaning within the order of discourse” (ibid.p.144). The order of discourse is also where antagonism and hegemony, as outlined previously, belong. Antagonism referring to the moment of conflict between different discourses within order of discourse, and hegemony and hegemonic intervention to the dissolution of conflict through rearticulation of elements, and the displacement of boundaries between discourses.

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12 Elements are signs in discourse that have not yet been fixed, they are polysemic, i.e. they have several meanings. Those signs that are fixed or momentary fixed in relation to other signs are called moments.
In this thesis, the order of discourse could loosely be seen as discourses that are situated in the domain of “the relationship between agglomeration and development”. However, identifying and formulating at this stage what the “common terrain” or “domain” is, is a complex task for several reasons. I do have an understanding, prior to this thesis project, of what meanings are common or antagonistic in the group of discourses that partly cover the same domain, i.e. agglomeration and welfare. In other words it shows that the research process is not linear. Formulating the domain of the order of discourse also exemplifies hegemony, it would be a possibility to describe the domain of order of discourse in terms of competitiveness and agglomerations, but the meaning of competitiveness is sedimented, meaning that it is so naturalised as belonging to the economic sphere that it is hard to at this moment of time to see the struggle over meaning.

Identifying the different discourses within the order of discourse is one of the analytical tasks of my study, and this will be the focus of the first part of the thesis. However, sufficient to say at this point my focus is on something that can generally be referred to as cluster discourse, which in turn can be divided into different historical periodisations. Central to the task of delimiting discourses is to see it as an analytical exercise that “entails understanding discourses as objects that the researcher constructs rather than as objects that exist in a delimited form in reality, ready to be identified and mapped” (Jörgensen and Philips 2002).

### 2.3.5. Across the approaches

The different papers presented in the thesis are to be seen as stages in my research process of clusters – they clearly show how my perspective has evolved during this writing process. There is a certain ontological and epistemological tension between the earlier writings and the later part, most notably as the earlier production does not explicitly consider or critique the social consequences of the discourse. Yet there is a link throughout the papers with the underlying question of understanding what articulations cluster discourse draw on. At the core of the research process has been to take a step back and try to look at the familiar (in my research it means clusters) in an unfamiliar way (Antonacopoulou 2010, 7). When I read my earlier analysis of cluster discourse I see how hard the process of reflexivity is. As Jörgensen and Philips (2002, 21) note:

> In working with discourses close to oneself with which one is very familiar it is particularly difficult to treat them as discourses, that is, as socially constructed meaning-systems that could have been different. As analysts are often part of the culture under study, they share many of the taken-for-granted and common sense understandings that are to be investigated… it is fruitful to try to distance oneself from one’s material…the problem of the researcher’s role goes much deeper and needs to be tackled reflexively

I see reflexivity as the key practice of gaining distance. While reflection involves giving order to situations, reflexivity is about unsettling conventional practice (Cunliffe & Easterby-Smith 2004).

Cunliffe (2009, 98) separates between self-reflexivity, which is the recognition that we shape and are shaped by our social experience, involving a self-dialogue on our values and assumptions, questioning of core beliefs; and critical reflexivity, which means the examination and unsettling our own assumptions, actions and their impact, and issues such as what is entailed in clusters, creativity discourse, knowledge management, the innovation imperative etc. Unsettling our own sedimented assumptions and actions is an arduous and ongoing process, and the thesis is testimony of one such journey.
In the papers I also utilize a number of analytical theories – some such as the governmentality perspective (paper 5,6) and performative space (paper 6) are ontologically and epistemologically close to a discursive approach and poststructuralism, others such as Intellectual Capital theory (paper 4) is less evidently so. But as Jörgensen and Philips (2002, 153-154) point out discourse analysis is often in practice about multiperspectival research and it is common to supplement a discourse analytical approach with “non-discourse analytical theories about the specific social phenomenon under study. It is thus possible to form a multiperspectival framework that approaches a phenomenon from different angles and thus take into account the complexity of the phenomenon. In the concluding section of the thesis (chapter 3) I ‘translate’ some of the results into discourse analytical terms, which Jörgensen and Philips (ibid) suggest as an approach to ensure that the philosophical premises, theories and methods of the different approaches are consistent.

2.3.6. Periodisation and problematisation of discourse

As I am interested in changes in cluster discourse, there needs to be some clarification in how I set out to delineate cluster discourse into different historical periods. In terms of the methodological foundation I herein draw explicitly on the work of Skålén, Fougère and Fellesson (2008) who have analysed marketing discourse through the lens of Laclau and Mouffe’s discourse theory. In their study Skålén et al periodise marketing discourse into three historical periods, by combining the concepts of periodisation and problematisations with discourse theory, in order to give more “precise methodological position” (39). They note that the periodisations demarcate “important and fundamental changes in the…discourse have taken place between these period as regards the governmental rationality promoted, the governmental domain being aimed for and the governmental technologies and practices being promoted in order to achieve government” (45).

In order to sharpen the analytical methods of defining, and overcoming the vagueness of what exactly constitutes, a “fundamental change” in the context of discourse analysis, Skålén et al (2008) combine it with insights from Foucault’s genealogical methodology. Genealogy seeks to identify important developments and turning points that lead up to the present discursive order (Foucault 1988), and it can be seen as a particular form of historical analysis that attempts to diagnose the present by comparing it with historical accounts and as a result question the self-evident and the naturalised understandings of the present (Skålen et al 2006).

Skålén et al. (2006) use the concept of problematisations to track and uncover central changes in discourse. Problematisations refer to “elaborations and changes in discourse… the reasons and occurrences that lead to realized or attempted shift in … discourse” (37), more particularly “signifying the ways through which a regime of government is questioned and/or questioning”. Questioning here does not imply critique - as understood elsewhere in this thesis - but rather “an internal critique of the discourse”. Such “internal critique” or questioning could refer to general changes in society and societal order, a competing discourse, or the discourse itself. Critique on the other hand is understood as the “problematisation of the problematisations” (39).

Skålén et al (2008, 38) give the example of how problematisations may concern how managers should carry out government and management of organisations according to certain prescriptions, but also how they should conduct themselves. In the language of discourse theory problematisations is closely connected to hegemony and hegemonic
intervention. Hegemony as argued previously is the manufacture and organisation of consent (Barrett 1991) and hegemonic intervention is the process whereby alternative understandings are suppressed – leading to a naturalisation of one dominant perspective (Jørgensen and Phillips 2002, 36).

Problematisations are connected to Laclau and Mouffe’s discourse theory as problematisations are articulatory practices that aim to turn moments (i.e. signs that are temporary fixed with meaning) of a particular discourse into elements (a sign whose meaning is not fixed). Problematisations thus rearticulate discourse and provide it with new meaning (Skålen 2010, 108), i.e. opening up discourse and attempting to close it. Problematisations are often directed at the nodal points of discourse as these provide the discourse with its central meaning (ibid). Problematisations also link back to the concept of hegemonic intervention, previously in this chapter referred to as the manufacture and organisation of consent (Barrett 1991). Hegemonic interventions is representative as a form of problematisation, thus hegemonic intervention can be seen as a “problematization which, by definition, always manages to close discourse in a way that is in line with its inherent articulatory practice(s) (Skålén 2010, 107).

In this thesis I deal with genealogy, periodisation and problematisations by mainly analysing the “internal” turning points in cluster theory within economic geography. Turning points, following Skålén et al (2006), are seen as changes, displacements, elaborations and developments of rationality in cluster discourse. But as discourse is constitutive, there is no rhetoric or theory that is untangled from action and changes in society (Laclau and Mouffe 1987, Jørgensen and Phillips 2002); I illustrate the fundamental changes in discourse by situating them in specific papers/cases within the development of a periodisation of cluster discourse.

According to Skålén et al (2008), by combining the notions of periodisation and problematisation with Laclau and Mouffe’s discourse theory, the former will be given a “more precise meaning and a more steady base” (39) and that such a combination will also provide a more detailed methodological framework for analysing discourse (ibid).

The identification of periods, problematisations and turning points do not, however, necessarily demarcate a shift in meaning in a paradigmatic sense. In other words the turning points do not necessarily demarcate a change in the dominant and underlying rationality of the discourse, rather the changes might build on continuity and primarily concern “the governmental domain being aimed for and the governmental technologies and practices being promoted in order to achieve government”(Skålén et al 2006, p. 279). It is important to note, however, that I do not consider periodisations to completely displace each other in a linear manner or sequence although each is dependent on the preceding periodisation as the condition of its existence.
Table 2  Periodisation of the cluster discourse

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>Key elements/moments</th>
<th>Floating Signifiers</th>
<th>Manifestation of place</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Competitive Period (1990-2000)</td>
<td>mobility, networks, competitiveness, productivity, flexibility</td>
<td>Competitiveness</td>
<td>The 'good business environment', nation state,</td>
</tr>
<tr>
<td>The Creative Period (2003-)</td>
<td>Competitiveness, individuality, industrial design, co-creation, consumption, apolitics</td>
<td>Creativity</td>
<td>City, urban centers, airports</td>
</tr>
</tbody>
</table>

In the thesis and as explicitly outlined in Paper 2, I distinguish between three main periodisations of cluster discourse (see Table 2). Each of these demarcate a change in regards the governmental rationality promoted, the governmental technologies and practices being promoted in order to achieve government, I refer to these periodisations as 1) Competitive Cluster discourse, which is heavily influenced and connected to the texts of Michael Porter (covered most overtly in Paper 2), the Collective Cluster Discourse (Paper 3,4), that transformed the former by incorporating questions beyond economic development by focusing on learning as a commodity for innovation, inspired by both management learning theory (e.g. communities of practice) as well as industrial district literature, it also shifted the emphasis from the faceless markets towards the individual; and lastly emergence of the Creative Cluster discourse (Paper 5,6), which while combining elements of the former periodisations shows an emphasis on governmentality (government as freedom) as a central tenet for establishing and diffusing the discourse. The Creative Cluster Discourse shows an increased focus on the individual as an employee, manager and consumer.
3 FINDINGS, CONCLUSIONS AND REFLECTIONS

This section concludes the introduction of this composite thesis. Following a short presentation and discussion of the individual papers there follows a general discussion of the overarching conclusions and findings of the thesis. This section also “translates” the main findings of the individual papers to that of discourse theory. The chapter finishes with suggestions for the practice of cluster researchers and practitioners as well as suggestions for further research. I will begin by briefly discussing how I see the limits of the cluster discourse, in other words what has emerged as the order of discourse.

3.1.1. Development discourse – the order of discourse

Even though it is a theme in all papers of the thesis, it is important to underline that cluster discourse in its various forms cannot be understood outside of the word ‘development’. Development is a central notion in the economic geographic field (c.f. Amin 2004, Brenner 2003, Krugman 1999). Indeed, when analysing the key texts that were used for the papers in this thesis, the word ‘development’ was given central presence in all of the texts – not only in share number or occurrences in the documents but also in terms of defining the domain of the discourses.

Indeed ‘development’ is central to delimiting the discourses covered in each of the papers – in other words, in terms of identifying boundaries between discourses and what can be treated as a single discourse, which is a central starting point to any discourse analysis (Jörgensen and Phillips 2002, 144). Order of discourse is a concept from Fairclough’s (1995) discourse analysis that Jörgensen and Phillips suggest to be used as a complementary tool in Laclau and Mouffe’s discourse theory. The order of discourse can be used to help delimit among other things the number of texts that are analysed. Order of discourse denotes two or more discourses ‘that operate in the same terrain – both in conflict and in concordance with one another’. This also means that what is more interesting in terms of a starting point for analysis is not necessarily a single discourse, such as cluster or creativity discourse, but rather the ‘interplay between the discourses in the order of discourse’ (Jörgensen and Phillips 2002, 145).

In order to identify an order of discourse, identifying floating signifiers is central. Floating signifiers are signs that different actors and discourses try to define in different ways. Central is that floating signifiers have not been fixed with meaning – there is no closure and there has been no hegemonic intervention (Laclau 1993). Hegemonic intervention is a (temporary) naturalisation of a particular articulation. But the articulation of ‘development’ is not fixed – rather in discursive terms there is an ongoing struggle in defining it, and it has multiple potential meanings. The word “development” is a nodal point in the order of discourse that is the focus of this thesis. A nodal point is a central privileged sign around which discourse(s) are organised – it acquires meaning by being inserted in particular discourses and in relation to other signs.

In economic discourse, more particularly within neoliberal discourse, the meaning of development is constituted through its relation to elements such as ‘competitiveness’, ‘economic growth’, ‘markets’, ‘free trade’, ‘deregulation’ and ‘privatization’. In cluster discourse and the key document I have analysed this meaning is inherently present most notably through how it is given meaning through its relation to competition and competitiveness:
Culture, creativity and innovation are vital for the competitiveness and development of our economies and our societies and are all the more important in times of rapid changes and serious challenges; (Council of the European Union 2009, p4)

In the contemporary world, a new development paradigm is emerging that links the economy and culture, embracing economic, cultural, technological and social aspects of development at both the macro and micro levels. Central to the new paradigm is the fact that creativity, knowledge and access to information are increasingly recognized as powerful engines driving economic growth and promoting development in a globalizing world. (UNCTAD 2008, 11)

Economic development seeks to achieve long-term sustainable development in a nation's standard of living, adjusted for purchasing power parity. Standard of living is determined by the productivity of a nation's economy, which is measured by the value of the goods and services (products) produced per unit of the nation's human, capital, and physical resources. Productivity, then, defines competitiveness. The productivity and prosperity of a location rest not on the industries in which its firms compete but rather on how they compete (Porter 2000, p.19)

But ‘development’ is neither uncontested nor exclusive to neoliberal discourse. Within other, competing discourses such as human development discourse or sustainable development (a development which does not give primacy to sustainable economic development), ‘development’ is also a central sign – a nodal point - but in human development discourse it is understood in terms of its relation to capacitation and enlargement of people’s choices (Power M. 2003b, 94). The paragraph from Porter’s text, is revealing on several points, as it not only shows how development gains meaning in relation to competitiveness but also how there is a struggle over meaning over sustainable development – as it here gives primacy to sustainable (i.e. sustained) economic growth rather than being understood through its relation to ecological and social sustainability. Development is thus also a floating signifier, part both of neoliberal discourse human development and sustainable development discourse, its meaning distinct and contested in each. The meaning of development has also changed over time and continues to change in cluster discourse, as can be seen in each of the papers.

3.2. Main findings of the individual papers

3.2.1. Paper 1 Network Knowledge versus Cluster Knowledge – The Gordian knot of knowledge transfer concepts

The paper traces the interlink between the cluster concept and the systemic views inscribed in the network approaches. It captures the turning point between the Competitive cluster discourse and the Collective Cluster Discourse. The paper shows how knowledge diffusion and innovation is a key signifier in both discourses, but also how the competitive cluster discourse based on Porter but contextualized in economic geographic research is increasingly drawing on notions such as collective learning, openness, community, collective visions, informal interaction, socio-cultural, institutional context and cooperation whereas the network approaches are more firm centred and thus display signifiers and elements that are closer to economic discourse, such as business goals, formal inter-firm partnerships with restricted membership.
3.2.2. **Paper 2 Geographies of Competitive Fear – Between solid place and liquid imperatives**

The paper outlines the tenets of cluster discourse and its legitimisation within economic geographic research. Using discourse theory it shows how all three periodisations (Competitive, Collective and Creative) are built on discourses of fear that are extracted from the tension between place and mobility. The paper also critically analyses the shift from the national state in Porter's texts (Competitive Cluster Discourse), to the community in the learning region approach (Collective Cluster Discourse) to the individual in the creative imperative (Creative Cluster Discourse). The paper discusses the development through Bauman's (2000) concept of Liquid Modernity.

3.2.3. **Paper 3 The Context and Diffusion of Knowledge in the Finnish Jewellery Industry: The role of the House of Fabergé**

The paper illustrates the historical roots of the collective cluster discourse by looking at a historical knowledge community that shows elements of each periodisation. By looking at the practices of learning within the House of Fabergé the paper shows the complex historical relationship between the economic and the cultural, local and global as well as highlighting the importance of connecting the practices to society at large and the tensions within.

3.2.4. **Paper 4 'The sharing, protection and thiery of Intellectual Assets— The Case of the Formula 1 Industry'**

This paper concentrates on the silences and marginalisation of cluster and knowledge economy discourse. It 'revisits' the well-known design and knowledge intensive cluster of the motorsport industry situated in the virtual place of Motorsport Valley. The paper suggests a complementary interpretation of the Formula 1 industry not only as a best-practice case of how community and trust knowledge spillovers facilitate innovation, but also how ethically questionable practices of intellectual capital acquisition exist as an accepted part of the process. The paper shows by looking at the practice within the cluster how the learning and knowledge economy discourse by concentrating of the soft language of capitalism hides practices that do not fit the articulation of the sharing and caring knowledge economy. Examples of such practices are illegal and/or ethically questionable practices such as deception, greed and espionage. The paper argues that these practices need to be recognised as part of the discourse.

3.2.5. **Paper 5 ‘Governmentality and the Creative Class: Harnessing bohemia, diversity and freedom for competitiveness’**

The paper critically analyses the discourse of creative regions by analyzing Richard Florida's works. Drawing on Foucault's concept of governmentality and the framework introduced by Dean, the papers asks and answers:

1 Q: What is being governed? A: The creative class... and everyone else
2 Q: How government is achieved? A: Through the introduction of the three Ts (technology, talent and tolerance) and the correlations established between them and economic success

3 Q: Who we become when governed? A: Workaholic, consumerist and apolitical ‘Bohemians’ who value individuality, meritocracy, diversity and openness – and flexible immaterial labour, working in increasingly precarious conditions

4 Q: Why we are governed this way? A: Because being part of the creative class is both socially worthy and personally desirable. The paper posits that these norms are instrumental in the reproduction of a deeply unequal economic and social system, designed to exploit both the conspicuous winners and the excluded losers.

3.2.6. Paper 6 'Better by Design? A critical appraisal of the creative economy in Finland'

In this paper I critically examine, mainly by drawing on insights from poststructuralist critique (e.g. Thrift 2005, Dean 1999, Rose 1996), the discourses, practices and impacts of the creative economy. The paper further elaborates on the critique of the previous paper by concentrating on the practice of the Creative Cluster Discourse looking specifically on how design and industrial design is presented and used in discourse. By doing this the paper emphasizes the necessity of analysing the rise of industrial design within the larger discourse of the creative economy. The paper particularly focuses on the role of space in constructing a new subject position (the creative class) based on “new creative ethos” - in this chapter illustrated through the re-emergence of the design industry in the economic landscape in Finland. The paper exposes the complex and competing forces shaping the creativity discourse, and thus it can contribute to helping researchers and practitioners to ask important questions about the re-presentation of spaces of creativity, and how these are used to produce collective bodies and identifications, foremost the “creative class” (c.f. Florida 2002).

3.3. General (and expanded) conclusions

R1 Which discourses do the articulations of clusters draw on, and what discourses are reproduced and which are challenged and transformed?

In order to understand how meaning systems and strategies are created, accepted and naturalised in cluster discourse, and how this affects individuals, the economic landscape and society at large, one must first look at the articulations of the discourse. This is something that all papers (1-6) are concerned with in different manners. Some of the papers are looking more closely at articulations/theoretical writings (such as Paper 1,2), others (Paper 3,4,6) look at discourse (theory and practice) interchangeably.

More explicitly when considering the individual papers we can ask ourselves which discourses do the articulations that are studied draw on, and what discourses are reproduced and which are challenged and transformed? In order to do this, the key signifiers of the discourse need to be identified. Key signifiers are privileged signs around which specific discourses are constructed (Jörgensen and Phillips 2002). I will start with one of the most evident key signifier, the word “cluster”, which is the focal interest in all papers. “Cluster” is a good example of an empty signifier, it means very
little by itself, an element that has several potential meanings. It is heavily anchored in the economic domain.

As show in the individual papers, in economic geographic literature the word “cluster”, has come to signify and understood in relation to a particular kind of space, but also a spatial practice, and it carries within a range of metaphorical meanings and associations. Related geographical words such a ‘location’, ‘region’, ‘locality’ etc. refer to what Harvey (1993) calls the generic qualities of place, but ‘cluster’ similar to words such as ‘city’, ‘town’ and ‘metropolis’ has come to refer to a particular kind of space. Yet the discourse of clusters remains less articulated and less interrogated than e.g. ‘the city’.

The most cited definition of clusters is that of Michael Porter (1998: p.78):

Clusters are geographic concentrations of inter-connected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition.

From a discursive point of view the most important signifier that is being attached to the meaning of cluster is that of competitiveness:

Economic development seeks to achieve long-term sustainable development in a nation’s standard of living, adjusted for purchasing power parity. Standard of living is determined by the productivity of a nation’s economy, which is measured by the value of the goods and services (products) produced per unit of the nation’s human, capital, and physical resources. Productivity, then, defines competitiveness. The productivity and prosperity of a location rest not on the industries in which its firms compete but rather on how they compete (Porter 2000, p.19)

Through increased power and wealth the MNC is surpassing the national state in many forms of influence and wealth (Dicken 2002); this is also the gist of the message in the competitive cluster discourse (paper 2). It emphasises and normalises how innovations are created by firms, rather than by e.g. nation states or individuals. The placeless corporation discourse constructs images of borderless networks of innovation, where different stages of the innovation process are situated in different countries. The corporation can move around its capital to those places, which are deemed competitive. They are not tied to any one nation, but gravitate towards those locations that can offer the most advantageous environments. This also leads us to key signifier in the order of discourse of clusters, the limited number of discourses that compete (over meaning and fixation) in the same terrain (Jörgenssen and Phillips 2002, 27), ‘competitiveness’. Competitiveness is a nodal point in all discourses in the analysed order of discourse, but it is also a floating signifier. It is a central concept in many of the competing discourses but its meaning differs depending on how it is related to other signs.

As a key signifier in neoliberalism and neoliberal discourse, competitiveness is being attached to certain characteristics of place. The places of competitiveness are portrayed as free markets, liberated from most forms of state intervention (Brenner and Theodore 2002). Such places are largely understood in relation to or as markets, or even as a commodity on the market, c.f. the ‘location market’ (KEA European Affairs 2009, 8).

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13 Here I adhere to the conception of the political project of neoliberalism as representing the attempts “not only to visualize a free-market utopia, but to realize these self-same conditions, as the downsizing of nation-states enlarges the space for private accumulation, individual liberties and market forces” (Tickell and Peck 2003, p.163)
A recent example of how the term competitiveness is crystallized as a nodal point in the regional discourse, and how it can be used to achieve hegemonic intervention, was seen in the debate of whether the city of Helsinki would have the rights to annex a part of a neighbouring municipality, Sipoo:

“In order to be dynamic and competitive the Helsinki region’s urban structure needs to be balanced... Everyone who familiarises themselves with the proposition [to include parts of Sipoo into Helsinki] without prejudice and with factual arguments, understand how important an issue it is for the competitiveness of the Helsinki region and for the whole of Finland” (Pajunen in Taavitsainen 2006, p.9, translation from Finnish by the author)

The rhetoric evident in cluster discourse is used by those politicians who are in favour of annexing parts of the smaller neighbouring municipality without its consent. It is required because of international competitiveness. The parts of Sipoo that Helsinki is interested in contain some of the qualities of place that are seen as central to achieving international competitiveness. One such quality of place that is frequently mentioned in the debate is the availability of property suitable for housing projects that are close to the archipelago. Helsinki needs these kinds of land properties in order to be able to accrue/entice an international or an internationally minded workforce. The argument is that even if the workforce is drawn by urban externalities, such as a developed infrastructure, specialized services and a cosmopolitan atmosphere, they do not want the negative externalities of urban areas, such as agglomerated levels of pollution, living in close-quarters to other people and other characteristics inscribed into the very meaning of urban and metropolitan.

I return to the definition of a cluster; the position presented earlier was not the meaning of a cluster is more contested and less fixed than that of a firm. First, a dictionary definition:

cluster, regionally embedded cluster   An integrated grouping of towns and their rural catchments, which can be cultivated to promote growth, and reduce poverty, in backward regions that are not too remote from existing economic centres. (A Dictionary of Geography)

...and the popularised definition of Michael Porter:

Clusters are geographic concentrations of inter-connected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. (Porter 1998: p.78)

If we fix the meaning of clusters in relation to “reducing poverty” or to enhance “competition” we will end up with quite different meanings of a cluster, and resulting in different social practices. It is important to realize that clusters, despite its lack of physical form, are inscribed with meaning. But this meaning is not fixed; it is a function of particular epistemologies and ideologies that change over time. Cluster discourse, like all discourse, is not permanently fixed as it is constantly being transformed through the interplay with other discourses. Different discourses, with their own ways expressing and understanding the social world, are interlocked in a discursive struggle (Jörgensen and Phillips 2002) trying to achieve hegemony: the dominance of one

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14 “Ollakseen elinvoimainen ja kilpailukykyinen Helsingin seudun kaupunkirakenteen tulee olla tasapainoinen, Pajunen perustellee Helsingin kaupunginvaltuuston kesäkuun lopulla tekemää esitystä Sipoon osan liitämisestä pääkaupunkiin. Kaikki, jotka paneutuvat esitykseen kihkottomasti ja asia-argumenteineen, ymmärtävät, kuinka tärkeästä asiasta on kyse Helsingin seudun ja koko Suomen kilpailukyvylle.”
particular perspective. The problem is that the understanding of clusters in relation to competitiveness, and understanding competitiveness in relation to productivity, has become so hegemonic, so naturalised and sedimented that it becomes almost impossible to question it or offer alternative understandings. In the papers I outline specifically the efforts of two discourses, the Collective Cluster Discourse (paper 2,3,4) and the Creative Cluster Discourse (paper 5,6), in the struggle over meaning. Yet I conclude that they have failed as they have not been able to distantiate themselves from the underlying rationale of competition or insert of competing understanding to competitiveness.

The promise of the cluster discourse is to establish an understanding of innovation that is not focused on the firm but on the ensemble of relations between firms, states and other actors in the economic system (Cooke and Morgan 1998). In summary, the proposition constructed within economic geography is that with diminishing transaction costs, the qualities of place have become much more important for the increasingly mobile multinational capital (Harvey 1993). The proposed locational shift is often portrayed in relation the “Other” (Said 1985), the non-western nation (often China, India and/or Brazil), abundant of low-wage, low-skill work force, who possess little or no knowledge that can be commodified. Signs such as knowledge, innovation, and creativity are inserted as qualities of place, or possible qualities of place that will keep the western deindustrialising regions one step ahead of the running pack of the developing and newly industrialised countries:

“American economic experts and policy-makers are rightly preoccupied with the emergence of behemoths like India and China, which offer huge markets, capable workforces, and cost advantages. Unfortunately, they overlook a subtler but even more profound shift in the nature of global competition. In the past two and a half decades, this shift has taken us from the older industrial model to a new economic paradigm, where knowledge, innovation, and creativity are key.” (Florida 200615)

In the ideology neoliberalism the idea to diminish (national) state intervention in the free market economy is at the core. At the same time the competitive cluster discourse, as articulated e.g. in Michael Porter’s writings and through cluster projects/policies around the world, promotes the understanding that the qualities of place are not inherited (unlike the access to natural resources) and that these qualities can be and should be developed (Paper 2). The difference is that the qualities will not be shaped by regulation of the economy or through state intervention, but rather through “animation” and “facilitation”. The animation, based on the notion of managerialism - everything in society can and should be managed- will need to be increasingly done by corporations (as agents for the market) and the facilitation by the government. The facilitation is to be done in understanding and cooperation with the MNCs, based on their needs of achieving competitive advantages. But it also necessitates a reformulated understanding of the relation between firm (MNC) and government. The inherent rhetorical challenge will be to overcome paradox of decreasing planning on one level (national level) while increasing it on another (corporate level). This is the deceit of simplicity of neoliberal discourse, the silence in terms of the necessity to make, steer and police markets in order to reach free markets. It prescribes not less state intervention but qualitatively different state action (Tickell and Peck 2003). How is the discourse articulated to make this proposition appear plausible; in other words how to exclude and suppress the element of state planning and competitiveness while at the same increasingly creating rhetorical links between managerialisation and competitiveness?

As discussed in paper 2, there are inherent implications that can be derived from locating the popularization and the birth of the dominant cluster discourse within strategic management and not economic geography. Here I use Thrift’s (2005) notion of the ‘cultural circuit of capitalism’ to understand how clusters have gained such discursive power. The cultural circuit of capitalism refers to the discursive apparatus “business schools, management consultants, management gurus and the media” (Thrift 2005, 6) which has made capitalism itself into a theoretical enterprise in which virtual notions (such as networks, clusters, knowledge economy, the creative class) are “able to take flesh as, increasingly the world is made in these notions’ likeness through the power of consulting solutions” (ibid.). While discourse theory reminds us that power is something that is exercised rather than possessed and is not attached to agents but rather is incorporated myriads practices, Porter is well positioned as a node in the practice of the cultural circuit of capitalism, “which through its continuous production of propositional and prescriptive knowledge, has the power to make its theories and descriptions of the world come alive in new built form...this form of capitalism has become a remarkably powerful formation in a remarkably short time and is now a permanent feature of capitalism” (Thrift 2005, 11)

While it is clear that the concept of cluster has been a most invigorating and forceful word for reasserting the role of space into economic theory, yet it remains marred by ambiguity (Martin and Sunley 2003). Unlike in, for example, the theory of the firm, in cluster theory the unit of analysis is not evident, much less fixed. Cluster theory does not have the firm or even an abstraction of it as its object of study; instead it studies spatial manifestations of particular economic systems. The spatial manifestation, i.e. the cluster, is not an actor and it does not exist outside of the discourse. You cannot physically observe or touch a cluster, as it has no physical form. It is an articulation that seeks to demarcate a totality by ascribing it an objective content, but where the totality is imagined (Laclau 1990, p.6) Clusters do entail material practices, such as the production of textual accounts, maps, theoretical constructs, policies etc. This is also the case for signs such the firm/corporation, and other spatial concept such the city, the neighbourhood etc. The degree of fixity in our understanding of discursive constructs such as the firm, community, the city and clusters varies. Some understandings are more naturalised than others. It does however have identity effects, e.g. through cluster initiatives (c.f. the Cluster Initiative Greenbook) some actors are scientifically shown to be part of a cluster, and usually this means that they are also prescribed or expected to act in a certain way (for the benefit of the cluster):

“Cluster initiatives are organised efforts to increase the growth and competitiveness of clusters within a region, involving firms, government and/or the research community...cluster initiatives are a central part of industrial, regional and innovation policymaking across the developed world. Cluster initiatives have come to play an important role in rejuvenating ailing clusters... in promoting the emergence of new science-based industries.” (Cluster Initiative Greenbook, p.15)

If there are initiatives that includes certain (economic) actors to “rejuvenate ailing clusters”, then what is a cluster, what does its meaning entail and what does it exclude? The meaning of a cluster is not fixed: for example does a cluster include the non-economic, the cultural and social space?

In order to address this question, I analyse at the closure or fixity of clusters by a comparison to another discourse within the economic domain, that of the firm (Papers 1,5). Clusters are also understood in relation to firms as clusters are “geographic concentrations of inter-connected companies” (Porter 2000, 15). Often in the economic geographic cluster discourse, clusters themselves are seen as places – or rather places are understood as clusters. For example, when thinking about successful
clusters Silicon Valley, rather than e.g. the computer/IT industry, is often inserted to give meaning to clusters:

That innovative activity has become more important is not surprising. What was perhaps less anticipated is that much of the innovative activity is less associated with footloose multinational corporations and more associated with high-tech innovative regional clusters, such as Silicon Valley, Research Triangle, and Route 122 around Boston. Only a few years ago the conventional wisdom predicted that globalization would lead to the demise of the region as a meaningful unit of economic analysis. (Audretsch 1998, 18)

Or an example from Finland, Aviapolis a logistics cluster situated in Vantaa:

The versatile residential districts of Aviapolis are among the most favoured in the City of Vantaa. They include nature reserves and cultural settings of historical significance. All needs are catered for when it comes to housing. Should you wish to live in your own house or in an apartment, there are countless possibilities in Aviapolis. (www.aviapolis.fi)

Aviapolis is specifically interesting, because as is the case with Motorsport Valley (covered in Paper 4), it is an imagined, a virtual place. They are not geographical names that appear on maps – yet they are put forward as real geographical spaces. They are myths, an imagined totality (Laclau 1990), yet these virtual regions are meaningful as they are occupying the spaces of how to understand and deal with regional development.

In the thesis I have contend that this kind of understanding, where places are understood as clusters is increasingly legitimised and naturalised in policymaking, in theory and in practice. I contend that it is most visible in the third periodisation of cluster discourse, the Creative Cluster Discourse where the habitat is re-categorized as an internationally competing cluster.

However, the meaning of clusters is not yet fixed; regions are not yet exclusively understood in relation to competition or competitiveness even in cluster discourse. Fixity is of central importance. A comparison between the definition of a firm and a cluster highlights some differences and similarities in meaning:

corporation (body corporate) n. An entity that has legal personality, i.e. it is capable of enjoying and being subject to legal rights and duties (see juristic person) and possesses the capacity of succession. A corporation aggregate (e.g. a company registered under the Companies Acts) consists of a number of members who fluctuate from time to time. (Oxford Dictionary of Law)

Even if the meaning of a corporation is not fixed there is some meaning inscribed in it that has become so conventionalised that we see it as natural. For example, the corporation is a ‘fictitious legal personality’, meaning it is a legal entity defined by law, with its own rights and duties. Its main duty and responsibility being the maximization of profit for its shareholders (Banerjee 2006). This meaning of a corporation has become naturalised, so conventionalised that it is hard to question or contest it. When a discourse becomes so established that we forget their contingency, forget that it is constituted by politics and power, it is referred to as objectivity (Laclau 1990). But this is not to say that the meaning of the corporation is definite and closed to all other meanings in the future (or in the past). Neither does it imply that all meanings change constantly or that the social world can be freely shaped. Jørgensen and Phillips (2002, p.38) describe discourse as having an inertia that we are caught up in, and because of large areas of objectivity it becomes hard to think beyond that or contest its meanings.

Discourse and its signs are never so completely fixed with meaning that they would be impervious to other meanings from competing discourses, the closure i.e. fixing of
meaning, is always temporary (Laclau and Mouffe 1985). The firm can be used to illustrate the temporality of meaning: The legal personality of the firm was not established until the late 19th century, and the narrow economic responsibility of the company (i.e. maximizing the financial profit of its shareholders) was not established until a number of court rulings in the US around the 1920s (Banerjee 2006). The meaning of the firm has not always been the same, and it will probably be modified in the future as well. For instance, influence from the discourse of sustainable development has led to a modification, albeit modest, of the dominant organisational discourse and our understanding of the responsibilities of the corporation. Today, through elements such as “corporate citizenship”, “corporate social responsibility”, “corporate environmental responsibility” and “sustainable development”, the understanding of the corporation accommodates for social and environmental responsibilities towards future generations and stakeholders, in addition to its traditional financial responsibilities towards its shareholders. However, the meaning of the firm remains dominantly to be understood and articulated in terms of its relation to financial responsibility rather than ecological or social responsibilities. Because of the hegemony of economic discourse in society today, it is hard to fathom the firm otherwise even if we would create its meaning through its relation to sustainable development.

The relation between the firm and its responsibilities is not a random example, and as the fluctuations in the meaning of the corporation and its responsibilities is transforming the cluster discourse. The firm is also a privileged sign in the cluster discourse. In the Competitive Cluster discourse a cluster is defined and understood in terms of its relation to the word corporation/company/firm: “geographic concentrations of inter-connected companies”, through this articulation other meanings are excluded, for example understanding it through its relation to non-(or rather non-mono-)economic elements; citizens, citizen groups, racial minorities, the impoverished, consumers, residents, residences etc. This does not mean that e.g. citizens cannot be an element of the cluster discourse, but it is not central to the articulation of clusters or in establishing its meaning. A cluster is articulated largely through its relation to the corporation, economic institutions, and competitiveness. Discourse is largely constituted in relation to an outside (Jörgensen and Phillips 2002), what it is not. For example a cluster is not (yet) understood to mean a city, even if it is situated in the same spatial terrain and level of abstraction, and even if they share some signs that articulate their meaning:

city Initially, a city was a European town which was the centre of a bishop's diocese, and had a cathedral. This rather specialized term has been superseded, and a city is now defined as a large urban centre functioning as a central place, which can provide very specialized goods and services. There is no world-wide, or even European agreement over limiting figures of population size or areal extent for a city. (A Dictionary of Geography).

A city is also understood through its relation to agglomeration/central place and the provision of specialized goods and services. In the context of ‘new regionalism’, cities, just as the less fixed word ‘cluster’, are increasingly understood as a more ‘natural’ unit of governing economic development than the national state (Ek 2003). As was shown in the Creative Cluster Discourse (Paper 5,6) the discourse shares several key signifiers with the urban discourse, most of them geared towards overcoming the perceived binary between economy and culture. It is also a binary that the discourse of clusters tries to overcome, or at least reformulate. The word city, unlike the word cluster, is not primarily understood from its relation to economic signs. The city can be seen a key signifier of the urban discourse that includes a number of elements that are not central to the understanding of clusters: public space, subcultures, urbanity, neighbourhoods,
diversity, poverty etc. But as was investigated in Paper 6 the articulation of clusters does increasingly draw on some elements of the urban discourse, but at the same time urban discourse and cluster discourse do in particular instances compete over the meaning of individual signs, such as for example the meaning of public space. Urban discourse can thus be seen to denote order of discourse, it is competing in the same terrain as cluster discourse.

Like clusters, the city is an imagined territory. Laclau (1990:p.61) uses the term myth to refer to articulations that seek to demark a totality by ascribing it an objective content, but where the totality is imagined. As a form of key signifier, myths are invested with different content by different articulations. Whereas nodal points organise discourses and master signifiers organise identity, myths organise social space. What all key signifiers have in common is that they are empty signifiers, meaning that they can be invested with a variety of meanings because they have no inherent content (Townshend 2004). Rather they are invested with meaning through chains of equivalence, when they are combined with other signifiers that give them meaning. Jørgensen and Phillips (2002, p.39-40) use the example of the word ‘country’ to explain a myth: When a socialist politician announces that “we will do what is best for the country” and a conservative politician does likewise, it produces very different images of the country and very different strategies to achieve it; “…the myth, ‘the country’, makes national politics possible and provides different politicians with a platform they can discuss with one another…the choice of myth delimits what is meaningful…if ‘the country’ is the starting point, then ‘national economy’ is important and local, regional and global economic issues are understood from a national perspective.” In terms of cluster discourse, this is exemplified through how the urban city-regional level has increasingly occupied the space of understanding economic issues previously occupied by the nation state (Ek 2003).

As outlined in the thesis clusters are given it meaning through its relations to other words or signs, be it “competitivenes”, “innovation”, “creativity” “urbanity” or something else. There is a strive to fix the meaning of signs in relation to other signs but the meaning is never fixed as the relationships between signs are contingent (Jørgensen and Phillips 2002). The aim of discourse analysis is not to find a fixed meaning of the discourse, because that cannot be done, instead the analysis becomes an effort to map the processes that try to fix the meaning of signs in relation to others, and to map the processes by which some meanings (despite not being fixed) become so conventionalised and naturalised that we do not question them (Schoenberger 1998, Jørgensen and Phillips 2002).

3.3.1. Fear, imagined places and their scientific reproduction

In this section I return to the second research question:

*R2 How is the cluster concept mobilised and legitimised?*

3.3.1.1. The role of time and space

Without assuming too much and too simple linearity in the process that produces and reproduces meanings and understandings to clusters, it is useful to ground the analytical task at hand in the relation between clusters and fear – this relation is present in all the periodisations that I identify (see paper 2). Or more precisely, the
relation between clusters and the process that David Harvey has called the terror of
time-space compression (Harvey 1990a) inherent both in the descriptions of
globalisation and industrialisation, and which in many ways is a central premise of
cluster discourse. Inscribed in globalisation as a process, just as in industrialisation, is
an understanding the latest technological shifts are characterized by what Marx
labelled the annihilation of space by time (Harvey 1993; Massey 2005)(Massey 1993).
Marx’s text reminds us that images of the threat posed by movement and the uneasy
relationship between capital and space is a historical yet ongoing process:

... while capital must on one side strive to tear down every spatial barrier to intercourse, i.e. to
exchange, and conquer the whole earth for its market, it strives on the other side to annihilate
this space with time, i.e. to reduce to a minimum the time spent in motion from one place to
another. (Marx 1858, p.538)

Such processes predate industrialisation and globalisation, capital has tore down
spatial barriers throughout history, what has changed is the speed of the transactions
and the reductions of time spent in particular places (Agnew 2004). Inscribed in Marx's
powerful metaphor is the implication that technology and innovations are to be seen as
the means through which capital could free itself from geographical constraints. But the
power of the metaphor lies not only in the image where space is equated with
geographical distance ("the death of distance"), but also the threat of "annihilation"
that capitalism/globalisation poses to particular spaces. Here referring to particular
space that have been given a meaning and significance usually by people occupying it,
i.e. the concept of place (MacKinnon and Cumbers 2007, 3).

It is important to distinguish between the signifiers space and place, Agnew (2005,
p.82) has defined the two in terms of space referring to "location somewhere and place
to the occupation of that location. Space is about having an address and place is about
living at that address...Place is specific and space is general". Places are the lived spaces
where capital comes to rest and where resources are produced. It is also central to the
construction of subject positions and identities, and thus connected to discourse
theory’s concept of key signifiers, the signs in discourse that organise social space and
identities (Jörgensen and Phillips 2002). I assume a certain chain of equivalence, in
terms of how clusters is understood in relation to the antagonism between mobilities
(movement) and place (lived spaces), and I see this antagonism as a central building
block of (all) cluster discourse.

This understanding can be traced by going back to research during the late 1980s and
1990s, which expressed the dramatic improvement in communication systems and
labour mobility, and a subsequent decline in transactions costs for the increasingly
influential multinational corporations (Dicken 2003). The common denominator is
something I refer to as ‘mobilities’ (drawing on Larsen 2006, p. 47) such as the physical
travel of people and the physical movement of goods and capital but also
communicative travel (person to person messaging through letters e-mails and
videoconferencing), virtual travel (through e.g. Internet) and imaginative travel (e.g.
through texts, TV, films). For some, increased mobilities implied the rise of placeless
 corporations and with that a certain discursive erasure of place (Harvey 1990a; Harvey
1993; Storper 1997), this represents what can be called an aspatial view of globalisation
(Massey 2005). Much like the language of modernity itself (Zukin 1991), through
discursive strategies of decentralisation and relocation, this perspective suggested a
'definite' movement away from place. We can understand this shift through what
Sutherland (2005, p.187) refers to as the deterritorialisation of meaning in a globalising
world. Here, meanings are not constructed around territorial entities (such as the
national state), imagined or not, but increasingly around technology (the mobilising
force) and the multinational corporation (the mobile force).

The periodisation I refer to as competitive cluster discourse is inherently linked to the
“death of distance” idea that gained popularity through the arrival of the Internet age
remains dominant within social research of technology (Graham 1998). Such
technocentric discourse is in some ways antagonistic to cluster discourse. But they are
also part of a discursive struggle, linked through floating signifiers, such as place and
mobilities. The imagined geographies of the discourses are in contrasting (Massey
2005). In the influential book “Death of Distance: How the Communications
Revolution Is Changing our Lives” Cairncross (1997) predicted that with the rise of
information technology, transport costs will become less and less important, and thus
industry will be geographically dispersed. Technological developments reinforce the
image of place and local community as something archaic (Zukin 1991). Influential
voices like Virilio (1993, p.10) have predicted a shift away from “paradoxical
agglomeration in which relations of immediate proximity give way to interrelations
over distances”. What is presented is the replacement of space of places with space of
flows (Castells 1996), the meaning of the knowledge economy derives from the flows of
capital, information, technology, organisational interactions, images, sounds and
symbols rather than by particular territorial entities (or places). Flows are dynamic,
place is static – this view became increasingly dominant especially throughout the
1990s with the fall of the Berlin Wall (the End of History) and the rise of Internet (the
End of Geography). The death of distance metaphor also became central to neoliberalist
discourse in the 1990s.

Given, there is no all-encompassing view on the relationship between place and
mobilities within neoliberalism. Neoliberalism is not, after all, an undifferentiated
project (Tickell and Peck 2003). But a flat-earth understanding of the relationship
between mobility and place within discourses of neoliberalism is not uncommon.
Popular writers such as Thomas Friedman present a flat-digital-earth view of
globalisation, which suggests that due to technological convergence, geography does
not limit competition. This suggests influence from discourses of technocracy and
neoliberalist ideas of unmediated markets, institutional convergence and cultural
homogenization: “...the flattening of the world means is that we are now connecting all
the knowledge centers on the planet together into a single global network...
Globalization ...is shrinking the world from a size small to a size tiny and flattening the
playing field at the same time” (Friedman 2005, p.8-9). Massey (2005, 81) has referred
to this view as “aspatial globalization”.

In many ways, place is a misfit in the language of globalisation, which is dominated by
images of movement: increased movement and flows of capital, people, and knowledge;
the accelerating speed (and need for speed) of innovations. Movement is what defines
modernity. Marx famously stated that capitalism is built upon movement as

“All fixed, fast frozen relations with their train of ancient and venerable prejudices and opinions,
are swept away, all new formed ones become antiquated before they can ossify. All that is solid
melts into the air, all that is holy is profaned, a man is at last compelled to face with sober senses
his real condition of life and his relations with his kind” (Marx quoted in Berman 1983, 21)

Such flows are closely connected to technological advancement. In the discourse of the
knowledge economy a contrast is drawn between historical “space of places” and a
suggested new “space of flows” (Castells 1996, Massey 2005). The space of places is
portrayed as immobile, and at the mercy of mobile actors. This serves to strengthen the
binary between the mobilities and place.
In the last 10 years, and interesting for geographers, the mobility theme has re-emerged in Zygmunt Bauman’s metaphor of thought-provoking metaphor of liquid modernity (2000), which in its “probable dissatisfaction with the inability of postmodernity to confront the emerging conditions of inequality in the West and around the world” (Lee 2005, 62). The idea of liquid modernisation was introduced and applied as a lens in Paper 2 as it captures well what is made valuable to us in the creative cluster discourse – what in paper 5 was referred to questions of deontology (following Dean 1999): Who do we become when governed through the creative ethos? What subject positions are made available and valuable to us? According to Bauman:

What is valued today (by choice as much as by unchosen necessity) is the ability to be on the move, to travel light and at short notice. Power is measured by the speed with which responsibilities can be escaped. Who accelerates, wins; who stays put, loses’ (Bauman and Tester, 2001, 95).

Whereas this theme is evident in all three periodisations of cluster discourse it is most evident in Creative Cluster Discourse (Paper 5,6). This I suggest is not least due to how in Creative Cluster discourse, most visibly in comparison to Competitive Cluster discourse, the individual appears as a nodal point around of which meaning is created. This as was outlined in paper 5, in the Creative Cluster Discourse as illustrated by the writings of Florida (Paper 5,6), there is a normalisation and an imperative that individuals need to become more flexible, and orient themselves (through governmentality, see paper 5) towards values of flexibility – the meaning of creativity is established through understanding it in relation to the apolitical bohemian consumer (Paper 5) that is engaged in short-term projects and episodes that render concepts such as “career”, meaningless. The creative subject should be flexible and willing to abandon commitment and loyalty – yet paradoxically as is evident in the Collective Cluster Discourse (Paper 3,4), trust and community are central to the discourse, yet there is little reflection about this within creative cluster discourse, instead the portfolio career is seen as a necessity.

What I find especially interesting about Creative Cluster discourse is the fixity of the imagined creative spaces: the world design capitals, the creative helsinkis, the competitive metropolises, and the buzzing (and piping) airport cities. It leads us to the question of what kinds of spaces are discursively produced in order for creativity and learning to take place.

Once labour has become short-term and precarious having been stripped of firm (let alone guaranteed) prospects and therefore made episodic, when virtually all rules concerning the game of promotions and dismissals have been scrapped or tend to be altered well before the game is over, there is little chance for mutual commitment to sprout and take root. Unlike in times of long-term mutual dependency there is hardly any stimulus to take acute and serious, let alone critical, interest in the common endeavour and related arrangements. (Bauman 2000, 148-149)

Bauman uses the spatial metaphor of the camping ground, which stands in stark contrast to the images of the’ community’ of the firm or the communal vision of cluster projects, where we stay momentarily and from where we may leave at any moment (“if the comforts on offer are not delivered or found unsatisfactory” (ibid, 149). In this camping ground there is no time “to take trouble and patiently work out the acceptable rules of cohabitation” (ibid). Bauman identifies the attribute of extraterritoriality – being ‘in’ a place but not ‘of’ a place as characterising liquid modernity (Bauman 2003) – and two subject positions that are most visibly part of this discourse, the globetrotting elite, and here the parallels to Florida’s creative class is evident – and refugees. The latter of course is marginalised in economic discourse, including cluster discourse – despite the clusters, the hotspots and metropolises being nodes for the
increased global flows of not only the ‘creative supercore’ but also the marginalised, the poor and the refugees, these latter groups are outside of Florida’s taxonomy of the economy and thus not part of the discourse, even though they exist in the same order of discourse (development). But managing the creative spaces is also seemingly about managing the flows – about creating gated communities and elite spaces – there is an imperative for order in the spaces of creative destruction.

The role of space, or rather place, I posit (Paper 2) is still remaining in the discourse as a key signifier, or rather a myth - imagined territories that refer to articulations that seek to demark a totality by ascribing it an objective content (Laclau 1990:p.61). In the Creative Cluster discourse place still represents solidity for the increasingly mobile creative subject position with its portfolio career and valuing of the speed imperative. There is still a need for solidity – but perhaps not beyond the need of making the creative subject position increasingly valuable.

In cluster and innovation policy time serves as a basis for a sense of constant urgency and mobility. Not only through the Marx’s notion of the annihilation of space by time but by the notion of accelerating pace of innovations. Innovations are portrayed to occur faster and faster at an accelerating pace, necessitating both fast management subjects (Thrift 2005) as well as fast policy responses. The metaphor of a ‘race’, is often utilized – the race occurring both between Western regions nations, and cities, as well as between industrially established developed countries/regions and laggard/developing/’catch-up’ regions.

The elements of mobility (temporal/spatial) and place are often utilized as a prelude to the necessity for policymakers to acting fast. A study prepared for the European Commission (KEA European Affairs 2009, 8) serves as a typical illustration of how place, space and time are utilized in the discourse (emphasis added):

...there is a competitive race to attract talent and creators (“the creative class”) to localised environments supporting the clustering of creativity and innovation skills. Europe risks experiencing a talent drain in sectors such as video games and cinema attracted abroad by better conditions, essentially financial. Moreover, culture and innovation play a crucial role in helping regions attract investment, creative talents and tourism. Paradoxically, whereas we are living at a time where information technologies have abolished distance and time constraints, “physical location” and the “socialisation” factor remain decisive for economic success. The “location market” is a reality. Cities and regions are competing to attract foreign direct investment and creative talents.

The construction of fear and the portrayed threat against place, articulated through images that ‘no place of earth is safe because increased mobility’, is a central element in neoliberal discourse. As in the above example, talent is ‘drained’ as the pace of the race between unnamed regions/places is heating up in a context where technologies have removed distance as a barrier. ‘Distance’ (to the ‘Other’) is still a sign in the discourse but it is understood in relation to its abolishment of barriers, and the fear of the approaching faceless and nameless competition. In the discourse technology, rather than for example the liberalisation of trade policies or corporate strategies of off-shoring and outsourcing, is the driving force of mobility.

In such discourse, where the “location market” is a reality places are posited to need to adapt to, reproduce and become favourable business environments with “better conditions”. This adaptation necessitates among other things, new roles “for companies, for various levels of government, and for other institutions in enhancing competitiveness” (Porter 1990, p.16). “Competitiveness” is constructed as a
characteristic of place, which can be reproduced if following some prescriptions. Cluster policy has become a central prescription to this malady.

In globalisation discourse the “death of distance” often becomes or is equated with the “death of place”. Such understandings can be found in many modern accounts of globalisation and is often present is cluster/agglomeration discourse. A premise in cluster discourse is that there is an imminent threat to place, often drawing on the terror of time-space compression. Hall (1998, p.960) offers a slight variation of the Marxian language of globalisation when he writes that “...faced with the combined impact of globalization and information technology, no place on earth is safe”. Clusters policy firmly rest on such premises and fears that “no place on earth is safe until it prescribes to competitive policies”. There are multiple sources of fear in cluster discourse foremost I identify face/nameless competing places (places of the Other) and more generally the terror of time/space compression.

Polarising place and mobilities in constructing meaning of clusters is a central premise of the discourse as an understanding of clusters is grounded in fear; both a fear of the unknown and a sense of threat against the places where we live. An imaginary is constructed around the terror of time and space compression and it calls for a unified order of development discourse. In this sense unity and the motive behind acceptance of cluster discourse as a master discourse is built upon fear. For example, an OECD policy brief on clusters begins by relating a need for cluster policies to the threat of an increased mobility of capital, and through that the threat of competitive lower-cost locations towards ‘uncompetitive ‘regions:

“Nations and regions are struggling to remain competitive and adapt in the context of globalisation... Many regions that were historically production centres are losing out to lower-cost locations and are reorienting their activities to higher value-added non-manufacturing industries or R&D-intensive manufacturing niches. Yet, given that even some of these upstream activities have begun to be off-shored to lower-cost OECD and non-OECD countries, the question for policy is how durable are the competitive strengths on which regional economies are based.” (OECD 2007, p3)

While similar to the previous citation (taken from KEA European Affairs 2009) about the ‘competitive race’, the text from OECD is not situated in the creative cluster discourse, thus the ‘race’ focuses not on individuals (what was referred to as ‘talent’ in the previous citation) but on firms. Yet the imagery is very similar: certain (Western) places are struggling to remain ‘competitive’ (measured and understood relation to the attraction of direct investments) in the competition/race with low-cost places. The meaning of these places are understood in terms of what they are not, i.e. “lower-cost” (i.e. cost of labour), “competitive” and mobile. In terms of mobility, globalisation with its images of constant movement (reorientation, offshoring) provides the backdrop. As a unified order to this uncertainty, cluster policies are put forward.

Influential researchers and policy consultants such as Richard Florida (whose contribution to creative cluster discourse was covered in-depth in Papers 5 and 6) have framed the need for a “clustered view” with the observations that “experts and policy-makers are rightly preoccupied with the emergence of behemoths like India and China, which offer huge markets, capable workforces, and cost advantages” (Florida 2006b). As an answer or reassurance to the threat of such behemoths, cluster policies draw on various forms of ‘new regionalism’16, trying to reaffirm the importance and sense of

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16 A wide range of perspectives and ideas converging in the claim that the sub-national region is, through forces of globalization (not least time-space compression) displacing the national state as the “crucible of economic development” (Lovering 1999)
place in the midst the latest revolution of technological and organisational shifts. For example, the European Cluster Memorandum (2007, p.1), which defines “the key objectives for cluster policies in Europe” states that “[r]egions that combine risk capital, skills and research excellence with strong cluster portfolios face more opportunities to become innovation hubs, while regions with no clusters...risk falling behind”. Cluster discourse establishes a link between competitiveness and places: Essentially, there are ‘uncompetitive’ western places (without clusters) and there are ‘competitive’ western places (with clusters), additionally there is the “Other”; competitive low-cost places, which may or may not use cluster policy – there is usually no clarifying this point. The texts that I have analysed do not show a great deal of reflection around the premise that clusters are normatively promoted and legitimised as a standardized solution and are used in the often referred to catch-up and developing economies, as clusters apparently not only protect OECD-countries but also offers “new opportunities for developing countries to leapfrog into emerging high-growth areas of the world economy” (UNCTAD 2008, p.6) – at the same time we are reassured that the “large majority of developing countries are not yet able to harness their creative capacities for development” (UNCTAD 2008, p.7).

Clusters are equated with “competitiveness” but it also gains meaning from the threat of “low-cost locations” and mobilities – places of the ‘Other’, especially in terms of movement of capital. Clusters as policy can then be understood to aim to reaffirm the “space of place amidst the space of flows”, creating island-like nodes - geographic centres of gravity (Scott 2000, p18) - for capital to rest, thus trying to maximize the capital’s time spent in motion from one place to another.

3.3.2. The rise of caring capitalism

I now briefly return to the two latter periodisations/articulations of cluster discourse, the Collective Cluster Discourse and the Creative Cluster Discourse in addressing the research question of R1. Which discourses do the articulations of clusters draw on, and what discourses are reproduced and which are challenged and transformed?

Understanding agglomerations in relation to economic growth, industrial dynamics and innovation has been normalised and naturalised within economic geographic research for over a century. The focus on agglomerations as the unit of analysis goes as far back as Alfred Marshall at the turn of the 19th century, and his theories on industrial districts (Marshall 1899; Marshall 1927), even though these ideas in relation to the meaning of place did not become dominant until they were rediscovered and reproduced in the end of the 1980s when the meaning of place and community had drastically changed.

Marshall was largely invoked into cluster discourse in the 1980s through the writings of Italian economist Giacomo Becattini’s work (1975, 1978, 1989) on industrial districts in Italy. Later it spread more forcefully into Anglo-Saxon tradition by the writings of MIT professors Michael J. Piore and Charles F. Sabel (1984), who linked the industrial district discourse with Post-fordist production and innovation, especially by giving clusters meaning through its relation to ‘flexible production’. A major paradigm shift in analysing regional and agglomeration economies did not occur until the late 1980s and early 1990s. Contrasted to the neoclassical approach the emerging theories put a great emphasis on relational assets (Storeper 1997; Vatne and Taylor 2000b). Its most important contribution can in essence be seen as a perspective where ‘the social is brought into the economic’ (Vatne and Taylor 2000b, p.6). At the centre of this
At the core of cluster studies that brought the social to the economic was the concept of the industrial atmosphere. Marshall highlighted the presence of an “industrial atmosphere” in industrial district, describing the mutual influence between the social and the economic systems, but he did neither very much elaborate on this idea, nor on its social foundations. The ‘industrial atmosphere’, which can be seen to a breeding ground for what Storper (1997) refers to as untraded interdependencies. But phenomena such as cohesion, industrial atmosphere, neighbourliness and foreignness are not created by spatial forms of proximity and distance but rather by psychological contents (Simmel 1997). The notion of industrial atmosphere is inherently tied to the notion of place. Place is more than an object, a physical setting for social relations, through differentiation of other places it becomes an object of identity for a subject (Agnew 1993). This conceptualization of place does not (necessarily) indicate community in the sense of Gemeinschaft based on high familiarity and kinship. It is a locale with which people can identify. For the industrial atmosphere it is the everyday practices that produce a felt sense of belonging at a particular place and time:

“The leadership in a special industry, which a district derives from an industrial atmosphere such as Sheffield or Solingen, has shown more vitality than might have been probable in view of the incessant changes of technique….an established centre of specialized skill, unless dominated by a guild or trade union of exceptionally obstructive character, is generally in position to turn into account quickly any new departure affecting its work...It is to be remembered that a man can generally pass easily from one machine to another; but that the manual handling of material is not easily acquired in middle age: for that is characteristic of a special industrial atmosphere.”

(Marshall 1927, p.287)

Marshall’s notion of industrial atmosphere can be considered one of the first attempts to highlight the possibility of converting social relationships to sources of productive activities, and argument later refined by Jacobs (1974), and explicitly articulated through Putnam’s (1993) social capital theory. For Jacobs and Putnam social relationships are seen as a way to reinsert/reclaim the realm of public sphere and civic engagement into the capitalist framework. At the same time by conceptualizing social relations through capitalization, it stand in danger of having the opposite effect; by enabling a further appropriation of the public by private and a complete annexation of the social spheres into the economic. As will be analysed in the following chapter, the insight of the importance social relationships for productive activities and economic growth was appealing to geographers as the social sphere could be equated to place to an extent that the economic could not any more. The idea that the processes that create social capital, the process of embedding and embeddedness at its core, are “rooted in place” (Taylor and Leonard 2002a, p.1) stands as the basis for the social turn of economic geography.

In economic geographic writing, the “soft” articulations often draw on the idea of industrial atmosphere, and have developed its implications further particularly in relation to competitiveness. The contention is that there is something more in the success of clusters, such as Silicon Valley or the new industrial districts in Italy, than “mere” external economies (Florida 1995b; Piore and Sabel 1984; Saxenian 1994). The position is that the agglomeration itself is a source of innovation and industrial dynamics, also decoupled from the externalities (Storper 1997). Contextualized in the ‘cultural turn’ of economic geographic research and reflecting a postmodern reflexive capitalism in which culture and economy are inherently intertwined (Barnes 2003) this stream of literature often draws on sociology, particularly on social network theory on embeddedness (Granovetter 1985) and philosophy of knowledge (Polanyi 1962).
Adopting a particular interpretation of Michael Polanyi’s (1962) distinction of tacit and explicit knowledge, this geographic learning discourse often assigns tacit knowledge to the particular space of the local, and explicit knowledge to the extra-local spaces of globalisation (Allen 2000b). When clusters and the notion of geographical proximity are related to innovations and the transfer of tacit knowledge, the concept of ‘learning regions’ emerges. In this perspective, certain spaces are ascribed as ‘spaces of tacit and explicit knowledge’ (Amin and Cohendet 2004). In Marshall’s (1899) terminology much of the research within the learning regions perspective has been preoccupied with how to create and develop certain places into spaces of ‘unconscious learning’ through the creation of something aching to community or communal learning. The relation between community and innovation and competitiveness are being reformulated.

As shown in Paper 2 conceptually the defence of region/place produced theories about localised learning (c.f. Asheim 2001; Cooke 2002; Florida 1995b; Maskell and Malmberg 1999; Morgan 2004) and regional innovation systems (c.f. Asheim and Isaksen 2002a; Braczyk et al. 1998; Cooke et al. 1997), which in turn have been produced materially in exclusive locations such as technopoles and science parks. Agglomerations per se are not a new observation, but the production of explicit links between agglomerations on the one hand knowledge production, learning and creativity on the other hand constructs a very particular understanding agglomeration emerges, articulated around innovative deindustrialised clusters. In the discourse place is invoked as an alternative basis for innovation, opposed to the placeless multinational corporation. Innovation is thus seen as a particular (potential) characteristic and quality of particular places, in this case clusters, understood interchangeably as a metaphor, a territorial configuration and a form of organisation. The emphasis on innovation, and the understanding of innovation as something inherently good (in the spirit of caring capitalism) may also lead to the exclusion of research that focuses on tensions, marginalisation, and the silences of the discourse. For example, by putting an overt emphasis on innovation, agglomerated economic activity such as EPZs and maquiladoras, i.e. cluster manifestations in developing countries, are easily not considered part of the core of cluster discourse. If these illustrations were part of the dominant cluster discourse it would be easier to see how the social and the political is overtly present, as are practices of non-caring capitalism - such as exploitation of female workforce, pollution, over-extended work-time, wages below living wages, migrant workers without social rights, worker turnover rates, or political tensions arising from compensation for land resumption. Are these manifestations somehow outside of the economic discourse or unrelated to clusters? For example, recent events in Foxconn Technology Group’s operating plant in the SEZ in Shenzhen, China saw a peak in suicides among workers, with a tally of 17 copycat suicides (Barboza 2010), but how are we to understand these events in relation to cluster discourse? We seemingly cannot because cluster by definitions gain its meaning through ‘soft’ signs, and seemingly economic geographic research is if not fully content, then rather complacent, about it. In paper 4, I have reframed the analysis of a cluster by analysing the darker practice that is inherently present in (innovative) clusters, by doing so I wish to open up discussion about the silences of the discourse and the reasons for this silence.

Over the last decade the notion of innovative clusters has developed into something of a paradigm, and is fostered within economic geography as a dominant paradigmatic solution for both exporting the ideas of economic geography to other ‘bigger’ disciplines (Grabher 2006; Massey 2005) as well as enhancing the influence of economic geographic theory in policy-making (Lovering 1999; Markusen 1996; Martin and Sunley 2003).
Policy cluster initiatives were arguably hit-and-miss processes at best. Many a cluster project in the form of science parks and technological centres has not been able to go beyond the preparatory stages of the innovation process (Törnqvist 2004a). These failures, have gathered much less interest than the often overused and anecdotal cases of success. In other instances of improving existing clusters, such as the celebrated example of Silicon Valley, the neglect of social development and ecological innovation has arguably undermined the cluster competitiveness in the long run (Benner 1998; Borsook 2000; Gerstleberger 2004; Krantzler 2002; Pellow and Park 2003; Pitti 2002). Within economic geography, the critique against the cluster concept in the form popularized by Porter (1990) has evolved not least around the inability to reconcile the respective and reciprocal roles of local standard of living with firm competitiveness (Bristow 2005). Enlarging the focus from the purely economic has thus become a central/potential research contribution from economic and human geographers alike. This was already mentioned in, and is strongly connected to the soft articulations of capitalism, and the relations between community and innovation. However, the recent emphasis on creativity brings in a different understanding and different meanings to regional competitiveness. This shift in cluster discourse is most important in its emphasis on 1) the individual (from community) and 2) the urban (from regional) (as outline in paper 2,5,6).

One aspect that is becoming increasingly evident is the re-emergence of a) creativity as the pinnacle of localised/clusterised western competitiveness b) the urban nature of clusters c) the creative nature of particular urban places (Paper 2,5,6). Interplace competition is not only about attracting production (Harvey 1993) and the economic sphere is not easily separated from the social and cultural sphere. But this critique is increasingly appropriated through the fusion of the economic, social and cultural landscape. This can be seen as performative capitalism (Thrift 2005, p.4), wherein a defining feature is capitalism’s ability to be highly adaptive and a constantly mutating formation. This includes adopting the language of its critique (ibid.). Creativity, with its strong associations to arts, individual artists and the cultural sphere in general, is a case of the point.

Increasingly creativity is not only replacing “raw materials or natural harbours as the crucial wellspring of economic growth” (Gertler, Florida, Gates and Vinodrai 2002, p.ii) in cluster discourse but also knowledge. Knowledge, historically a central signifier in cluster discourse, has something of historical burden. Knowledge may be easier to frame within discourse of commodification, and it is similar to creativity in the sense that it is locked into the brains of the workers, but it is not understood as equally human-centred, unorthodox or as placebound as creativity. Language accommodates understandings that knowledge, through its intertwined relationship to information, can be transferred over distances mediated through technological advancement. Much like knowledge, creativity is framed by discourse as a commodity and a resource, but unlike knowledge it is an inherently urban resource: “Cities have one crucial resource-their people... imagination and creativity are replacing location, natural resources and market access as urban resources [emphasis added]. The creativity of those who live and run cities will determine future success.” (Landry 2000, p.xiii)

Through the spheres of landscaping, urban design and architecture, cluster policies increasingly incorporate the attraction of consumers and residents into the agenda. For example, the Helsinki Region’s Innovation strategy states:

In order to attract and keep creative talents, the Helsinki Region will have to provide creative settings offering high standards in housing, work and leisure opportunities... The entire Helsinki Metropolitan Area must invest in diversified, pluralistic and increasingly international cultural
Cluster initiatives have generally been kept apart from urban development (Hessler 2003), which in part explains a lack of holistic perspective. A typical example is science and business parks, where there is an exclusive business focus (Massey, Quintas, Wield 1991). This seems to be changing, as cluster initiatives are increasingly explicitly combined with urban planning, ranging from the master planning of an airport city (Arend et al. 2004; Kasarda 2001a) in Dubai (www.ameinfo.com/) to the construction of a bioscience ‘township’ in Stockholm (Björkman and Skär 2004). By broadening the focus from a purely economic one, a number of crucial issues arise. Cluster discourse includes the element of regional cohesion. The compression of time and space does not necessarily bring nearness or cohesion (Heidegger 1975). Regional cohesion is in this context interpreted as including a strategy of developing a common vision (Cooke 2002) or a common regional identity (Ashmore et al. 2004; Farrell 2004; Houtum and van en Lagendijk 2001; Süssner 2002) for a particular geographic entity or locality. This cluster identity is portrayed as shared by firms, policy planners and the inhabitants alike. For example following the definition by Cooke (2002, p.121) for a geographical cluster: ‘Geographically proximate firms in vertical and horizontal relationships involving a localized enterprise support infrastructure with a shared developmental vision [emphasis added] for business growth, based on competition and cooperation in a specific market field.’ Yet, individualism, self-management, self-reliance are some of the most defining values of the creative workforce (Paper 2,5,6).

The integration of an urban / creativity discourse can also paradoxically be considered an effort to counter the rigidity of over-planning. In the last decades policy clusters have had difficulties in constructing the creative atmosphere that theory and research often ascribe them (Törnqvist 2004a). Urbanity and the urban is often connected to creativity (Florida 2005; Hall 1998) (Landry 2000), thus by attaching the development of clusters to places that already possess the attribute of a “creative atmosphere” some of the problems of ‘creating’ an atmosphere are seemingly removed. On the other hand it takes master planning to a new level, as it adds and emphasizes the development of the social and environmental dimension of clusters that at their outset are purely connected to economic development. We return to the paradoxical portrayal of state action in neoliberalist discourse, who creates, animates or harnesses creative atmosphere or genus loci? This question is most explicitly discussed in paper 5 that introduces the notion of governmentality to understand how the creative economy is governed.

In the discourse of creative clusters, place is annihilating space in the race for access of technologies that can lower the barriers for creativity and knowledge diffusion across space. In the words of Richard Florida (2002a, p.6): “Place has become the central organizing unit of our time”. The vision is played out in scenarios of technopoles (Castells and Hall 1994) with a communal soul and a competitive engine, where actors are seemingly rallied towards new levels of creativity and innovation by seamless juggling of multiple identities (e.g. work-based subjects, leisure-based-subjects, consumption-based subjects, community-based subjects) in different networks (e.g. global-local; business-private). At the same time there remains serious antagonism between the actors in such networks, where place-bound access to technology becomes the dividing line between centre and periphery. The current dominant cluster discourse shows the potential (and will) of eradicating ‘false dichotomies’ (Malmberg 2002; Malmberg and Power 2003; Porter 2000) like manufacturing and services, public and private, large companies and small companies, high tech and low tech, Gemeinschaft
and Gesellschaft, virtual and placebound. But where one border is eliminated it appears somewhere else (Escobar 2001b; Swyngedouw 1993), and this remains largely unproblematised in cluster discourse. The current cluster discourse with its ‘urban turn’ is remaking the distinction between creative centres and periphery. Policymakers and economic geographers are rallying a defence of place as a project to bolster innovation and thus the prospects of tapping into global markets. It also reinforces the dichotomy of “old economies” and “new economies”, enforced by claims of having isolated specific cluster aspects as distinctive to a particular point in time.

Creativity is closely linked to creative industries and to commodification. Certain industries utilize creativity as a resource and input. The creative industries are framed as “enterprises that monetize (creative) ideas in a consumer society” (Hartley 2005b, p.114) Central to the fixing of meaning to creativity and creative industries is the removal of ‘artificial boundaries’ between culture and creative, and arts and industry (Paper 6). Creative industries enables an understanding that goes “beyond the idea that creativity is the exclusive domain of artists” (Landry, 2000, p.xv). Thus with less discursive constraints than ‘culture industry’ in terms of commodification, the understanding that “creativity and competitiveness go hand in hand” (Florida 2007, p.9) is increasingly naturalised.

But the shift from culture to creativity has also been a gateway to circumvent a number issues connected to cultural industries, most notably perhaps the position of fine arts and the critique of Theodor Adorno and Max Horkheimer (and the so-called Frankfurt School of neo-Marxist social theory) of the commodification and marketisation of culture. Cultural industries, a term coined by Adorno and Horkheimer, is still widely understood through its relation to the Frankfurt school and the critique that cultural industries is a governing mechanism that controls the population serving market interest, and that the needs served by the cultural industry are false needs (Adorno 2001). This critical perspective, or historical burden, is not fixed in the articulation of creative industries. Even when stripped of its Marxist past and even through “morally neutral use of the term “cultural industries” has proven limiting in the policy context” as it fails “to combine art and culture, culture and creativity [emphasis of the original text]” (Hartley 2005, p.14) The fixing of meaning to creativity in relation to competitiveness, commercialisation and industry is facilitated through positioning creativity as a central signifier instead of culture. As was discussed in paper 2, 5 and 6 the creative economy discourse effectively removes all subversive signs and elements, most notably all political elements, while establishing consumer-market criteria at the centre of creativity discourse. The discourse effectively subordinates the cultural through creativity to the market- and economic rational. Thus cementing and naturalising the understanding that the whole creative class is to accept that they have to legitimise themselves in terms of market and criteria, which is based not least on speed: instant consumption, instant gratification and instant profit (Bauman 2008, 207).

3.4. Contribution to economic geographic theory

A central contribution of the thesis is approaching an “overresearched” area (i.e. clusters) in economic geographic theory in a disciplinary reflexive manner, but also by introducing some alternative ways of analysing cluster discourse, through the use of discourse theory, and combining it with more systematic approaches such as the framework of governmentality (Paper 5) and by incorporating Bauman’s concept of liquid modernity (paper 2) to understand the operationalisation and diffusion of
discourse. By combining insights from economic geography with insights from critical management studies, the thesis also contributes to what could be seen as the practice and theory of corporate geography by constructing conceptual bridges between the theoretical currents. Economic geographic theory has yet much to give in terms of uncovering the societal tensions that management and firm discourse as well as contributing to how space is dialectically related to society, lived in and meaningful to individuals.

I see it as a positive development that cluster discourse in its third periodisation, the creative cluster discourse, is increasingly focused on the individual and with that a focus on creativity as basis for development, as in principle it would answer the poststructural critique that concerns the representations of the objects of inquiry (region, nation, city, networks etc.) that detach geography from the lived world (c.f. Natter & Jones III 1993). What is being marginalised, however, in the creativity discourse is space as political and ideological. As discussed in Paper 5 and 6 the discourse produces images of an apolitical space where the creatives act out their subject positions; the unpolitical bohemian consumer/producer that values novelty above anything. The role of space is seemingly merely to produce/co-produce/consume new objects momentarily producing an “attachment to the quick turnover of anything” (Lee 2005, 66). One contribution of this thesis is recasting clusters as ideological and political once again, as a site of contestation. Also as the papers have shown there is a need to ask if what the discourse reproduces is an understanding of the individual in relation to the value of individualism, which in turn as discussed in paper 5 normalises consumerism, apoliticalness, and portfolio careers while marginalising questions around limits to growth, ideology and politics, and job security. In the thesis several papers have explicitly focused on uncovering some of the silences of discourse and problematised the effects (Paper 2,4,5,)

In the thesis the different conceptual and methodological approaches applied serve to provide a more holistic picture of how the cluster discourse is diffused and reproduced, while highlighting aspects that it serves to marginalise (Paper 4,5,6) and appropriate (Paper 5,6). While I do not wish to wish to collapse the logic of the economic geographic reproduction of the cluster discourse too easily onto the other, and assuming or recreating a totalizing account of the different voices, the papers show a recent focus on what I have referred to (Paper 4) as the ‘sharing and caring ethos of capitalism’ that suggests that the “New Economy” is somehow shifting away from the “predictable systemic exploitative logic” of industrialism (O’Donnell et al., 2003, p. 87). Thus in creative cluster discourse there is little problematisation or contradiction when everything including the critique is appropriated to strengthen the competitiveness imperative. Once creativity became a key signifier of the cluster discourse it became very hard to question the increasingly hegemonic discourse. Creativity is seen as universally good as it represents the subversive, public, private, elitist, communalist, individualist, consumerist and sustainable, all at the same time and apparently without contradiction understood in relation to competitiveness. But there are contradictions, and there are marginalisations in the discourse – there is just very little attention paid to these.

While the creative economy discourse is seductive and hard to resist, it should be critically analysed and problematised by further research. The overly positive connotations of creativity serve to mask the darker practices that are also at the centre of the discourse (Paper 4); portraying that such practice is somehow detached from the creative economy. The thesis illustrated it through looking at practice (industrial espionage) of one knowledge and creative intense industry (Paper 4), but other
industries would have been equally interesting to look at, for example it is hard to find a more creative industry than the finance industry, which should prove an interesting case study for looking at the practice of the creative class.

3.5. Implications for economic geographic research/practice: Toward a reflexive reproduction of discourse

The more tolerant the world becomes of the choices we make, the less the game, our playing it, and the way we play it are open to our choice. No longer does the world appear amenable to kneading and molding; instead, it seems to tower above us— heavy, thick, and inert, opaque, impenetrable and impregnable, stubborn and insensitive to any of our intentions, resistant to our attempts to render it more hospitable to human coexistence. The face it shows us is mysterious and inscrutable, like faces of the most seasoned poker players. To that world, there seems to be no alternative. No alternative, at any rate, that we the players, by our deliberate efforts, singly, severally, or all together, could put in its place (Bauman 2008, 110-111)

The critique partly aimed at the existent social world that I am part of myself – at the business school, one of the core institutions of the cultural circuit of capitalism (Thrift 2005) I teach the same theories that I have critically examined, reproducing and effectively diffusing them. In many ways this experience has been unsettling. The thesis has contributed to exposing some underlying tensions of the cluster discourse, and also reflected on the practice of economic geography as an integral part of legitimising and diffusing the discourse and shaping the social practices. In returning to the third research question; R3b What alternative understandings can be envisioned? in a critical work such as this it is easy to lean towards cynicism and a sense of powerlessness, in many instances over the writing of this thesis the world does not, as Bauman writes when describing what characterizes liquid modernity, amenable to kneading and moulding and every alternative imagination conjured and critique put forward stand in the danger of being appropriated by the dominant discourse.

An overarching theme in the papers is the call for increased reflexivity - i.e. the “ability to encounter the familiar as new (unfamiliar)” (Antonacopoulou 2010, 7), and while reflection involves giving order to situations, reflexivity entails unsettling conventional practice (Cunliffe and Easterby-Smith 2004). Cunliffe (2009, 98) makes a distinction between: a) self-reflexivity, the recognition that we shape and are shaped by our social experience, involving a self-dialogue on our values and assumptions, questioning of core beliefs; and b) critical reflexivity, the examination and unsettling of our own assumptions, actions and their impact. The implications are many-fold, first in terms of a) there is a need for recognizing that economic geographic research is increasingly a part of the object of study – research is part of giving meaning to clusters, to the extent that it might result in self-fulfilling prophesies. Self-reflexivity does not necessarily need to be connected to applying a poststructuralist perspective as has been the case in this thesis.

There is also the stronger link and interrelation between universities, firms and policymakers who converge e.g. in agencies for innovation systems such as VINNOVA in Sweden and STTRA in Finland that needs to be problematised and the target of increased critical reflexivity. Critical-reflexivity becomes especially important when research is concerned with concepts and activities that are not exclusively situated in the economic domain, creativity being a case of the point. If creativity is increasingly understood in relation to the economic – in its most extreme understanding as a form of capital - it will serve to hide both the subversive element and the mundane practices that are part of the creative process. Without critical reflexivity there is also the danger that we reproduce the discourse that marginalises those creative individuals that are
not situated in the economic domain or adding to the narrow notion of competitiveness.

There are also implications for policymaking, the speed imperative that stands as basis for fast decision-making and the constant reformulation of innovation policy is characteristic of Bauman’s description of the current phase of modernity, liquid modernity, where there is no time for anything to solidify including development policies, “something – anything, needs to be done, fast”. Yet policymaking that targets development is in many ways about creating something solid; “Nothing is more solid than being able to demonstrate to foreign visitors and local residents alike workable infrastructures, efficient bureaucracies, impressive communication systems, and generally acceptable standards of living” (Lee 2005, 70), which stands in contrast with the increased liquidity of outsourcing, flexible specialization, portfolio careers and downsizing. This is also why I think the interest towards space has increased during the past 10 years among both policymakers but also among management scholars, there is a need to have something material, no matter how superficial to keep the subjects grounded and under control. In this sense space is increasingly important for governmentality, government by freedom, management of the self by the self, the values of novelty, constant change and liquidity is made valuable – we are to aspire to these norms because they are both ‘socially worthy’ and ‘personally desirable’ (Rose, 1999). Space/place is rendered to apolitical, non-subversive, consumerist arenas – shopping malls, innovation universities, hotels, airports; solid performative spaces where paradoxically the subject position of liquid modernity is acted out. Yet outside of the competitiveness imperative there is little reflection for whom this development of liquidity is desirable and valuable. Liquidity is seen as inevitable, space is for being in not being of. But the discourse of liquidity and mobility is thorn and the tensions it creates is left unproblematised and marginalised, the increased mobility of the outsiders, the non-creatives, the poor, uneducated, the refugees, the asylum seekers have no room in the creativity discourse – rather policymaking is increasingly used to control and contain this liquidity. Outsourcing is seen as a natural, valuable phenomenon of globalisation – whereas begging in the streets by those Europeans who have had their livelihoods erased and have no chance of employment in their home countries are not part of “Western culture”. They are drawn to the global nodes of creativity by the same images that are used to attract the international supercreative core, instead discourse freezes these people in a spatial void, in the creativity discourse mobility is for the rich, educated and most importantly those willing/able to consume and indulge.

To wrap it up I return to Tönnies inability to create meaning of community through business: In the creative cluster discourse community has come to signify joint stock-communities, that is why there is little paradox or seeming tension when the major of Helsinki can in Helsinki’s application (aptly named Open Helsinki) to become the “World Design Capital” proclaim that Helsinki is an “open city” that strives to “serve the international community”, and state that “the possibility for people to interact with each other and with communities, regardless of time and space, is sincerity at its best” or that “[C]losing up into self-contained loneliness would lead us to a dead end. We need the world” – while simultaneously wanting to restrict and even outlaw the flows of the transnational marginal and poor – particularly the governing of the few hundred Roma people flowing to Helsinki from Romania, who have become increasingly mobile through the EU membership, has been positioned as a problem for the aspiring creative metropolis. Thus simultaneously the major and other governing bodies of Helsinki have actively been driving for a change in legislation that would permit cities to outlaw begging as “begging does not belong to the Western welfare state ” (Pajunen 2010).
From a creativity perspective, begging is part of the field of discourse as once begging is banned/outlawed research is bound to be employed to scientifically classify when the creative act of busking (performing in public places for tips) becomes ‘unproductive’ act of begging. The sharing and caring ethos of the creativity discourse is revealed when in the World Design Capital application it is stated that:

The city is made up of people. The buildings and infrastructure are the shell and skeleton. They are created for people’s needs, to support activity. People make the city pulsate with their actions. That is why my city is open to researchers, artists and merchants – to all the people that wish to exchange ideas, products and services with us ... Business is now and has always been the best way to network people and communities (Pajunen in Open Helsinki — Embedding Design in Life, 2010)

The meaning of people has become understood in relation to their wish to exchange products, services and various forms of capital (ideas, creativity, knowledge), and corporations are the best space to bring people together. We are nearing the discursive point where in the creativity discourse we would hardly speak of a ‘non-commercial individual’. And it would sound quite revolting to make the linguistic compound ‘public space’ if such space does not contribute to productivity through the commercial exchange of products and services.
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APPENDIX 1: INDIVIDUAL ESSAYS


**Paper 2** (single-authored) Geographies of Competitive Fear – Between solid place and liquid imperatives, Unpublished


ABSTRACT

Both management scholars and economic geographers have studied knowledge and argued that the ability to transfer knowledge is critical to competitive success. Networks and other forms for cooperation are often the context when analyzing knowledge transfer within management research, while economic geographers focus on the role of the cluster for knowledge transfer and creation. With the common interest in knowledge transfer, few attempts to interdisciplinary research have been made. The aim of this literature review paper is to outline the knowledge transfer concepts in the two strands of literature of management and economic geography (EG). The paper takes an analytical approach to review the existing contributions and seek to identify the benefits of further interaction between the disciplines. Furthermore, it offers an interpretation of the concepts of cluster and network, and suggests a clearer distinction between their respective definitions. The paper posits that studies of internal networks transcending national borders and clusters are not necessarily mutually exclusive when it comes to transfer of knowledge and the learning process of the firm. Our conclusion is that researchers in general seem to increasingly acknowledge the importance of studying both the effect of and the need for geographical proximity and external networks for the knowledge transfer process, but that there exists equivocalness in defining clusters and networks.

KEYWORDS: knowledge transfer, networks, clusters, ecologies of knowledge, interdisciplinary research

1. INTRODUCTION

Management scholars have argued that the ability to transfer knowledge is critical to competitive success (Levinson & Asahi, 1996, March & A., 1958, Powell, Koput, & Smith, 1996), with the postulation that organizations can learn from cooperation with other actors. Where researchers have explicitly studied how firms collaborate to generate economic benefits, there has been a tendency to focus on one particular benefit associated with cooperation, such as learning, lower transaction costs, or pooling of resources (Dyer, 1996, Hamel, 1991, Powell, Koput, & Smith, 1996, Teece, 1987)
In contemporary economic geographical and regional development research, knowledge is also a central theme (Allen, 2000, Bunnell & Coe, 2001, Howells, 2002). The interest is rooted in the spatial dimension of localized knowledge, as knowledge transfer appears to be facilitated by geographical proximity and clustering. Thus, a characteristic for geographically bounded research is understanding the spatial dimension of innovative activity and knowledge transfer, knowledge spillovers, and the determinants and mechanisms that underlie industrial clustering (Audretsch & Feldman, 2003, Gertler, 2003, Malecki, 2000, Stafford, 2003).

In regards of the research context for knowledge, management research has tended to focus on networks and other forms for cooperation, while economic geographers have tended to focus on the role of the cluster for knowledge transfer and creation. With the shared interest in knowledge transfer, some attempts to interdisciplinary research have been made. The concept of geographical clustering has recently received some attention by scholars of international business, themes ranging from the role of TNCs in clusters to the role of localized knowledge for small firm innovation activity. (Birkinshaw & Hood, 2000, Dunning, 1998, Malmberg, Sölvell, & Zander, 1996, Porter & Sölvell, 1998, Powell, 2003) Correspondingly, research within economic geography (EG) has shown a growing interest towards (external) networks and their influence on regional competitiveness (Amin & Cohendet, 1999, Bunnell & Coe, 2001, Conti, 1993, Dicken, Kelly, Olds, & Yeung, 2001, Malecki & Veldhoen, 1993, Yeung, 2000). Within management research there has also been an attempt to review the network concept of different disciplines (Araujo & Easton, 1996). We feel, however, that this review did not sufficiently elaborate or discuss the distinction between terminology, such as industrial districts, networks, and clusters. Further, it provided a rather limited overview of the geographical literature, and thus we believe that a more in-depth comparison is called for.

Despite the initial attempts to use the two concepts and strands of literature for understanding knowledge transfer, there still exists confusion of what distinguishes a cluster from a network. This in part, stems from a number of equivocal typologies and concepts of what constitutes a business network and cluster respectively. Within both disciplines there has also in the past existed a tendency to juxtapose the role of organizational proximity (inter-organizational networks) to that of geographical proximity (clustering) (Morgan, 2001). But as this paper argues, using both strands of literature and understanding respective concept, without an aim of trying to identify which concept is the paramount for understanding knowledge transfer, can contribute to building a stronger foundation for understanding the concept of knowledge transfer within both disciplines.

1.2 Aim and scope of paper
The aim of this paper is to outline the knowledge transfer concepts in the two strands of literature of management and economic geography (EG). The paper takes an analytical approach to review the existing contributions and seeks to identify the benefits of further interaction between the disciplines. Furthermore, we offer an interpretation of the concepts of cluster and network, and suggest a clearer distinction between their respective definitions.

The aim, however, is not to identify which geographic scale or which concept is more useful for understanding the knowledge transfer process, but rather to review the body of work in the two disciplines, outline some differences, and comment on the possibilities of further cooperation between the two fields.
1.2 Structure of the paper
The structure of the paper is as follows: In the first part we introduce the issues under consideration and the aim of the paper. Next, a review of the concept of cluster and network as they are discussed in literature is conducted, followed by a comparison of the two concepts. In the third chapter, knowledge transfer is defined as seen in cluster and network literature. The material presented is discussed in the fourth chapter, and finally conclusions are drawn.

2. DEFINING THE DIFFERENCE; CLUSTERS, NETWORKS AND ACADEMIC EQUIVOCALITY
In international business and other academic literature networks and clusters are often assumed to denote the same thing (Cooke, 2001). However, as is outlined in this paper, this interpretation can prove misleading. The equivocalness over the differences between the two concepts follows a general academic reluctance to address and delimit the definitions (Cooke, 2001, Steiner, 1998). One of the main causes of this negligence can be traced back to the complexity and the fuzziness of the cluster-concept (Martin & Sunley, 2003) and network-concept (Nohria, 1992, Powell & Smith-Doerr, 1994). Thus, in order to conduct a comparison and outline the main differences, the cluster and network concept definitions are reviewed in the following chapter.

2.1 Defining clusters
The importance and benefits of a spatially concentrated industry was already identified by Marshall, nearly a hundred years ago in his studies of industrial districts in Britain (Cooke, 2001, Malecki, 2000). Since then it has continued to capture the attention of economic geographers (e.g. Cooke, 2001, Hayter, 1997, Markusen, 1996, Piore & Sabel, 1984, Scott, 1988, Storper, 1997). The term ‘cluster’, however, was brought to mainstream academic attention by Porter (1990).

Despite rigorous research of clusters, it has been argued that researchers often tend to neglect to address what actually defines a cluster (Cooke, 2001, Martin & Sunley, 2003, Rosenfeld, 1997, 2001). Literature displays a wide variety of cluster definitions; however, the most popularised definition is that of Porter (Porter, 1998: p.78); "Clusters are geographic concentrations of interconnected companies and institutions in a particular field."

Whereas Porter's originally (1990) applies clusters to explain the competitiveness of nations, he later (1998) stresses the importance of the region and geographical boundaries. Yet, it can be argued that the economic geographic community was critical and hesitant to use the concept, in part because of a sense of not-branded-here syndrome, and in part because it was felt that Porter portrayed his concept as something new, whereas largely similar had been conceptualised, if not popularised by economic geographers (Martin & Sunley, 2003). This notwithstanding, Porter's definition and cluster typology, or lack of such, has come under some rigorous, albeit constructive criticism from geographers. (e.g. Cooke, 2001, Martin & Sunley, 2003) The deception of the simplicity of Porter’s concept and typology is that it tends to render assumption that there is such a thing as a ‘standard cluster’, which is not the case (Martin & Sunley, 2003, Morgan, 2001).

Since Porter’s definition, as presented previously, is often taken out of context and interpreted in various manners, we adopt the more descriptive and comprised definition of Cooke (2001: p.121):
“[A cluster is] Geographically proximate firms in vertical and horizontal relationships involving a localized enterprise support infrastructure with a shared developmental vision for business growth, based on competition and cooperation in a specific market field.”

This definition better highlights Porter’s inclusion of vertical relationships and horizontal relationships between firms and institutions, as well as the importance and inclusion of common identity. This definition is, however, far from complete as it still fails to address one of the main problems highlighted by Martin and Sunley (2003) in their extensive criticism of Porter’s cluster concept; what constitutes ‘geographically proximate’? In Porter’s typology geographical proximity seemingly spans from rural areas to nation states. If clusters operate on such a diverse range of spatial scales, and it is posited that knowledge spillover effects and externalities are scale-independent then it undermines both the empirical and analytical significance of the concept (Martin & Sunley, 2003). Thus, there exists a further need for cluster research to address and argue for the choice of scales. Neglecting the spatial scales also makes the concept less distinguishable from the network concept, another problematic concept that will be outlined in the following chapter.

2.2 Defining networks

As the term network is used in several different research streams (within management, marketing and sociology), confusion exists about its contents. Academically, the term is used in social network analysis (Burt, 1992, Nohria, 1992, Uzzi, 1997), in the network perspective of inter-organizational research (Nohria, 1992, Powell, 1990), in the industrial network approach (IMP\(^1\)) (Andersson, Håkansson, & Johanson, 1994, Ford, 2002, Håkansson & Ford, 2002, Håkansson & Snehota, 1990), and even as a network paradigm within marketing research (Hunt & Morgan, 1994, Morgan & Hunt, 1994). In inter-organizational research and strategy (Eccles, 1981, Jarillo, 1988, Powell, 1990, Thorelli, 1986), including Williamson (1991, 1996), it is widely accepted that firms can exist in networks as a kind of third form of organization, as an alternative to the market as a regulating force, and the hierarchy with administrative power as regulators.

However, as Nohria & Eccles (1992) point out, the term is in different academic streams and by different researchers used with such a multitude of meanings, that is has little intrinsic meaning left. According to Larsson, Bengtsson, Henriksson, & Sparks-Graham (1998), the use of the concept mainly leads to confusion in literature. However, in their discussion of the network metaphor Powell and Smith-Doerr (1994) come to the conclusion that the term network, despite its many meanings is useful 1) as an analytical tool employed in economic sociology (Uzzi, 1997), or 2) as a form of governance as in the industrial network approach (Turnbull, Ford, & Cunningham, 1996) and research on industrial districts (Piore & Sabel, 1984). Still, researchers within the industrial network approach argue that the network approach also provides a useful framework for analyzing interaction in business (Turnbull, Ford, & Cunningham, 1996), rather than being a form of governance. The view of the network adopted in this paper draws on the industrial network approach.
approach, complemented and moderated with insights from inter-organizational research. In the following part the view of the network of the industrial network approach will be outlined.

Within the industrial network approach, a business network is built up by three important variables: actors, activities and resources. Actors, which can be individuals, groups of individuals, parts of firms, firm or groups of firms, perform activities in the network and control the resources (Håkansson & Johanson, 1992). The general assumption of the network approach is that firms enter cooperative relationships with other firms in order to get access to the resources of the network (Johanson & Mattsson, 1987). Naturally, there is a limit to the number of relationships that can be maintained simultaneously by a firm, and relationships, despite being viewed as long-lasting, may have to be terminated in order for the firm to be able to create new relationships. The network is therefore characterized by exclusiveness, as a firm has to purposefully create and maintain relationships. (Håkansson & Snehota, 1998) Still, the network of the industrial network approach cannot be managed, as one firm cannot be in control of all the relationships, rather the firm has to manage in the network (Ritter, Wilkinson, & Johnston, 2002). This view is rather different Jarillo’s (1988) strategic network, which have a controlling hub firm in the middle that sets up and manages the network.

The relationships cannot be analyzed or understood separately from other relationships in which the actors are involved, nor from the effects of other relationships surrounding them in the wider network (Håkansson, 1986). Thus the boundaries of the network are quite unclear, as “the whole global industrial system… (is) one giant and extremely complex network since there always exists some path of relationships that connects any two firms” (Mattson 1988, cited in Easton, 1992) In order not to get lost in an analysis of a global network, the unit of analysis is often a focal firm (Easton, 1992) or a focal net (Hägg & Johanson, 1983, Salmi, 1995). The focal net is defined as “the net of direct and indirect inter-organisational relationships that the focal firm perceives as affecting its business in certain (e.g. Russian) market” (Salmi, 1995), and can be differentiated by aspects such as products, processes, technology or geography (Easton, 1992). In marketing, arguments have been raised for four different levels of analysis of the network, being the actor level, the dyadic relationship between two firms, group analysis of triads of networks of more actors, and finally the network level, with a network consisting of a limited number of actors (Iacobucci & Zerrillo, 1996). The network approach has also been criticized for being overly theoretical, but lacking empirical studies to support the theoretical conceptualizations (Turnbull, Ford, & Cunningham, 1996).

The view taken in this paper is that a network consists of relationships connecting actors (individuals, groups of individuals, parts of firms, firm or groups of firms) that are cooperating in order to acquire resources they may not themselves possess.

### 2.3 Comparing the concepts

Very few attempts have been made to differentiate the characteristics of networks and clusters. Notable exceptions include Rosenfeld (1997, 2001) and Cooke (2001). Of these, Rosenfeld makes no explicit reference to which field of network research he bases his classification of networks on. Our understanding is, however, that he is mainly concerned with policy networks. Cooke’s classification is an adoption of Rosenfeld, albeit he outlines clearer what he defines as a network.
Both authors make a clearer distinction and stronger case in regards of what constitutes a cluster. One explanation for this may be that neither Cooke nor Rosenfeld are anchored in the management discipline, but in economic geography and regional development studies respectively.

Table 1 Characteristics of networks and clusters. (Adapted from Cooke, 2001, Rosenfeld, 1997, Rosenfeld, 2001)

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>NETWORK</th>
<th>CLUSTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>Restricted</td>
<td>Open</td>
</tr>
<tr>
<td>Relationships</td>
<td>Competitive through</td>
<td>Competitive with cooperation</td>
</tr>
<tr>
<td>Actor amalgam</td>
<td>Common business goals</td>
<td>Collective vision</td>
</tr>
<tr>
<td>Base for interaction</td>
<td>Formal partnerships</td>
<td>Informal interaction</td>
</tr>
<tr>
<td>Scale</td>
<td>Limited, inter-firm</td>
<td>Large</td>
</tr>
<tr>
<td>Basis of knowledge transfer</td>
<td>Relationships</td>
<td>Location/proximity</td>
</tr>
</tbody>
</table>

The main distinctions between networks and clusters are shown in Table 1. As an actor establishes relationships in order to get access to the resources within a network, there is a limit to the number of relationships each actor can maintain (Håkansson & Snehota, 1998). This results in a restricted membership. Clusters, on the other hand, can include tens of thousands of firms and other actors (Cooke, 2001), as exemplified in the much-cited case of Silicon Valley.

Clusters enjoy knowledge spillovers from co-location. Factors that may explain the basis for knowledge spillovers, and thus the raison d’être for clusters include staff recruitment and workforce mobility, observation of rivals, comparability of solutions, and the circulation of gossip and rumors. (Henry & Pinch, 2001, Malmberg & Maskell, 2002) A common denominator for these processes are that they do not require the firms in the cluster to have a formal relationship or close interaction. They can have formal agreements and co-operation, but it is not a prerequisite. These processes, however, and their effects on localized knowledge transfer and generation still remain empirically under-researched (Bunnell & Coe, 2001, Howells, 2002).

In the case of networks, the content of the established relationships is increased collective competitive strength through the cooperation between the actors, as they can pool their resources and knowledge and work towards a common goal. Whereas the cooperation in the network is on a more aggregate level, i.e. the firms as a group increase their competitive strength by cooperating; the relationships in a cluster contain both cooperation and competition on the firm level. The long-term relationships between the actors in the network develop a joint understanding and trust that facilitates knowledge transfer.

A further complication in separating between the two terms has been the recent policy interest in networks and inter-firm cooperation (Rosenfeld, 1997). This fascination can partly be traced to the success of northern Italy's industrial districts of small firm networks in the 1980s (Storper, 1997,
Tödtling, 1994). Policy makers became convinced that the basis for the region's success lay in the rate of inter-firm cooperation/networks. But as Rosenfeld (1997) notes, these networks were not the source for a local production system, but rather a result of mature and dynamic clusters. Another source of confusion relating to the industrial districts is that it sometimes is used on par with cluster, although the industrial district is a rather distinctive form of industrial agglomeration of SMEs in the same industry (Amin 2000b). These firms often operate in specialized market niches in traditional consumer industries, such districts have most famously been observed in northern Italy and southern Germany (Storper, 1997).

3. KNOWLEDGE TRANSFER IN LITERATURE
The management of knowledge is a crucial determining factor for creating and maintaining competitive advantage. (Prahalad & Hamel, 1990, Prusak, 1996, Winter, 1987) Extensive research has been conducted in a variety of academic disciplines, focusing on different aspects of production, appropriation, and transfer of knowledge. Some researchers have concentrated on the learning process (Levinthal & March, 1993, Szulanski, 1996), others have emphasized the creation of knowledge (Nonaka & Takeuchi, 1995), while still others have focused on the transfer and replication of knowledge (Zander & Kogut, 1995) The unit of analysis has varied from individual-level (Brown & Duguid, 1996), to organizational level (Powell, Koput, & Smith, 1996), to regional and national level (Asheim & Isaksen, 1996, Florida, 1995).

A dividing issue between management and EG is the key social environment shaping the production of knowledge. While EG literature, with some notable exceptions (see e.g. Allen, 2000, Amin, 2000, Bunnell & Coe, 2001) tends to argue that local context matters more in shaping knowledge production, whereas management literature tends to focus on the organizational context and relationships between professionals bound together by a joint enterprise (communities of practice) (Brown & Duguid, 1996, 2000, Wenger, 1998).

3.1 Tacit versus explicit knowledge
Some confusion exists within both fields on the matter of explicit and tacit knowledge and to what extent they should be differentiated. Referring to Polanyi, some divide knowledge into two different types (Loebbecke & van Fenema, 2000, Nonaka & Takeuchi, 1995, Nonaka, Toyama, & Konno, 2001), while others (Allen, 2000, Brown & Duguid, 2001, Gertler, 2003) argue that tacit and explicit are dimensions of knowledge. Nonaka and Takeuchi (1995) conclude that explicit and tacit knowledge are not exclusive, but rather complementary. They argue that knowledge can be converted from one form to the other. This view seems to be shared to an extent by some economic geographers (Malecki, 2000, Storper, 1997, Sturgeon, 2003), even though the views between the disciplines differ in regards to what extent it is possible to convert tacit knowledge into explicit. This debate has been of central interest within EG, since if all knowledge is codifiable, distance is rendered insignificant (as suggested by e.g. Cairncross, 2001). If a distinction should be made between tacit and explicit knowledge, the tacit dimension of knowledge can be seen as a central component for localized knowledge. It is generally seen as more geography-bound and -dependent than codified knowledge (Cooke & Morgan, 1998, Florida, 1995, Gertler, 2001, Lundvall, Johnson, & Lorenz, 2002).

Our interpretation of the existence of tacit and explicit knowledge, following Brown & Duguid (2001), is that Polanyi (1962) was not arguing for two types of knowledge, but rather for two
dimensions. These are seen as two mutually interdependent dimensions, as the explicit dimension is based on the previously interiorized, implicit or tacit dimension (Allen, 2000, Brown & Duguid, 2001, Gertler, 2003, Howells, 2002).

3.2 The concept of transfer
In its strictest sense, the term transfer implies a physical process where the control of a resources or the resource itself is passed from one actor to another (Håkansson & Johanson 1992; Grönhaug, Haunschildt & Priefer 1999). When transferring technology, the technology is considered transferred only when the ability to apply it has been transmitted from one actor to the other. (Grönhaug et al 1999) In this context technology can be seen as the embodiment of knowledge. Davenport and Prusak (1998) include two actions in the definition of transfer: transmission and absorption. If the receiver does not absorb knowledge, there has not been transfer, only transmission. Merely making knowledge accessible does not equate transfer. Similarly, it has been argued that knowledge can be transferred, but it depends on the absorptive capacity of the actor receiving the knowledge whether the transfer is completed (successfully) or not (Nonaka & Teece, 2001).

Research of knowledge transfer in networks: Vitalizing the death of distance?
Management research on knowledge transfer can be divided into two groups: one focusing on intra-organizational transfer and communities-of-practice, (Brown & Duguid, 1996, Szulanski, 1996) and the other mainly focusing on inter-organizational transfer, i.e. across firm boundaries (Lei, Slocum, & Pitts, 1997, Powell, 1998). However, there are also studies where these two groups are combined. For example, a study by Iansiti and Clark (1994) shows that a combination of external acquisition (a capacity to access knowledge through relationships) and internal integration (i.e., the ability to transfer knowledge within the subunits of the organization) was one of the sources contributing to sustained performance at NEC and Nissan. On the intra-organizational level, the actors in the network are usually individuals or groups, while analyses of the exchange within the inter-organizational relationships usually are conducted on firms level.

3.3.1 Intra-organizational transfer and communities-of-practice
Within the intra-organizational research stream two main groupings can be identified. One stream focuses on MNCs and their problems with stickiness when purposively sharing knowledge within the multi-unit organization with formal organizational initiatives. The research (Hansen, 1999, Kogut & Zander, 1996, Szulanski, 1996, Tsai, 2001, Zander & Kogut, 1995, 1992) concentrates on the factors influencing the efficiency of knowledge transfer such as the characteristics or capabilities of the sender and the receiver, and the context, or how the network ties and position affects the sharing of knowledge. Knowledge transfer is usually viewed not only as a complex process with reconstruction and recombination of knowledge.

The other stream within the intra-organizational research, the communities-of-practice literature is concerned with the transfer and sharing of knowledge between people in a group as an emergent phenomenon. The group, formed by socialization and sharing a certain context, works as a repository of knowledge, where the individuals’ heterogeneous skills partly overlap each other and new knowledge is formed in the interaction. (Lave & Wenger, 1991, Wenger, 1998) Brown & Duguid’s (1991) communities-of-practice are closely related to Nonaka’s (1994) concept of “ba”. However, “ba” is a shared specific time and space for creation of new knowledge, not necessarily
physical, while the concept of communities of practices is rather used for sharing already existent knowledge. (Nonaka, Toyama, & Konno, 2001)

3.3.2 Inter-organizational transfer

Inter-organizational knowledge transfer can be deliberate, such as in learning agreements and joint R&D projects, or unintentional as in spill over effects and competitor imitation. The deliberate transfer has been analyzed as the key component in cooperative behaviours such as licensing, R&D cooperation, joint ventures, development of new processes etc. The transfer may be identified as interaction of employees, exchange of services, assets or patents, or publications. Through cooperation the firm to gets access to technologies, and hence the ability to develop and provide a more extensive variety of products or services, and also access to knowledge and skills beyond the firm's boundaries (Powell, 1987). The firms involved in the exchange can be actors in a supply chain, suppliers cooperating to meet a buyer’s needs, or actors on the same market level.

Extent research has been conducted on inter-organizational cooperation and transfer of knowledge between firms (Alter, 1993, Kogut, 1988, Powell, 1998, Powell, Koput, & Smith, 1996, Powell, 1987, Prahalad & Hamel, 1990, Watne, Roos, & von Krogh, 1996). The method of transfer has been studied by Appleyard (1996), however, without explicitly distinguishing between information and knowledge transfer, or examining creation of new knowledge received from the network. Others have used patent data to analyze knowledge transfer (Almeida, 1996, Mowery, Oxley, & Silverman, 1996).

The outcome of the knowledge transfer depends on several factors, where the notion of absorptive capacity (Cohen & Levinthal, 1990) has received extensive attention. Absorptive capacity is the ability of the receiver to assimilate, value and use the knowledge transferred. According to Cohen and Levinthal (1990, p 129) “…the notion of absorptive capacity is that the organization needs prior related knowledge to assimilate and use new knowledge”.

The tacit characteristics of the knowledge affect the transfer. Scholars disagree whether only explicit knowledge can be integrated through networks. Knowledge with a more tacit dimension is difficult to manage and represents a more important strategic asset than explicit knowledge. Thus it is argued that it especially in horizontal cooperation should be kept within the organisation. (Chesbrough & Teece, 1996) Similarly, there is a fear that in cooperative relationships with competitors involving knowledge transfer the firm will "nurture their competitors in unintended ways" (Lei, Slocum, & Pitts, 1997) Furthermore, as tacit knowledge is often institutionally as well as organisationally specific, co-operation is likely to be more successful between firms in similar contexts. (Lei, Slocum, & Pitts, 1997)

The knowledge acquired through cooperation with other actors may be used for different purposes. First, the firms are cooperating to achieve some kind of relationship specific knowledge or jointly create new knowledge. Second, the cooperation itself brings with it general knowledge on how to cooperate with others. This so called relational experience can then be used in other cooperative agreements. (Kale, Singh, & Perlmutter, 2000, Kale, Dyer, & Singh, 2002) Also a study of (Powell, Koput, & Smith, 1996) supports these findings, as they note that firms already are collaborating tend to increasingly enter cooperative relationships and simultaneously become better at collaborating.
3.4 Research of knowledge transfer in clusters: Resurrecting the tyranny of distance?

Shared and public knowledge forms the basis of successful localities and regions (Malecki, 2000); this is a central postulation in economic geography and regional studies. Relating to the cluster concept is the supposition that geographical concentrations of industries gain performance advantages through co-location (Doeringer & Terkla, 1995). The very basis for a knowledge-based economy, namely know-how, innovation and technology, appears to be facilitated in terms of creation and transfer by geographical proximity and when processes are localised. Thus, much research within contemporary economic geography relates to understanding the spatial dimension of innovative activity and knowledge transfer, knowledge spillovers, and the determinants and mechanisms that underlie the tendency of innovative activity to cluster (Audretsch & Feldman, 2003, Krätke, 2002, Stafford, 2003).

A cluster approach enables an enhanced understanding of the firm and its knowledge transfer through its addition and emphasis on a socio-cultural, institutional and spatial context and environment. And although the cluster concept and its typology has recently been criticised (Malmberg & Maskell, 2002, Martin & Sunley, 2003), and despite the predicted ‘death of distance’ (Cairncross, 2001), the existence of clusters is hardly debatable: materials productions, financial centres, and innovative activities remain highly clustered (Amin & Thrift, 1992, Audretsch & Feldman, 2003, Cooke, 2001, Leamer & Storper, 2001, Porter, 1998, Tödtling, 1994). The reasons for clustering is, however, less clear-cut.

According to Storper (1997) clusters are characterised by so called untraded interdependencies, which includes not only the formal and traditional buyer-supplier, input-output relationships, as emphasised in transaction-cost theory, but also informal rules, conventions, and habits for interpreting knowledge. These untraded interdependencies, "sticky" to their nature, are the locus of regional competitiveness (von Hippel, 1994).

3.4.1 Knowledge spill-overs and collective learning

A cluster-effect that has gathered much attention in contemporary EG research is that of knowledge spillovers. Although cluster studies take on many an approach, and albeit different definitions are abundant, e.g. industrial agglomeration, learning region, innovative milieu, national/regional innovation systems, industrial districts etc. (and although they are not as such denoting clusters), a common denominator is the assumption that long-term competitiveness of the firm is decided by its ability to innovate and learn continuously. (Cooke, 2001, Florida, 1995, Malmberg & Maskell, 2002)

The development of knowledge is heavily influenced by face-to-face contact and human interaction, a process that is constrained by distance. Externally acquired knowledge and information bear scanning costs and face various acquisition barriers, often correlating with distance (Howells, 2002). Another common assumption is that spatial proximity facilitates knowledge spillover (Howells, 2002, Jaffe, Trajtenberg, & Henderson, 1993, Malmberg & Maskell, 2002), and thus knowledge transfer. The explanation offered is that firms in the same industry or closely related industries trigger processes that create dynamism, flexibility, as well as enhancing learning and innovation.
The learning process itself is to a large extent a social process, be it through educational institutions or the research laboratory (Howells, 2002, Wolfe, 2002). For the individual firm, geographical proximity can facilitate contact to other firms, who have developed or adopted new technologies. These kind of formal knowledge spillovers and manifested relations in clusters are more common in vertical relationships, in other words in supplier-buyer relationships (Malmberg & Maskell, 2002). Informal knowledge spillover and knowledge sharing are harder to measure, although they are also part of the knowledge spillover process (Howells, 2000, 2002, von Hippel, 1994). Informal and unintended spillover effects may occur e.g. through workforce turnover, during joint training, or conferences (Henry & Pinch, 2001). These kinds of informal spillover processes do not presuppose a formal relationship between the actors in the cluster.

The importance of local institutions has also received deserved attention in EG literature. Institutional actors are of great importance in their role as agents they are still the main providers for infrastructure and in essence the underlying and surrounding environment, which facilitates the transfer of technology, knowledge and innovation (Clark, Tracey, & Lawton Smith, 2002, Florida, 1995).

It is also important to bear in mind that agglomerations, as such, do not necessarily produce or result in beneficial untraded interdependences or positive spillover effects (Malmberg, 1996, Saxenian, 1994). In this context it should be mentioned that there exists a difference between the terms ‘agglomeration’ and ‘cluster’, although the former is sometimes questionably used on par with the latter. Agglomerations also feature geographic proximity and intersectoral complementarity with certain external economies as a result of co-location, but these spillovers are yet to excel and transcend to the extent that is the case in clusters. Agglomerations lack the identity and capacity for establishing representative associational mechanisms that is possible in clusters (Cooke, 2001).

3.4.2 The role of the social milieu and embeddedness

It can be argued that some of the benefits derive from clusters and between the actors within, are only possible because of the social climate. A local culture, with shared values, norms and institutions facilitates the diffusion and adoption of tacit knowledge between firms. (Lundvall, 1988, Malmberg & Maskell, 2002, Storper, 1997) The marginal cost of transmitting knowledge is lowest through frequent social interaction, observation and communication (Audretsch & Feldman, 2003). In essence, a region and culture of greater interdependence and exchange among individuals can contribute to a superior innovative performance, than in regions where firms and individuals are more isolated and less interdependent (Saxenian, 1994, Scott, 1998). In clusters, spatially defined communities can be formed, thus facilitating communication, as communication gaps can be formed if the same language, beliefs, norms and values are not shared (Malmberg & Maskell, 2002). Physical proximity enables more personal relationships, which in turn, create opportunities for co-operation by heightened awareness, trust, and commitment (Eisenhardt & Schoonhoven, 1996). The importance of social embeddedness further emphasises why "proximity" (or "distance") of firms should not focus only on physical closeness, but also cultural and organisational closeness (Gertler, 1995).

However, some scholars point to the danger of over-emphasising the need for local embeddedness as a developmental mechanism (Dicken, Forsgren, & Malmberg, 1994, Tödtling, 1994, Woolcock, 1998). In order to grow and prosper a firm needs to integrate with external networks and develop a
certain autonomy from the strong local embeddedness (Woolcock, 1998), this also tends to highlight one of the downside of clusters: the problem related to path-dependency and lock-in (Arthur, 1989), another phenomenon that has captured the attention of economic geographers (Cooke & Morgan, 1998, Glasmeier, 1994, Storper, 1997) as well as geographic economists (Krugman, 1991). The criticism is also relevant as it emphasises that depending on the size (SME or TNC) and structure of the organization and industry the need for local embeddedness can vary. Whereas in some industries, such as electronics, the utilization of a global organization of R&D is more common, in other industries, such as biotechnology, transnational corporations and global networks may play less of a role in the transfer of knowledge (Bunnell & Coe, 2001). The local dimension of tacit knowledge also highlights the need to distinguish between different industries and industry structures. If it is accepted that the codified dimension of knowledge is less geographically bound than the tacit dimension, then industries that depend on more codifiable knowledge can be expected to be less dependent on location. Howells (2001) mentions the pharmaceutical industry as an industry more dependent on the codified dimension of knowledge, embodied e.g. in patents and scientific papers.

4. DISCUSSIONS AND CONCLUSIONS
In regards to knowledge-transfer research; economic geographers may face some problems concerning the object of study. Choosing regions as the object of study may juxtapose relational and organizational proximity on the one hand with geographical proximity on the other. The danger in this has been referred to as “spatial fetishism” (Amin & Cohendet, 1999, Massey, 1986, Morgan, 2001) and “regional gaze”. Space cannot be used as an explanatory factor for economic action nor can it be treated as a separate research object in isolation from economic and social embeddedness (Bathelt & Glückler 2003, Lagendijk, 2002). Rather, it has been argued that economic actors and their action/interaction should be at the core of a theoretical framework of economic geography, and not space and spatial categories. (Bathelt & Glückler, 2003) This scrutiny withstanding, the discipline displays an established, particular stream of research that emphasizes the firm as the focal unit of analysis (e.g. Krumme, 1969, Markusen, 1994, McNee, 1960, Oinas, 1998, Törnroos, 1991).

The unit of analysis is also problematic in management research on networks. Sometimes the terms network and nets are not only used interchangeably, but also each term may refer to a number of different phenomena. (Easton, 1992) The term “local networks” have also been used on par with clusters, which, as we have outlined, is misleading. In addition, network research in general has been criticized for limiting the unit of analysis to firms and industrial sectors, and not paying sufficient attention to other actors or institutions in the empirical work and analyses (Dicken, Kelly, Olds, & Yeung, 2001), especially for achieving a more thorough understanding of knowledge transfer processes (Bunnell & Coe, 2001).

It can be argued that economic geography has done well in incorporating the social, institutional and cultural understandings of knowledge transfer (Barnes, 1999, Yeung, 2001). Still, Bunnell & Coe (2001) posit for bringing networks to the forefront in knowledge transfer research within EG. It is argued that networks can help identifying the threads that link together clusters and nodes. Nevertheless, the same authors argue that cause of priority should not be given to one scale of analysis over the other.
The literature review of this paper has shown that rather similar concepts are discussed in terms of knowledge transfer and definitions of knowledge in management and EG literature. The tacitness and stickiness of knowledge are discussed in both research streams, as well as problems occurring when transferring knowledge with more tacit dimensions. The codification of tacit knowledge and discussion around whether this is possible to codify or not, has received extensive attention, and there are diverging views in both streams of literature. A lack of definitions of the phenomena networks and clusters is observable in both research streams. This in turn leads to even further confusion when attempts are made to conduct interdisciplinary research. Research on clusters has in management literature been portrayed as mainly concerned with the link between industry clusters and national competitiveness (Birkinshaw & Hood, 2000), and thus it might have adhered further management research of the concept. This portrayal might also unintendedly have advocated for the adoption of terminology such as ‘localised networks’. However, this has also been reinforced by EG’s initial unwillingness to adopt the term “cluster” as coined by Porter.

In our view, studies of internal networks transcending national borders and clusters are not necessarily mutually exclusive when it comes to transfer of knowledge and the learning process of the firm. Rather they can be mutually reinforcing and complimentary. (Keeble & Wilkinson 1999, Oinas 1999) Studies of firms in clusters can be complimented by studies of networks and supplier systems as sources of innovation (Florida, 1995). When considering the role of proximity and geography, the nature of the knowledge that is being transferred, and the context of its generation and transfer have to be taken into account and outlined (Howells, 2002).

Nevertheless, EG researchers can do well by increasingly asking themselves to what extent and how studies of (external) networks can improve EG-researchers understanding of the spatial dimension of knowledge transfer? However, when using the term ‘network’, EG research should better posit where their conception of networks stands in relation to the different network-schools. A focal shift from the ‘fuzzy’ clusters to networks cannot be done without a clear definition and typology of the latter. There seems to exist a certain notion within EG literature that the grass is greener and the definitions are clearer within network studies.

Management research on knowledge transfer can, on the other hand, be advised to pose the question; to what extent and how does studies of clusters improve management researchers understanding of the organizational dimension of knowledge transfer? Without belittling the seminal nature of Porter’s (1991), and Piore and Sabel’s (1984) contributions to cluster studies, when including the cluster term in management research it advisable to keep in mind that a lot of water has run under the bridge since these cluster studies, and that a lot of water had run beneath before. The literature review of this paper does not do justice to the breadth of cluster research; it is merely a selective sample highlighting what EG-literature can contribute in to further understanding the process of knowledge transfer.

Our conclusion is that researchers in general seem to increasingly acknowledge the importance of studying both the effect of and the need for geographical proximity and external networks for the knowledge transfer process. This view is seemingly embodied in the so-called “ecology-of-knowledge”-approach, as advocated by Morgan (2001) and coined by Brown and Duguid (2000). This approach is neither shackled by the spatial nor the organizational fetishism. It acknowledges the firm as the main actor, but without trivializing the role of proximity. As Morgan (2001 p. 15) puts it:
“The spatial core of these ecologies of knowledge may be a regional cluster, but the outer boundaries might straddle multiple spatial scales, from the local to the global, because some of the firms which constitute the ecology will be multi-locational organizations.”

We believe that this is a purposeful starting point for further research on knowledge transfer.

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Creative Geographies of Competitive Fear

Between solid place and liquid imperatives

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(UNPUBLISHED)
1 INTRODUCTION

Place has historically been mobilized in and for political argument and action in economic discourse (Massey 2005), but equally important as the very imagination of place and its symbolic value has been an imagined erasure of place - a deterritorialisation of the economy, if not society (Ley, 2004, Elden 2005). Discourse that focuses on the threat against place and deterritorialisation of the economy tend to rely heavily on the symbolic value of place/space rather than marginalizing it – indeed one would be hard pressed to find a text on globalization that is not focusing on the intersection between places and flows. In globalization discourse there is a constant juxtaposition of images and imaginations of liquidity/flow through increased and accelerated circulation of people, corporations, capital, commodities and images on the one hand and on the other, geographical places: solid and immobile containers of community and culture (Zukin 1991, Castells 1996, Brenner 1999, Bauman 2000).

Place is also increasingly central in economic discourse as it is the domain not only for economic actions and actors but also signs traditionally considered ‘non-economic’, such as social interaction, culture and community. A current trend in both economic practice and discourse has been an increased understanding of non-economic signs and mechanisms in relation to and as a means for competitive advantages (Lash & Urry 1994; Thrift, 1999, 2005, Fougère and Solitander 2010). This is a discourse where ‘the social is brought into the economic’ (Vatne and Taylor 2000b, p.6) and where place is given a strong mediating role as it encapsulates and embeds both economic and non-economic practice. Historically, economic geography as an academic discipline, has both directly and indirectly been an important force in legitimizing, producing and reproducing these discourses where the social is brought into the economic - be it through the idea of industrial districts (Becattini 1975, 1978, 1989; Piore & Sabel, 1984), clusters (Porter 1990), national and regional innovation systems (Lundvall 1992, Braczyk, Cooke & Heidenreich 1998), or learning regions (Asheim 1996, Morgan 1997).

One of the latest and arguably one of the most forceful articulations, which explicitly focuses on the intersection of place/flows and culture/economy is the creative economy discourse. The creative economy discourse is firmly anchored in well-trodden ground within economic geographic literature: The challenge of economic development as situated within particular places that are increasingly through globalization linked by flows of different forms of capital (Florida 2002, 2003, 2004, Landry 2000, Power and Hallencreutz 2004, Törnqvist 2005). What is new and particular of this discourse as opposed to its previous articulations is, on the one hand, an almost complete erasure of boundaries between the domains of economy and culture, and the focus, and production, of a new subject position: the creative worker; ‘a new subject who is cooler, hipper, more urban, more tolerant, more talented, more caring and humane and, most importantly, more competitive than in the previous articulations’ (Fougère and Solitander 2010, 42). The creative economy ethos has been eagerly embraced by policymakers and corporations alike; 2009 was declared the European Year of Creativity and Innovation, wherein the key message was to get across to the citizens and member states how “creativity and innovation contribute to economic prosperity as well as to social and individual wellbeing” (http://create2009.europa.eu/) and how regional and local development strategies should increasingly be based on creativity and innovation in order to ensure competitiveness, and during the year the creativity researcher/guru/consultant Richard Florida was appointed “European Ambassador for Creativity and Innovation”; UNCTAD has launched a “Creative Economy and Industries Programme” in order to promote the creative economy as a new source of growth for developing regions (http://www.unctad.org/); in 2004 UNESCO launched the “The Creative Cities Network” as cities “are increasingly playing a vital role in harnessing
creativity for economic and social development” (unesco.org); in Finland the city of Helsinki – like numerous other cities/capitals around the world, such as Singapore, Vienna and Toronto, is basing its competitiveness strategy around the proposed link between competitiveness-creativity-place.

From the perspective of economic geography as a discipline, the interest from policymakers, firms and academia has been important because it has involved a rearticulation of the very meaning – and importance - of place in relation to (economic) signs. This is important as globalization and knowledge economy discourse produce images of increasingly mobile actors – contemporary society is seemingly built on an ethos of mobility. This mobility - or rather liquidity - goes beyond the movement of capital, which traditionally has been of central interest within economic geographic writing. Indeed, as Bauman and Tester state: ‘what is valued today (by choice as much as by unchosen necessity) is the ability to be on the move, to travel light and at short notice. Power is measured by the speed with which responsibilities can be escaped. Who accelerates, wins; who stays put, loses’ (Bauman and Tester, 2001: 95). Through the concept of liquid modernity Bauman describes how contemporary society is defined in terms of ‘liquidity’: constant and perpetual movement. The concept is interesting because it goes beyond the processes that David Harvey has referred to as the terror of time-space compression (Harvey 1990a), which in turn is building on Marx (1858) writings concerning the historically uneasy relationship between capital and space:

... while capital must on one side strive to tear down every spatial barrier to intercourse, i.e. to exchange, and conquer the whole earth for its market, it strives on the other side to annihilate this space with time, i.e. to reduce to a minimum the time spent in motion from one place to another. (Marx 1858, p.538)

These ideas have been visible in some form in most articulations that concern the interface between place/flows, economy/culture– but in its latest articulation, what I in this paper refer to as creative economy discourse, liquidity as a value goes beyond the movement of capital, such as the physical travel of people and the physical movement of goods, communicative travel (person to person messaging through letters e-mails and videoconferencing), virtual travel (through e.g. Internet) and even imaginative travel (e.g. through texts, TV, films). Liquidity becomes a basis for subject formation. In the creative economy discourse this subject position is built upon e.g. fast and instant consumption, a perpetual desire for new things, episodic careers (so called portfolio careers) and family life, flexibility and adaptability.

The aim of this paper is to create an understanding of how the creative economy discourse is legitimized, produced and reproduced. In doing so the paper looks at what discourses the creative economy discourse draws on, and how and by what means it is legitimized – I am particularly interested in understanding the role of place in legitimizing the creativity discourse. The paper is inspired by discourse theory (Laclau and Mouffe 1987, Jörgensen and Phillips 2002) in looking at how discourse is legitimized. The paper presents a genealogical reading of the creative economy discourse as the latest articulation of discourse that focus on the interface of place/flows and culture/economy. By a genealogical reading I refer to research that seeks to identify important developments that lead up to the present discursive order (Foucault 1988). Genealogy is here used as a particular form of historical analysis that attempts to diagnose the present by comparing it with historical accounts and as a result question the self-evident and the naturalised understandings of the present (Skålen et al 2006).

In order to delimit myself and make the project at hand manageable I have used three documents as the starting point (while supplementing with insights from others) for the
analysis of the creative economy discourse: the writings of Richard Florida, whose academic work (Florida 2002, 2005, 2007) is central for the scientific legitimization of the creative economy discourse; The European Council’s (2009) “Conclusions on the contribution of the cultural and creative sectors to the achievement of the Lisbon objectives” and the European Commission’s (2010) Green Paper “Unlocking the potential of cultural and creative industries”, which are central policy documents for the European Union’s strategy for the creative economy; and UNCTAD’s (2008) report “The Creative Economy Report”, which demarcated the first “multi-agency study to present the United Nations system-wide perspective” (www.unctad.org) on the topic, the report is particularly interesting both in terms of the scale (global) and in terms of audience; developing regions.

The paper is structured as follows: the first part introduces some methodological considerations and concepts, the second part introduces the creative economy discourse as the third periodisation of economic geographic discourse that focuses on the interface of place/flows and culture/economy as the basis for development, in the third section I discuss the implications of the particularities of this third periodisation through Bauman’s concept of liquid modernity.

**Discourse theory, genealogy and periodisation**

This paper is inspired by discourse theory (Laclau and Mouffe 1987, Jörgensen and Phillips 2002), as it aims to analyse how within the creative economy discourse meaning systems and strategies are created, accepted and naturalized, and how they affect individuals, the economic landscape and society at large. In terms of the methodological foundation I herein draw explicitly on the work of Skålén, Fougère and Fellesson (2008) who have analyzed marketing discourse through the lens of discourse theory.

By drawing on discourse theory some central epistemological and ontological tenets that this paper rests on can be identified (Jörgensen and Philips 2002, p.5):

1) As with the whole field of discourse analysis, the paper takes a critical approach to taken for granted knowledge, naturalized understandings and objective truths. It rests on the understanding that our knowledge and representation of the world is products of discourse.

2) Our knowledge of the world is historically and culturally situated and contingent. The notion of contingency is in this context central, as it indicates what is possible- but not necessary. Our identities and perception of the world could have been different, and they are not fixed, they can change over time. Discourse is a social action that is part in the production of the social. Knowledge, identities and social relations are constructed socially and thus not pregiven or determined by external conditions.

3) There is a strong link between knowledge and social processes. Knowledge is created by social interactions by which some truths are naturalised, and by which there is a struggle over what is “true” and “false”.

4) There is a strong link between knowledge and social action. Within some discourses some forms of action will be naturalized while other forms of action will become unthinkable and marginalized. The construction of knowledge will thus have clear social consequences.
Discourse theory is focused on looking at articulations, practices that establish relations between different elements of discourse, and in doing that question what meanings are being established in the discourse and what meanings are potentially excluded. The proposition within discourse theory is that articulations can be investigated in relation to particular discourses by addressing two central questions (Jørgensen and Phillips 2002, 30-31):

1) What discourses do articulations draw on- i.e. what discourses are being reproduced?;

and

2) Does the articulation challenge or transform existing discourse by redefining the meaning of signs?

A discourse is a “structured totality resulting from articulatory practice” (Laclau and Mouffe 1985, p.105), it is a fixation of meaning within a particular domain (Jørgensen and Phillips, p. 26). Discourses, as unified systems of meaning, are perhaps foremost created by the exclusion of other possible and competing meanings. In discourse, signs derive meaning from their difference and relations to each other. Discourses are established as signs are fixed as moments (Jørgensen and Phillips, p. 26). A moment is an ‘undisputed sign’, a temporary fixation of meaning in the discourse. The fixation of meaning is, however, always contingent - possible but not necessary. Contingency is based upon the notion of elements, signs whose meaning has not yet been fixed (Skålén et al 2008, 40), they are not, in the words of Laclau and Mouffe (1985, 105) “discursively articulated”. Articulatory practices try to turn elements into moments, thus fixing the signs of the discourse. Discourse is by this understanding seen as a temporary closure of meaning, as the closure is always contingent. Discourses are attempts to dominate and “arrest the flow of differences, to construct a centre” (Laclau and Mouffe 1985, 112). Identifying such centres is central to discourse analysis.

Jørgensen and Phillips (2002) suggest that a starting point for research using discourse theory is to identify nodal points of discourse. Nodal points are privileged signs around which other signs are ordered and through which other signs acquire meaning. Nodal points act as centre of discourse and organize discourses. But in themselves the nodal points are ‘empty’ signs until inserted in discourse. For example, in cluster discourse ‘competitiveness’ is a privileged sign around which other elements of the discourse gain meaning. However, “competitiveness” by itself is empty, it only gains meaning by combining it to other signs such as “productivity” and “international competition”. Signs that are especially open to meaning are called floating signifiers (Laclau 1990). The distinction between a floating signifier and a nodal point is that the former refers to a struggle of meaning between different discourses competing in the same terrain, e.g. in some instances the discourses of art and economic development while being separate discourses might share signs that each try to fix meaning to. ‘Creativity’ would be an example of a floating signifier in the struggle of meaning between art discourse and economic discourse. Floating signifiers are signs that at the same time are part of several (antagonistic) discourses, and can thus have distinct meanings within each of them (Skålén et al 2008). The two can coincide and a nodal point of one discourse can be redefined or changed from the outside.

The concept of problematisations can be used to find important changes in discourse (Skålén et al 2006). Problematisations are articulatory practices that aim at turning moments into elements i.e signs whose meaning is not fixed. Problematisations thus rearticulate discourse and ascribe it with new meaning (Skålén 2010, 108). Problematisations are part of genealogical analysis as they can pin-point important “changes, displacements, elaborations and developments in the managerial and governmental rationality”(Skålén et al 2006, 279) of a certain discourse. By applying these concepts it is possible to identify periodisations in
particular discourses. Periodisations demarcate important and fundamental changes in the discourse in terms of the rationality promoted as well as the governmental technologies and practices being promoted in order to achieve government (Skålén et al 2008, 45).

The rise of the creative economy discourse

Creativity has become the principal driving force in the growth and development of cities, regions and nations (Florida 2005, 1 [emphasis of the original text])

Culture and creativity are driving forces for the development of European regions and cities, as they enhance local attractiveness and help revitalise local economies, including through the clustering of cultural and creative industries at local and regional level (Council of the European Union 2009, 4)

In the contemporary world, a new development paradigm is emerging that links the economy and culture, embracing economic, cultural, technological and social aspects of development at both the macro and micro levels. Central to the new paradigm is the fact that creativity, knowledge and access to information are increasingly recognized as powerful engines driving economic growth and promoting development in a globalizing world. (UNCTAD, 2008, 3)

When aiming to trace the rise of the creative economy discourse there is a need to first establish some central underpinnings of the discourse. The creative economy discourse is broadly, yet in essence, focused on issues around development. Development is, to use the terminology of discourse theory, the order of discourse. Order of discourse refers to the “common platform of different discourses” (Jörgensen and Phillips, 2002, .144) that compete in the same terrain. But development in itself is an empty signifier, it is devoid of meaning unless put into a context: We can understand development differently if it gains meaning in the context of human development, personal development, organizational development, sustainable development etc. What defines creative economy discourse is an understanding of development in relation to competitiveness - this is a also the conceptual starting point and delimitation of the analysis in this paper. Competitiveness is a nodal point of the creative economy discourse, as it is around this sign that the whole discourse is organized, as illustrated in the three texts:

In today’s economy, creativity and competitiveness go hand in hand (Florida 2004, 3)

The development dimension of the creative economy is the guiding principle of this Report. Developing countries can further integrate into the global economy by nurturing their creative capacities and enhancing the competitiveness of their creative goods and services in world markets (UNCTAD, 2008, 5)

Culture, creativity and innovation are vital for the competitiveness and development of our economies and our societies and are all the more important in times of rapid changes and serious challenges (Council of the European Union 2009, 3)

Competitiveness brings us to the first (overlapping) period of the creative economy discourse, the Competitive Economy Period, which approximately began around the mid-1980s, and cemented itself through the publication of Michael Porter’s seminal work The Competitive Advantage of Nations in 1990. Whereas the disciplinary roots of the creative economy discourse’s articulations that concern the interface between place/flows, economy/culture can
be traced back as far as Alfred Marshall’s writings (1899; 1927), and while these historical writings are part of the legitimization of the current discourse as they are extensively referred to and cited, in order to understand how the current discourse is so naturalized and pervasive, it is more important to understand how modern capitalism produces and diffuses knowledge about itself. If Michael Porter’s notion of clusters and competitive advantage ‘actually’ brought something new, rather than something borrowed (Martin & Sunley 2002), to the academic table is of less interest for this paper, what is more important is understanding how it came to legitimize certain meanings. In this context, Nigel Thrift’s concept of the ‘cultural circuit of capitalism’ is a useful tool. According to Thrift (2005) what characterizes capitalism post-1960s, and what is of pivotal understanding of understanding how current governmental regimes (including the creative ethos) are legitimized, is the discursive apparatus referred to as the cultural circuit of capitalism. The cultural circuit of capitalism refers to “business schools, management consultants, management gurus and the media” (Thrift 2005, 6) that legitimate certain virtual notions (such as networks, clusters, knowledge economy, the creative class) and embody them into various guises of consulting solutions that in turn (re-)produces the reality that they posit to depict. If we are to understand the rise of the creative economy discourse, then positioning it within the cultural circuit of capitalism is a good starting point.


An important approach to economic analysis applied to the creative sector is the model of creative clusters due to Michael Porter (UNCTAD 2008, 66)

If Europe wants to remain competitive in this changing global environment, it needs to put in place the right conditions for creativity and innovation to flourish in a new entrepreneurial culture (European Commission Green Paper 2010, 2)

Even though discourse is not created, sustained or steered by any one individual, the importance of Michael Porter, a management consultant, guru and scholar within strategic management should not be underestimated if we are to understand how the current meaning of creative economy discourse has become sedimented and legitimized as a dominant paradigm in the domain of theory, strategy and policy. While discourse theory reminds us that power is something that is exercised rather than possessed and is not attached to agents but rather is incorporated myriads practices (Jörgensen and Philips 2002, Foucault 1991), Porter is well positioned as a node in the practice of the cultural circuit of capitalism, “which through its continuous production of propositional and prescriptive knowledge, has the power to make its theories and descriptions of the world come alive in new built form...this form of capitalism has become a remarkably powerful formation in a remarkably short time and is now a permanent feature of capitalism” (Thrift 2005, 11). Although Porter is often attached to the subject position of a business strategist, his work has been hugely influential, both as a theory and as an source of inspiration for rekindling the imaginations of the role of geography within mainstream economics (c.f. Krugman 1995).

Porter successfully ‘sold’ the cluster approach as a paradigmatic solution for all stagnating regions around the world. Cluster policies should be based on sketches of best practice, without much thought going into contingency and historical context. Part of a cluster’s success should be the very act of writing about it, “Successes should be widely publicized.” (Porter 2000, p.32), an idea which is much in the spirit of the cultural circuit of capitalism, through the interweaving of practice and the writing about it, the production and reproduction of discourse.

The basis for Porter’s work ‘The Competitive Advantage of Nations’ is the question why some firms based in particular places succeed against foreign rivals in a particular industry segment
A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities. The geographic scope of clusters ranges from a region, a state, or even a single city to span nearby or neighboring countries...The geographic scope of a cluster relates to the distance over which informational, transactional, incentive, and other efficiencies occur. More than single industries, clusters encompass an array of linked industries and other entities important to competition...

Porter’s cluster concept is foremost understood in relation to competitiveness: “Although the phenomenon of clusters in one form or another has been recognized and explored in a range of literatures, clusters cannot be understood independent of a broader theory of competition and competitive strategy in a global economy” (Porter 2000, p.16). He deploys clusters in order to validate a particular understanding of competitiveness:

Location affects competitive advantage through its influence on productivity and especially on productivity growth....Prosperity depends on the productivity with which factors are used and upgraded in a particular location... Standard of living is determined by the productivity of a nation’s economy, which is measured by the value of the goods and services (products) produced per unit of the nation's human, capital, and physical resources. Productivity, then, defines competitiveness. The concept of productivity must encompass both the value (prices) that a nation’s products command in the marketplace and the efficiency with which standard units are produced.

According to Schoenberger (1998) it is through the naturalization of such a particular understanding of competitiveness that clusters, here considered as a material reality of the competitiveness discourse, has gone largely unquestioned and internalized even by people whose interests are not served by its increasing dominance. She concludes that competitiveness has become hegemonic and naturalized: “It is a culturally and socially sanctioned category that, when invoked, can completely halt public discussion of public or private activities. There is virtually no counterargument available to the simple claim that ‘doing X will make us uncompetitive,’ whatever X and whomever ‘us’ might be.” (Schoenberger 1998, 3). The competitiveness imperative is central in the creative economy discourse:

With the increasing knowledge intensity of the contemporary economy and the need for innovation to maintain competitive advantage, it has become imperative for countries to tap into their vast reserves of creativity (UNCTAD, 2008, 5)

As a key signifier in neoliberalism and neoliberal discourse, competitiveness is being attached to certain characteristics of place. The places of competitiveness are portrayed as free markets, liberated from most forms of state intervention (Brenner and Theodore 2002). Contrastingly, in her analysis of modern capitalism, Zukin (1992) distinguishes between markets; “the economic forces that detach people from established social institutions”, and place; “the spatial forms that anchor [people] to the social world, providing the basis of a stable identity’ (Zukin 1992: 223). This shows how the meaning of place itself is contested, in traditional neoliberal discourse people are not central to the understanding of place, but firms are. In such discourse firms innovate, not people. In neoliberal discourse place itself becomes a threat, a source of fear for people. Place is not an anchor that provides a basis of stable identity as in the discourse that Zukin reproduces, rather place is understood in relation to immobility, uncompetitiveness and
unwillingness to change – thus forcing firms to seek out ‘better’, more competitive environments. The competitiveness discourse firmly situates places as the immobile entity that is subjugated to the increased mobility of all forms of capital. The capital flows out of uncompetitive places towards competitive environments - be they foreign (often named in academic texts as China and India) or anonymous neighboring cities and regions. To strengthen the image of mobility, there is also a “race” between places: “Cities are locked in competition to attract, keep or grow their own creative classes, and the factors that contribute to this” (UNCTAD 2008, 18); “At any given time regions compete with one another for talent” (Florida 2005, 91).

In the competitive economy discourse place is understood as a) the market and b) the home base of the multinational firm, it gains its meaning in relation to the characteristics it provides to the positive business environment:

Clusters suggest that a good deal of competitive advantage lies outside companies and even outside their industries, residing instead in the locations at which their business units are based. This creates important new agendas for management that rarely are recognized... Cluster thinking suggests that companies have a tangible and important stake in the business environments where they are located in ways that go far beyond taxes, electricity costs, and wage rates... Many clusters include governmental and other institutions (e.g., universities, think tanks, vocational training providers, standards-setting agencies, trade associations) that provide specialized training, education, information, research, and technical support (Porter 2000, 15-16).

The systemic-perspective facilitates an all-inclusiveness, as it challenges orthodox vocabularies of politics:

An additional advantage is that [a cluster perspective] contributes to the bridging of a number of more or less artificial and chaotic conceptual divides that characterize so much work in economic geography and related disciplines. These include, for example, manufacturing vs. services, high tech vs. low tech, large companies vs. SMEs, public and private activities etc. (Malmberg and Powers 2003, p.4)

This facilitation of breaking down such dichotomies is inherent not only through cluster discourse but the larger discourse of globalization, that contests “the dichotomies of traditional political thought” (Rose 1999, p.2) Cluster discourse recreates the traditional and conventional notions of the national state, as it spatializes power along new dimensions. It both fragments and strengthens the image of the national state. The first and foremost dichotomy that is challenges is that of the local and global. Clusters are regional nodes in the global flows of money, products, individuals and knowledge. In “The Competitive Advantage of Nations” power is more visibly outlined along national boundaries, but in subsequent reproductions of the discourse the focus shifts towards subnational regions. Both conceptualizations, however, reject the traditional image of a single national economy and a single source of law, governance and authority, i.e. the national state.

The establishment of the systemic nature of innovation and economic activity is very important if we are to look at practice. The European Commission states that “European Innovation Policy has evolved over time. In the 1970s it focused on R&D, in the 1980s it was based on knowledge transfer. In the 1990s it was recognised that innovation is not a linear process, (research – development - exploitation), but is the product of a more complex system involving a network of players, among others, universities, researchers, public authorities and businesses.” The systemic nature of clusters is important also in terms of its influence on the creative economy discourse, not only by creating an understanding where different industry sectors, such as the
design sector and, say the as it opens up for understanding everything in society, even elements previously considered outside of the economic sphere in relation to competitiveness. For example, the role of universities and education in general becomes understood as the specialist input it can provide firms with, and sense clusters per definition ‘include’ non-business actors, these are by definition shackled to the productivity/competitiveness imperative. Consider for example when The Council of the European Union invites the member States

“WITH A VIEW TO STRENGTHENING THE LINK BETWEEN EDUCATION, TRAINING AND THE CULTURAL AND CREATIVE SECTORS [capital letters of the original text] … to assess whether the management aspects are sufficiently addressed in cultural and heritage studies and training schemes and promote the availability of managerial, business and entrepreneurial training capacities specifically tailored for professionals in the cultural and creative industries, and strengthen the cultural dimension in economics and business studies

In summary a clustered/competitiveness view of not just the economy but society, promotes an understanding that the qualities of a (competitive) place are not inherited, unlike for example the access to natural resources and that these qualities can be and should be developed. The difference is that the qualities will not be shaped by regulation of the economy or through state intervention, but rather through what Porter refers to as “animation” and “facilitation” (Porter 2000, 26). The animation, based on the notion of managerialism, which assumes that everything in society can and should be managed, the management will increasingly be driven by firms (as agents for the market) and the facilitation by the government. The facilitation is to be done in understanding and cooperation with the MNCs, based on their needs of achieving competitive advantages.

The proposition that was also reproduced within economic geography stated that through increased mobility, the qualities of place have become much more important for the increasingly mobile multinational capital (Harvey 1993). The proposed locational shift is often portrayed in relation the “Other”, the non-western nation (often China, India and/or Brazil), abundant of low-wage, low-skill work force, who possess little or no knowledge that can be commodified. As the competitive cluster discourse was further developed the focus became increasingly on signs such as knowledge, innovation, and creativity. These signs were inserted as qualities of competitive places, or possible qualities of place that will keep the western deindustrialising regions one step ahead of the running pack of the developing and newly industrialised countries. This shift in focus and the increased importance of non-economic and soft signs also led to a gradual reformulation and a turning point in the discourse. The critique towards the competitive cluster discourse not least the critique of the monofocus on corporate involvement and economic imperatives as a solution for regional development (Harrison and Glasmeier 1997, Schoenberger 1998, Martin and Sunley 2003), was also instrumental for the development of cluster discourse – and the critique itself became appropriated in the dominant discourse, as will be show in the following section.


The built environment – the stage, the setting, the container – is crucial for establishing a milieu. Essentially, the city is seen as a complex adaptive system where a more holistic approach creates “systemic creativity” and where creativity is leveraged in the entire community. This milieu creates the mood of the city, the atmosphere and its culture. (Landry in UNCTAD 2008,

...there seems to be a need to broaden the discussion by bringing together the various elements at all levels, including at European level, where the players can cooperate on
concrete actions in a number of fields of strategic interest. As an example, the setting up of meeting places and "laboratories" for user-centred and open innovation and experimentation, where various disciplines work together should be promoted; intermediaries or brokers between different sectors and disciplines should be encouraged.

A reoccurring critique against the reformulation between competitiveness and regions, most notably the form popularized by Porter (1990), evolved not least around the inability to reconcile the respective and reciprocal roles of local standard of living with firm competitiveness (Bristow, 2005, Schoenberger, 1998). But in the periodisation that followed the competitive economy period, in what I refer to as the Community Period such critique became increasingly appropriated through the fusion of the economic, social and cultural landscape into the language of capitalism. This can be seen as performative capitalism (Thrift, 2005, 4), wherein a defining feature is capitalism’s ability to be highly adaptive and a constantly mutating formation. This includes adopting the language of its critique (ibid.). The recent focus on learning and more recently, creativity, with its strong associations to arts, individual artists and the cultural sphere in general, are a case of the point. Competitiveness is still a key signifier, but other “softer” signs are positioned in relation to it. Further, territory itself is ascribed agency in the processes of soft capitalism, i.e. ‘learning capacity is expressed by the territory’.

In the mid-1990s with the rise of the Knowledge Economy there was an increased interest towards innovation among research, as now innovation was increasingly posited as the central building block for competitiveness. One of the aspects that was frequently pointed out and referred to was the importance of sharing, collaboration, community, cooperation and trust. This can be seen as part of problematising the mono-focus of the competitiveness discourse on competition. In the mid 1990s there was a clear shift in research towards an emphasis on non-economic mechanisms as means for competitive advantages (Thrift, 1999, 2005). Managerial rhetoric of the knowledge economy came with “supposedly caring and sharing ethos” (Thrift, 2005, p. 11). The dominant view became that knowledge was not a “solitary venture” but rather produced within communities (Amin and Cohendet, 2004, p. 142). Communities became understood not in terms of geographical spaces as in traditional societies but rather as firm communities, spanning intra- and interorganizational networks. There was a great sense of optimism as the community approach seemed to suggest a shift from the “predictable systemic exploitative logic” of industrialism (O’Donnell et al., 2003, p. 87), this time also saw a newfound interest in the writings of Alfred Marshall and his notion of industrial atmosphere. Marshall had referred to an ‘industrial atmosphere’ (Marshall 1927, p.287) where “great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously” (Marshall 1899, p.152). Although this idea was not thoroughly elaborated by Marshall it is found resonance with the ‘soft’ and socio-economic understanding of the economic community discourse: the social was brought into the economic (Vatne and Taylor 2000b, p.6) at full force.

The contention is that there is something more in the success of clusters, such as Silicon Valley or the new industrial districts in Italy, than “mere” external economies (Florida 1995b; Piore and Sabel 1984; Saxenian 1994). The position is that agglomerations themselves are a source of innovation and industrial dynamics (Storper 1997). The Community period is contextualized in the ‘cultural turn’ of economic geographic research, which reflects a postmodern reflexive capitalism in which culture and economy are inherently intertwined (Barnes 2003) this stream of literature draws on sociology, and particularly the social network theory on embeddedness (Granovetter 1985) and philosophy of knowledge (Polanyi 1962).

The community discourse was reproduced in economic geographic theories about localized learning (Asheim 2001; Cooke 2002; Florida 1995b; Maskell and Malmberg 1999; Morgan
2004) and regional innovation systems (c.f. Asheim and Isaksen 2002a; Braczyk et al. 1998; Cooke et al. 1997), which in turn were produced materially in exclusive economic locations such as business parks and science parks. This periodisation clearly builds on the foundations laid by the competitiveness discourse but it adds an explicit link between (deindustrialised) place, through its embedding of firms (Oinas 1998) and as a cultural container and innovation, knowledge production, learning and creativity. In the community period place is invoked as an alternative basis for innovation, juxtaposed to the placeless multinational corporation. Innovation is thus seen as a particular (potential) characteristic and quality of particular places, in this case clusters, understood interchangeably as a metaphor, a territorial configuration and a form of organization. Adopting a particular interpretation of Michael Polanyi’s (1962) distinction of tacit and explicit knowledge, the community discourse often assigned tacit knowledge to the particular space of the local, and explicit knowledge to the extra-local spaces of globalization (Allen 2000b). In Marshall’s (1899) terminology much of the research within the community perspective was preoccupied with how to create and develop certain places into spaces of ‘unconscious learning’ through the creation of something aching to community or communal learning. The relation between community and innovation and competitiveness was gradually reformulated, but without any successful challenge the hegemony of competitiveness at the center of discourse.

Over the last decade the notion of innovative clusters developed into a paradigmatic solution, and has been fostered within economic geography as a dominant paradigmatic solution for both exporting the ideas of economic geography to other ‘bigger’ economic and management related disciplines (Grabher 2006; Massey 2005), as well as enhancing the importance of economic geographic theory in policy-making (Lovering 1999; Martin and Sunley 2003). As a generic term, “New Regionalism” came to describe many of the policy-led theories produced within the discourse (Lovering 1999). For example a strategy document released by the European Commission in 2007 and which was to act as a basis for a more coherent European creative industry policy stated that:

The European Union is not just an economic process or a trading power, it is already widely - and accurately - perceived as an unprecedented and successful social and cultural project. The EU is, and must aspire to become even more, an example of a “soft power” founded on norms and values such as human dignity, solidarity, tolerance, freedom of expression, respect for diversity and intercultural dialogue...Europe’s cultural richness based on its diversity is also, and increasingly so, an important asset in an immaterial and knowledge-based world...As was recognised by the conclusions of the 2007 Spring European Council, creative entrepreneurs and a vibrant cultural industry are a unique source of innovation for the future. This potential must be recognised even more and fully tapped. (SEC, 2007/570, p.3.)

Here, the soft aspects are interwoven into the language of the economic; they become an “important asset” of international competitiveness. The economic project is reframed as social and cultural project through mediating the understanding of competitiveness in relation to “soft assets”. Yet the economic remains the key signifier from which the latter gather their meaning. Human dignity, solidarity, tolerance, freedom of expression, respect for diversity and intercultural dialogue are framed as assets and sources of innovation in an immaterial and knowledge-based world. Little difference or tension seemingly remains in “the cultural” (project) and the “economic”, or more extremely between signs such as “competitiveness” and “human dignity”, which can be seen as an implication of hegemonic discourse.

As the discourse was increasingly concerned with learning as practice, the individual worker/manager became an increasingly important element of discourse – learning and thus innovation became an embodied practice. According to Thrift (2005, 139) it gave rise to practices that used the body as a key element of the processes of learning, with the aim of
producing “better (i.e. more productive, more valuable) business through active participation in heightened practices of interaction”. The discourse reproduced work from the 1970s on experimental learning, what was at stake was “unlocking the potential of the management body, and most particularly the potential to innovate” (Thrift 2005, 140). What was different, and what is leading up to the turning point was that by making the management/worker body ‘visible’ so that it can be worked upon could not happen in an unduly prescriptive way (ibid), after all - the value on top of the discursive ladder is (a sense of) freedom and mobility.

The shift from community to the individual (what is being governed by discourse) and from prescription to freedom (how we are being governed) leads to the second turning point and third periodisation of the discourse.

The Creativity Period

... the twenty-first century has seen a growing understanding of the interface between creativity, culture and economics, the rationale behind the emerging concept of the “creative economy”... It entails a shift from the conventional models towards a multidisciplinary model dealing with the interface between economics, culture and technology and centred on the predominance of services and creative content. (UNCTAD 2008, 3-4)

UNCTAD has enlarged the focus of its policy-oriented analysis, emphasizing four key objectives in its approach to the creative economy: 1) to reconcile national cultural objectives with technological and international trade policies (UNCTAD 2008, 15)

For the members of the Creative Class, every aspect and every manifestation of creativity—technological, cultural and economic—is interlinked and inseparable (Florida 2004, 8)

The latest periodisation of the cluster discourse is in many respects similar to the previous period - most visibly through many common signs and elements of discourse, competitiveness, interregional competition and the importance of soft and non-economic signs in legitimizing the discourse (Solitander 2009, Fougere & Solitander 2010). The “soft and caring ethos” is seemingly amplified manifolds, and signs such as ‘industrial design’ become discursive bridges between culture and economy:

The mission of design is building sustainable, human-centred, creative societies. Human-centred design thinking, when rooted in universal and sustainable principles, has the power to fundamentally improve our world. It can deliver economic, ecological, social and cultural benefits to our societies and to all people, improve our quality of life, and create optimism about the future and individual and shared happiness (Sotamaa in Open Helsinki, Helsinki World Design City Applications, 2009)

If it is as Schoenberger describes (1998) that there is virtually no counterargument available to the competitiveness imperative, then adding the understanding of human-centered and happiness producing design in relation of competitiveness completes the hegemony. Who can be against shared happiness for all? The critique of the discourse’s lack of human centricity has been effectively appropriated; we are at a point where productivity seemingly equals happiness.

Cynicism aside, the quotation above is revealing as it reveals the most important shift and transformation in the discourse, the shift is now from the community to the individual. The increased emphasis on the processes of creativity produces a new subject position in the division
of labour, the creative worker/producer/citizen, articulated most explicitly in Richard Florida’s (2002, 2005, 2007) concept of the Creative Class:

...this new type of "entrepreneurial individuals" or "entrepreneurial cultural workers"...no longer fit into previously typical patterns of full time professions (European Commission, Green Paper 2010, 11)

The emphasis on individual is especially important as it enables what Rose (1999) refers to as government though freedom. By addressing the individuals directly the discourse is more directly engaged with the methods of acting upon others to produce subject effects: Advanced liberal government’ relies on ‘freedom’ to govern populations, here the subjects govern themselves by aspiring to norms that are both ‘socially worthy’ and ‘personally desirable’ (Rose, 1999, p.76), governing thus occur through facilitative rather than prohibitory mechanisms (Clegg et al., 2006). The discursive apparatus that is the cultural circuit of capitalism (Thrift 2005) is central in the subjectification process, as it contributes to prescribing how individuals in the domains addressed (e.g. the creative class) should constitute themselves, and in defining what is socially worthy and personally desirable.

I have analysed more in-depth the subjectification process of the creative class and the mechanism of government elsewhere (see Fougeré & Solitander 2010, Solitander 2009), herein I will address more particularly the role of space in the subjectification process of the new creative worker and in relation to this the centrality of the value of 1) speed/mobility and 2) individuality in creativity discourse. Bauman (2000) uses the metaphor of liquid modernity to describe the present state of modernity. In the liquid modernity of the creative class the values that are made valuable and socially worthy, are those were mobility and speed are imperative:

“Researchers who do leave the university to start companies need quick access to venture capital, top management and marketing employees, fast and cheap Internet connections, and a pool of smart people from which to draw employees. They will not stick around the area if they can’t find all these things. What’s more, young graduates know they will probably change employers as many as three times in 10 years” (Florida 2005, 151)

According to Bauman (2005) we are now witnessing “the revenge of nomadism over the principle of territoriality and settlement. In the fluid stage of modernity, the settled majority is ruled by the nomadic extritorial elite.” The speed and mobility does not only concern movement from one geographical place to another, but everything in life, relationships, employment – there is no time to solidify for anything that could serve as a frame of reference for actions or any long-term planning, the idea of a career (if it is not a ‘portfolio career’) is made “nebulous and utterly out of place” (Bauman 2000, 117). Instead the subject position is one of flexibility and adaptability: The creative class members “know that they are disposable, and so they see little point in developing attachment or commitment to their jobs or entering lasting associations” (Bauman 2000, 152). In liquid modernity any “dense network of social bonds, and particularly a territorially rooted tight network is an obstacle to be cleared out of the way” (Bauman 2000, 14). Power is here “measured by the speed with which responsibilities can be escaped” (Bauman and Tester 2001, 95):

Where strong ties among people were once important, weak ties are now more effective. Those social structures that historically embraced exclusiveness and closeness may now appear restricting and invasive. (Florida 2005, 12)
Weak ties are critical to the creative environment of a city of region because they allow for the rapid entry of new people and rapid absorption of new ideas. (Florida 2002, 9)

High-tech regions scored below average on almost every measure of social capital. High-tech regions had less trust, less reliance on faith-based institutions, fewer clubs, less volunteering, less interest in traditional politics, and civic leadership. (Florida 2005, 43)

It then comes as no surprise that the other value that is made socially worthy by the discourse is individuality, for the creative class the “only real job-security comes from their capabilities and continued productivity” (Florida, 2002, 110). The creative subject position, the unpolitical bohemian consumer/producer values novelty above anything. The creativity discourse, through its emphasis on the individual, individual responsibilities and individual freedom breaks with the Community period by rejecting everything solid and immobile – by doing so it also shifts traditional responsibilities of the state and even the firm, e.g. social and job security, to the individual.

What about the role of space/place in this discourse? The spaces for the creative subject positions is “one that continually generates new objects to be admired, possessed and consumed momentarily. It produces an attachment to the quick turnover of anything” (Lee 2005, 66). The places of creativity are as unpolitical and consumer-centered as the subject position, they are not sites for social contestation or upheaval – they are portrayed as sites for the creation of creative capital and temporary stopovers for the nomadic elite.

The creative economy paradigm seemingly tries challenges tense relationship between culture and management, and more particularly arts, with its “irrevocably critical impulse towards the status quo and all institutions thereof” (Adorno in Bauman 2008, 197), and management. The long-standing tension between the two was already explored in-depth by Adorno (2001) and is also an issue covered by Bauman (2008). Similar Adorno, Bauman concludes that these adverse discourses, management and culture, and arts in particular compete in the same discursive terrain, as arts is “engaged in recognnaissance battles whose purpose is to explore, pave and chart the roads that human culture may (or may not follow)” (Bauman 2008, 197), thus artists are both adversaries and competitors in the “job that the managers wish to monopolize” (ibid 198). But while competing in the same terrain, there is also the need for “culture creators“ (Bauman 2008, 1999) to engage with management and managers if they wish not to be marginalized but rather see their projects of “improving the world” realized. In many ways the creative economy discourse tries to remove all subversive signs and elements (not least anything political), while establishing consumer-market criteria at the center of creativity discourse. In order to subordinate (cultural) creativity to the market- and economic rational it demands that cultural creations accept that they are to legitimize themselves in terms of market and criteria, which is based not least on speed: instant consumption, instant gratification and instant profit (Bauman 2008, 207).

The creativity discourse, through its lack of problematization and reflexivity, but also through its relation to “soft elements” and the “sharing and caring ethos”, is in danger of masking the failure of consumer markets of catering long term needs and sustainable development. In the creative economy discourse, creativity is mobilized as an asset to be used for the creation of novel products, products of rapid circulation, with seemingly shorter distances from use to waste, from consignment to waste disposal “all for the sake of the immediate replacement of no-longer-profitable goods” (Bauman 2008, 207). But by drawing on sustainable development discourse (where what is sustained above all is economic growth) we are assured by the creative economy discourse, that as consumers and members of the creative class, we can continue to consume
with a good consciousness and an unpolitical heart that all these novel products creatively designed in a sustainable and eco-friendly manner to last the latest fad and to be replaced immediately by an even more “sustainable” product. Without engaging in these kind of problematisations, the creative economy literature and discourse will not induce the promise to “improve our quality of life, and create optimism about the future and individual and shared happiness” (Sotamaa in Open Helsinki, Helsinki World Design City Applications, 2009) – at least not in the long-run.

Conclusions

In the modern struggle between time and space, space was the solid and stolid, unwieldy and inert side, capable of waging only a defensive, trench war – being an obstacle to the resilient advances of time. Time was the active and dynamic side of the battle, the side always on the offensive; the invading, conquering and colonizing force. Velocity of movement and access to faster means of mobility steadily rose in modern times to the position of principal tool of power and domination. (Bauman 2000, 9)

This paper has been genealogy of the creative economy discourse, applying a particular form of critical historical analysis in an attempt to understand the present, by comparing it with historical accounts in order to question the naturalized and sedimented aspects of the present (Foucault, 1988). The paper identifies three periods of the discourse that have led up to the present creative economy ethos (see table 1)

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>Key elements/moments</th>
<th>Floating Signifiers</th>
<th>Manifestation of place</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Competitive Period</td>
<td>mobility, networks, competition, productivity, flexibility</td>
<td>Competitiveness</td>
<td>‘The ‘good business environment’, nation state,</td>
</tr>
<tr>
<td>The Community Period</td>
<td>Competitiveness, learning, innovation, collaboration, embeddedness</td>
<td>Community</td>
<td>Deindustrialised regions</td>
</tr>
<tr>
<td>The Creative Period</td>
<td>Competitiveness, individuality, industrial design, co-creation, consumption, apolitics</td>
<td>Creativity</td>
<td>City, urban centres, airports</td>
</tr>
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</table>

The rise of the competitiveness discourse gave economic geographers a thin line to thread; in its extreme it is a choice of either offering alternative imaginations or becoming what Krugman (1994) has called ‘policy entrepreneurs’. What this partially has contributed to is a further managerialisation of society and a rather, from a regional perspective, conflictious adoption and understanding of the term competitiveness.

The paper has shown how the porterian interpretation and recipe for place-based development, based on mechanisms of economic and social exclusivity/exclusion in network processes of growth was increasingly questioned and problematised internally (Gwynne 2004; Massey 2005; Taylor 2000), others facilitated by the fleeting borders between identities (researcher, guru, consultant) provided by the cultural circuit of capitalism (Thrift 2005) have risen to the occasion
from within the ranks as discussed in this paper. By drawing on alternative languages and practices, such as learning theories, the community discourse enabled firms to increasingly utilize ‘the weapons of the weak’ (Thrift 2005, p.4) to make themselves stronger. Central to this appropriation has been the infusion of ‘soft’ words into the language of economism; e.g. learning, creativity, tolerance, diversity, and community. But the word soft does not in any way imply that work has become less intense or demanding. Quite the opposite, the soft words enables a larger part of life – that outside of the economic and working sphere – to be incorporated into the economic language. According to Costea et al (2008) this language is exemplary how (human) subjectivity as a whole is appropriated into a managerial agenda. These signifiers are increasingly placed in the centre of creativity discourse, almost exclusively through their relation to competitiveness and innovation. They are portrayed as central components of the innovation process, and innovation is presented as the main driver of Western competitiveness.

Most recently we have witnessed the growth of the creative economy discourse. But while both the community discourse and the creativity discourse infused soft and non-economic factors and while the creativity discourse show a clear shift in focus towards the individual, or rather individualization, there is silence in terms of discussion about unequal power relations between firms, governments, and not to mention individual citizens and the constraint this places on the way firms do business, empowering some and disempowering others. Most disturbing, however, from the perspective of both research and practice is the apolitical nature of the latest discursive incarnation. In the creativity discourse, where as Bauman (2000) reminds us the modern era puts liberation and freedom brought forward by the creative ethos and its values of individuality and meritocracy, on top of the value hierarchy: “the individual has already been granted all the freedom he might have dreamed on and all the freedom he might have reasonably hoped for: social institutions are only too willing to cede the worries of definitions and identities to the individual initiative” (Bauman 2000, 22). Yet there is “a society and the individual as a member of society assigned to act individually without ever having any choice other than to act in the prescribed way. It seems that the first collective pressure of liquid society is to act according to individual interest” (Pfibã Amer 2007, 7). Bauman (2000) reveals how while individuals are increasingly free, liberated and emancipated they still feel that nothing they can do to change the way things are in society, hence the apolitical nature of the creative class. Yet the paradox of politics remains largely unexplored in the creativity discourse – and here research can still play a role by engaging with the politics of everyday life, and by being overtly political.

The paper has shown how creative ethos resonates well with Bauman’s idea of liquid modernity both in terms of understanding the shift towards the body (Thrift 2005) and the individual, and the changing role of ‘solid’ place. In the creativity discourse the creative subject positions are increasingly in a place rather than from a place. The discourse also serves to upkep a strange balance between fear of the unknown and the places of the non-western Other on the one hand as ruthless competitors to attract the flows, but on the other hand the creative economy discourse is also in positioning the values of openness and diversity as central to the creative ethos: “Keeping the roads free for nomadic traffic and passing out the remaining check points and phasing out the remaining check points has now become the meta-purpose of politics” (Bauman 2000, 13). The, at first glance, paradoxic mixing imperative of openness to diversity (what Bauman (2003) calls mixophilia) of sensitivity and allergy to the unknown and strange (mixophobia) is practiced everywhere in the creativity discourse – even if theorists like Florida (2002), by their own admission fail or choose not to engage with the question.

Consider the following practice in the creative economy: In Finland there is a conscious effort to brand Helsinki as a metropolis- a solid node in the space of flows, The Design Capital of the World, characterized by the values of the creative class; meritocracy, tolerance and individuality, all understood in relation to ‘the rules of globalization’ and the calls for flexibility, deregulation and privatization. Parallel to this there are calls for increased regulation in terms of ‘managing’
Those flows that are not part or marginalized by the creativity discourse, for example the City of Helsinki as it is preparing to become the Design Capital of the World is grappling how to hide the number of international beggars and poor – indicating Roma people particularly from Romania, who have become increasingly mobile through the EU membership of countries such as Bulgaria, Romania, Slovakia, and Hungary. The mayor of Helsinki has actively been driving for a change in legislation that would permit cities to outlaw begging as “begging does not belong to the Western welfare state” (Pajunen on www.hel.fi). The best practice referred to is that of another creative capital of the world, Vienna, a city that has banned begging while at the same time proclaiming that it “has the necessary cosmopolitan, multicultural and tolerant climate that encourages the personal and economic development of creative professionals, and furthermore provides the required infrastructure on which the economic development and utilization of innovative ideas are based”. What is disturbing in the discourse of creativity is the sense that mixophobia would not somehow exist within the discourse of the creative economy (despite the rise of xenophobia in most of the creative capitals of the world) but rather outside it – that the flows of the globetrotting elite (and capital) is ‘natural’ but the flows of the global poor is not? But what is it is at the heart of liquid modernity and in the creative ethos, as it is caused by an overwhelming feeling of insecurity (Bauman 2003):

There are, let me repeat, no local solutions to globally generated problems. The kind of ‘security’ that the urban developers offer is impotent to relieve, let alone eradicate, the existential insecurity replenished daily by the fluidity of labour markets, the fragility of the value ascribed to past or currently pursued skills and competences, by acknowledged vulnerability of human bonds and the assumed precariousness of commitments and partnerships. A reform of the existential condition needs to precede reforms of the city since it conditions their success. (Bauman 2003, 116)

The problem and challenge for economic geographic research, as for all research in the development domain is to again focus on the ‘existential condition’, rather than the reforms of the city, as is now the case.
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PAPER 3

THE CONTEXT AND DIFFUSION OF KNOWLEDGE
IN THE FINNISH JEWELLERY INDUSTRY
- THE ROLE OF THE HOUSE OF FABERGÉ
The Context and Diffusion of Knowledge in the Finnish Jewellery Industry -
The role of The House of Fabergé

Key words: learning, ecologies-of-knowledge, jewellery industry, the House of Fabergé, embeddedness

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The Context and Diffusion of Knowledge in the Finnish Jewellery Industry  
-The role of the House of Fabergé

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Abstract
Researchers within the fields of economic geography and organizational management have extensively studied learning and the prerequisites and impediments for knowledge transfer. This paper combines two discourses within the two subjects: the communities-of-practice and the learning region approaches, merging them through the so-called ecology of knowledge-approach, which is used to examine the knowledge transfer from the House of Fabergé to the Finnish jewellery industry. We examine the pre-revolution St Petersburg jewellery cluster and the post-revolution Helsinki, and the transfer of knowledge between these two locations through the components of communities of people, institutions and industry. The paper shows that the industrial dynamics of the Finnish modern-day goldsmith industry was inherently shaped both through the transfer and the non-transfer of knowledge. It also contends that the “knowledge-economy” is not anchored in and exclusive for the high technology sector of the late 20th century.

Keywords: learning, ecologies-of-knowledge, jewellery industry, the House of Fabergé, embeddedness

Introduction
At the level of the firm it has been argued that knowledge and intellectual capital are crucial determining factors for creating and maintaining competitive advantage (Winter 1987) and constitute to an increasing degree the value of modern firms. The knowledge is to a large extent tacit and exclusively tailored to the needs of the specific firm (Leonard-Barton 1992), embedded not only in documents or databases, but in the organizational routines, processes and norms of the organization (Davenport and Prusak 1998) These relationships between firms are needed for knowledge diffusion and technology development (Powell 1998). Learning and innovation are considered substantial parts of knowledge exchange, and especially in handicraft-based industries the economic success is largely depending on the transfer of tacit knowledge between employees.

The industrial dynamics of the Finnish jewellery industry serves as an interesting case for studying the transfer of artisan knowledge, and indeed, the non-transfer of knowledge. More specifically we have chosen to study the transfer of knowledge from The House of Fabergé and the jewellery cluster in St Petersburg to the jewellery industry in Finland. The House of Fabergé has represented the pinnacle of design, organisation and technique in the history of the jewellery industry. Yet its impact on
the Finnish jewellery industry has been modest (Vainio-Korhonen 1994). This apparent gap in the knowledge flow between the two locations becomes even more perplex on the face of it, by the fact that a large part of the metalsmiths and jewellers, who worked for the House of Fabergé were Finns, and many of them returned to Finland as the Russian revolution shut down the jewellery cluster in St Petersburg in 1917. We examine this case from an ecologies-of-knowledge approach, where we combine both the communities-of-practice approach and the learning region approach for explaining and analysing the knowledge transfer within the industry and the industrial dynamics before and after the Russian revolution in 1917.

It would of course be rather ill-advised to study the changing fortunes and industrial dynamics without considering the aspect of market and finances. Noteworthy is that the House of Fabergé was not only supplying for the local market, but for a large number of international clients as well. It is clear that by the overthrowing of the tsar and by the declining influence of the royalties in Europe, the market and the demand for the kind of extravagant jewellery as produced by the House of Fabergé was declining rapidly. However, it would be just as ill-advised to overlook the importance of knowledge creation and diffusion when trying to explain regional industrial dynamics (Pinch et al. 2003). The level of innovation (be it design, technique or organisation) and level of workmanship at the House of Fabergé was remarkable, yet this atmosphere of innovation and learning in the jewellery industry has not been successfully replicated to the same extent by a single firm since. We thus examine and analyse the knowledge transfer process from the House of Fabergé to Finland through the lens of the ecologies of knowledge approach; What (except of markets) affected the innovation process and the knowledge transfer; and what were the respective the roles of the region and communities of practice?

The empirical part of this paper mostly relies on archival data. The House of Fabergé has been extensively covered in historical accounts, remarkably so considering that the company seized to exist a century ago. A complete transcript of an interview with leading Finnish metalsmith Heikki Seppä was downloaded from the Smithsonian Archives. As this is a transcript from an actual interview conducted May 2001, it is easily analyzed and categorized as such. Also secondary material with statements
from several other Finnish metalsmiths active in Finland is used. The term metalsmith is in this paper used to cover several kinds of smiths working with precious metal, being both silver- and goldsmiths, and jewellers actually working with precious metal and gems.

**The failure of a dichotomy**

There exists a seemingly ever increasing thug-of-war between those downplaying the spatial dimension of knowledge transfer (Hendry et al. 1999) and those amplifying it (Asheim 1995; Lundvall and Johnson 1994). This tends to create a dichotomy of global versus local, where the usage of global networks equates the transfer of ubiquitous knowledge, and local clusters equates the transfer of tacit knowledge (Allen 2000).

We strongly posit for the view that there is no dichotomy of tacit and articulated (explicit) knowledge, following Brown and Duguid (2001) in their interpretation of (Polanyi 1962). In this view Polanyi was not contending for the existence two types of knowledge, but rather for two mutually interdependent dimensions, as the explicit dimension (or rather *articulated*, according to Polanyi) is based on the previously interiorized, implicit or tacit dimension (Allen 2000; Brown and Duguid 2001; Gertler 2003) There is thus not an automatic equation between tacit knowledge bound to local learning and diffusion, and the diffusion and spread of articulated knowledge shackled to global networks. This is not to say, however, that there is not a strong spatial dimension to knowledge transfer.

**The learning region approach**

"Learning Regions" is a concept coined by academic authors in the fields of innovation studies and economic geography (Florida 1995), defining regions are collectors and repositories of knowledge and innovative thinking. It is closely connected to Lundvall’s and other Danish researchers’ term ”learning economy” which is based on an idea that the ability to innovate and relate knowledge is one of the cornerstones of economic competitiveness (Lundvall and Johnson 1994). Florida (1995) underlines the significance of not only the learning of individuals, but also of
learning taking place within and between different institutions, may they be firms, research institutes or universities, for example. The core of the learning region approach is the idea that “tacit knowledge does not travel easily” as shared contexts and norms, eye-to-eye communication and personal relationships are needed in order to successfully transfer knowledge from one individual to another. The approach implies that a firm or individual in need of knowledge is likely to first search for it locally, among those they have a relationships and knowledge about. (Gertler 2003)

Recently doubts have been raised about the connection between the tacit knowledge and the localness, and it has been suggested that relationships that span organizational boundaries and geographical distances may be just as useful for transferring tacit knowledge (Coe and Bunnell 2003, Allen 2000) This view is drawing the field of economic geography closer to the communities of practice approach, as presented in the following chapter.

**The communities of practice approach**

Etienne Wenger and his team, while doing research on apprenticeship as a learning system, coined the term “Communities of Practice”. Nowadays apprenticeship is to a large extent not just a master teaching a journeyman or apprentice, but rather a relationship between an entire community of people where you may have masters and apprentices at diverse stages. According to Wenger, (2003) they opted for this term since the one issue that united the practitioners in a certain field together is the knowledge, practice, they share. Brown and Duguid (1991) later matched Wenger’s terms with Orr’s ethnographical study on service technicians and developed the aspects further. The communities of practice were a social construction, as the individuals included shared the same conceptions and view of the work, and through informal collaboration could help each other with problem solving. They are fluid and self-organizing with members changing in a straightforward way as individuals retire and new are employed, and they often cross formal boundaries of the organization

**Ecologies of knowledge**

The ecologies of knowledge approach may be seen as combining the theories of the learning region from economic geography from management’s communities of
practice into a fruitful fusion. In general researchers seem to increasingly acknowledge the importance of studying both the effect of and the need for both geographical proximity and external networks for the knowledge transfer process. In our view studies of internal networks transcending national borders and clusters are not necessarily mutually exclusive when it comes to transfer of knowledge and the learning process of the firm. This view is seemingly embodied in the so-called “ecology-of-knowledge” advocated by Morgan (2001) and coined by Brown and Duguid (2000). This approach is neither shackled by the spatial nor the organizational fetishism as it acknowledges the firm as the focal actor, but without trivializing the role of proximity. As Morgan (2001 p. 15) puts it:

“The spatial core of these ecologies of knowledge may be a regional cluster, but the outer boundaries might straddle multiple spatial scales, from the local to the global, because some of the firms which constitute the ecology will be multi-locational organizations.”

This approach will be used in the empirical study of ecologies of knowledge. The spatial core being the regional cluster of metalsmiths in St Petersburg around 1860-1917, and the spillover effect it has had on modern Finnish jewellery industry in the Helsinki area. In the study we compare and describe both the possible business network and geographical benefits and detriments, in regards of knowledge transfers in and between different forms of organizations within the clusters.

**Tacit knowledge and learning in the artisan industry**

Following Polanyi (1962), a large part of human knowledge is personal, and difficultly codified. Transferring tacit knowledge is only possible through close interaction between individuals in an environment of mutual trust and understanding. The acquirement of knowledge occurs through so-called “learning by doing”, as for example in the relationship between master and apprentice.

According to (Argyris 1977), the learning and knowledge leveraging activities of the individual may be either facilitated or repressed by what he calls “an ecological system of factors that may be called an organizational learning system.” (Huber 1991) follows the same line of thought arguing that an individual learns something only if its behaviour is altered thought processing available information. Learning according to
Huber is thus close to (Argyris and Schön 1978) idea of single and double loop learning. They argue that single loop learning occurs when schema remains unchanged despite the acquisition of new skills. Double loop learning, on the other hand, causes the changes in the current schema and does hence produce a fundamental change in the behaviour. Watkins and Marsick (1993) join the arguments about learning as a systematic change, also on an organizational level. The value of learning on an aggregate level within and across organizations has been supported by a large number of researchers, including Brown and Duguid (2001; 1991 1996) Wenger (1998) and Wenger and Snyder (2000), discussing Communities of Practice, from where the fundamental arguments of this paper are developed.

**Different kinds of knowledge**

Lam (2000) suggests a further division of knowledge based on the dimensions of tacit-explicit and collective-individual. We find this separation worthwhile discussing despite the fact that Lam seems to distinguish between tacit and explicit knowledge, a distinction that in not made in this paper. This division have been made earlier by Collins (1993) and Blackner (1995).

The first type, *embrained* knowledge is more individual and explicit. An example of embrained knowledge could be that hold by the scientist, where his cognitive and conceptual skills determine the understanding of abstract, theoretical knowledge. The second type of knowledge, so-called *embodied* knowledge is still on an individual level but more tacit than explicit. This is the kind of action oriented personal knowledge described by Polanyi (1962), which is accumulated by experience and practical understanding of occurrences. It is according to Barley (1996) context specific, and is not understandable or transferable outside the situation. (Lam 2000) However, as pointed out in Ancori et al. (2000), when we as individuals apprehend a piece of “objective” information we are likely to give different meaning to it depending on out cognitive capabilities. This, in turn, results in the fact that processing knowledge makes it personal and specific, and “embrained” knowledge would rather be the use of cognitive capabilities in order to turn give a more tacit dimension to originally explicit knowledge (as, for example, scientific knowledge).
Encoded knowledge is the collective and explicit kind of knowledge often referred to as information. This kind of knowledge can be stored in and spread through databases, blueprints or written documents. Embedded knowledge is collective and tacit, and may be found from organizational routines and from the shared norms of a firm. Brown and Duguid’s “communities of practices” are formed in order to leverage and transfer this knowledge, as it is relationship specific and dynamic. (Lam 2000) Thus this kind of knowledge that is difficultly transferred over organizational boundaries since it is constrained by a given network of social relationships (Gibbons et al. 1994). The organizational routines (Nelson and Winter 1982) are viewed as the genetic substance of the organization, where the knowledge is embedded. The organization as such functions as a context where knowledge with both more tacit and explicit dimensions is leveraged in routines mainly important for new employees.

The jewellery industry in Helsinki: Artisanal argonauts or high-tech laggards?
A traditional artisan industry embedded in a high-tech society makes an interesting case for knowledge transfer studies. The jewellery industry is one of the oldest craft based industries, and it featured prominently in Marshall’s studies of industrial districts (1920) and in studies of Italian industrial districts (Lazzeretti 2003; Santagata 2004). It makes a distinct contrast to the high technology sector in the sense that it is often based on what might be referred to as “culture-based goods” (as opposed to “knowledge-based” goods). In terms of innovation, these industries are seldom seen as high-tech industries. When following OECD classification they rank within medium-low technology industries (OECD 2003). However, within the E.U there exists the recognition that handling and manufacturing of products from precious metals are to be considered “technically very complicated” (EU 2002). The OECD sectoral classification notwithstanding, the jewellery industry, like many of the artisanal industries, should not be seen as lacking in innovation of technology, techniques, or design. As the classification is based on R&D intensity an industry which is classified as low-tech does not necessarily equate it not being innovation or knowledge intensive (Asheim 2001).
The industry does in fact bear some strong resemblance to the high-tech sector, as it is often mentioned as being in the centre of “glocalism” (localized globalism). It is an industry that is highly dependent on the strategic input of creativity and intellectual activity (Santagata 2004). The jewellery industry is also regarded as having a high degree of tacitness in its learning process (Lazzeretti 2003; Storper and Salais 1997). It has been argued (Santagata 2004) that some cultural industries, such as the jewellery industry cannot be delocalized: the ideas and aesthetic designs are rooted in the local culture. Its intellectual properties and intangible capital cannot thus be delocalized.

Especially so-called design knowledge (know-how) is considered tacit to its nature and almost impossible to articulate. This is the knowledge emerged through the design process and is often leveraged only in the mind of the artisan (Wong and Radcliffe 2000). Alexander (1968) (cited in Schön 1983) also describes the knowledge involved in design. He argues that an artisan often is able to recognize and correct a form that does not fit the content, but may not be able to explain why it fits better after the correction. A statement from Vickers clarifies this as “[we] can recognize and describe deviations from a norm very much more clearly than we can describe the norm itself.” (in Schön 1983:53).

"Too many designers and producers in our sector still fail to understand that the new technologies are essential if we are to adapt to the realities of the international market.” (Vitobello 2001)

**Innovation in the jewellery industry**

Although the jewellery industry is based on artisanal craft and fostering of traditional skill, it is also an industry, which in many respects has adopted new industrial processes and methods. There exists both the creation of new manual techniques, the combination and development of existing techniques in other industries, and the development of new mass production techniques. Learning occurs through different processes, and it is mostly the practice that shapes and supports the learning (Brown and Duguid 2000) Through formal education the young metalsmith might learn the “know-that”, but without being able to put the knowledge into use. The “know-how” to do something is only acquired through practice. (Ryle 1949) Below an example of
what Brown and Duguid (2000:136) would call “stolen knowledge”, acquired by merely observing when somebody is doing their job:

Q: “Did these older men that you admired give any instruction or did you simply learn by observation?
A: No, no. Just observation. I didn't even learn Danish to that extent.” [Seppä (2001) on his stay at Georg Jensen’s workshop in Denmark]

The silversmith in question (Seppä) was in this case supposed to be occupied with something completely different in the workshops of the world famous Danish master Georg Jensen, as he was still in the very early stage of his career. Still, he took advantage of the situation and acquired skills that later turned out to be very valuable for his development as a metalsmith.

The failure of knowledge transfer in the Finnish jewellery cluster 1920-1970

The jewellery industry in Finland makes an interesting case for several reasons. The industry has been rather highly regulated for more than 500 years, as a law passed in 1485 forced the metalsmiths to hallmark their products. In order to facilitate the control all the metalsmiths were encouraged to move to the cities at this time (Vainio-Korhonen 1994). The grounds for firm regulations was that the products were originally used as trade goods, and the value was measured in the percentages of precious metal. However, as their usage has altered, the value is now more dependent on technique, designs and the use of gems. (TaVM 2000)

There were about 300 metalsmiths in Finland 1999, of which the majority are running their own or jointly owned workshops producing jewellery as handcraft. Export-wise the industry does not feature very prominently although it has recently experienced a spur of growth. Partly of this growth may be attributed to a law passed in 2001, where the percentages of precious metal required was lowered in order to converge Finnish legislation to that of the E.U. A similar change in the Swedish legislation signified an increase in imports. (TaVM 2000)

Compared to other Finnish cultural industries, which rely on inputs of both design and technique, like furniture, glass and many other forms of industrial design, which all
made a name for them internationally in the 1950s and 1960s, the jewellery industry never really took off to the extent, especially in regards of exports. Interestingly enough, there were several positive conditions in place during the 1940s and 1960s for creating a competitive metalsmith cluster in Helsinki.

Not only where the design environment favourable because of possible spillover effects between the different design intensive industries and their actors, who were part of a small world network, but the guardians of metalsmith techniques were also present. Before the Russian revolution in 1917 St Petersbourg, building up around Carl Fabergé’s studio, was a central node for the craft of jewellery making and design in Europe. What makes the Fabergé legacy even more significant is that from a technical point of view the techniques used by the House of Fabergé represents a pinnacle reached by metalsmiths and jewellers in the history of the trade (Snowman 1980). In fact, it has been argued that what actually set Fabergé apart from other famous jewellery firms is not the design but rather the technical brilliance and the workmanship, which in many respects remains unchallenged (Farrington 1999). The House of Fabergé was in many respects very different from the biggest international competitors of those times, both in approach and execution of the trade, in many respects little has changed since then. The following quote by Fabergé himself sheds some light on the issue:

“It is understandable that if my work is compared to companies like Tiffany, Boucheron and Cartier, it means that they have more objects of value than I have…From them, you can find a necklace worth 1,5 million roubles. But they are salesmen and not jewellery artists. I am not interested in an expensive object if price is based on whether it has a lot of diamonds and pearls” –Carl Fabergé, quoted in Lopato (1980; 97)

A lot of the Fabergé-techniques are, however, lost today as are, more understandably, the extravagant and rather kitsch designs, and rather intriguingly, the organisational forms.

The Finnish jewellery industry, rather surprisingly show very little influx from the Fabergé legacy, design, technique and organisation-wise. Unlike popular perception, the industry has dominantly shown more influence from Sweden (Vainio-Korhonen...
1994). This despite the fact that a large part of the Fabergé metalsmiths came to Finland following the Russian revolution in 1917.

The community of people: The role of the Finnish metalsmiths

The House of Fabergé was created largely thanks to the network of master jewellers and metalsmiths that Fabergé managed to orchestrate. Carl Fabergé, sometimes referred to as “the last great craftsman”, never worked on the actual items himself. Instead, he acted as something of an artistic director, approving and sometimes designing the objects, but leaving the actual production to his carefully selected workmasters. (Farrington 1999)

Central nodes in his network were the hundreds of artists and workmasters who he found in Finland (at that time the Tsar’s Grand Duchy, annexed to Russia). In 1840 29% of all metalsmiths in Petersburg were Finns, and in 1869 27% (Engman 1980). By the early 1900 this number diminished somewhat, but the Finns still made up 1/5th of the total (ibid). Of the workmasters at the House of Fabergé as many as 3/4th were of Finnish origins. St Petersburg had no equal locality for Finnish metalsmiths; there were twice as many Finnish metalsmiths in St Petersburg as there were in the whole of Finland in 1840.

The environment in St Petersburg was very multinational. Around half of all the masters were foreigners, the Finns made up around 14% of this group. Consequently, most of the Finns worked as journeymen and apprentices. In many workshops almost all the workers were Finnish. (Engman 1980) The level of trust among these foreigners was high; this would certainly have facilitated the transfer of knowledge between the employees in the workshops.

The organizational environment: The role of The House of Fabergé

The House of Fabergé was close to what might be called a large international firm in its structure: the company was divided into workshops, each with its own narrow speciality. By the turn of the 19th century the workshops employed over 500 goldsmiths, enamellists, jewelers and other personnel (Snowman 1980). It was the
biggest company in Russia by 1910 and it remains the biggest jewellery firm to ever have existed. Most of the production took place in the workshops and factories in St Petersburg, but some specialised production was located in Moscow (silverware and traditional Russian jewellery). It had resale branches in Odessa, Kiev and London, but international sales operations were largely run as a catalogue-operation. Product-wise it is noteworthy that even though each product was unique and dedicated, between 1882 and 1917 The House of Fabergé produced 150,000 exclusive items (Farrington 1999). In the artisan industry it remains an exceptional example of a large competitive firm on the international market (both product and workforce) whose territorial roots remain integral of its and the surrounding district’s success.

Fabergé produced a wide range of products and designs: the famous Fabergé eggs; silverware; jewellery; European-style charms, and Russian-style carvings. The Fabergé metalsmiths had acquired and developed highly specialised techniques, which were not used elsewhere (e.g. enamelling and reticulation), the tacitness of these techniques were (and are) very high, Seppä (2001) recalls:

“There was one guy [Mr. Lajunen] who actually had worked in St. Petersburg and he showed me how to reticulate. And he told me where the reticulation came from – from Carl Fabergé’s shops where the apprentices would heat the coffee pot that they were soldering the spout to. Heat one spot a little bit too much and it would reticulate. And then they found out that hey this is a nice surface. “We can use this technique”. So, they researched it and made it almost infallible kind of process. “

The Petersburg branch was organised by a number of separate workshops, which all had the responsibility to oversee each object all through the production chain: from design, through the complicated manufacturing stages; to packaging; to finally its sale in a showroom. Each workmaster was then entitled to stamp his initials next to the brandmark “Fabergé” on the object that he had overseen. Each workshop was highly specialised in one form of object. The Moscow branch was run in an entirely different manner, more like a commercial enterprise, resembling more modern forms of production. Here the studios and workshops produced a wide range of products, from animal carvings to large silver items. The objects were anonymous and bore no personal signature of the workmaster. (Snowman 1980) It is noteworthy that even though the gold, jewellery and enamel products produced by the Moscow branch did
not reach the quality standards of the St Petersburg branch, the silver products produced in Moscow were superior. Moscow had historically always been the centre for silver production in Russia, it had become an agglomeration of most of the important and large silversmiths at the turn of the 19th century (Lopato 1991). From a learning region perspective this is interesting, since it underlines the role of the region and knowledge spillovers, but also locational path dependency, in the sense that Moscow had become the centre for silverware, and if you were in the silverware and silversmith trade it was hard to locate anywhere else, even if you were running a business in the scale of Fabergé.

The Moscow silversmith cluster also affected the Finnish knowledge of silversmithing. Most of the Finnish metalsmiths worked in St Petersburg, and thus the Finns knowledge on silversmithing was limited in comparison to the other metalsmith trades. This would later be evident by the fact that the Finnish silversmith art as taught in school in Finland, could be considered backwards and less innovative than the other metalsmith trades. This is echoed by the comments of one of pioneers of Finnish silversmithing, Heikki Seppä, who revolutionised the field with his silversmithing techniques, when describing the formal education in Finland in the 1940s:

“The goldsmith was working on jewellery. And the silversmiths were making coffee pots and trays and forging spoons and forks — just run of the mill stuff. And when I look at some of the pictures from the school times, it just makes me so sick because I did not realize that silver can do a lot more than that… Finland is still not contributing to the silversmithing art… silversmiths are still working on two-hundred-year-old designs that don't say anything.” (Seppä 2001)

The high degree of specialisation as used in St Petersburg favoured a system built on subsidiary suppliers. This was the form of organisation, favoured by The House of Fabergé. Very few of the Finnish masters had shops of their own in St Petersburg, they concentrated on production for firms, like the House Fabergé, which took care of the sales. These Finnish workshops usually worked either under exclusive contracts or as free subsidiary suppliers. (Snowman 1980) This system of organisation would later seal the fate of many of the Finnish masters upon their return to Finland, and serves as part of the explanation on the non-transfer of knowledge from the Fabergé cluster to the Finnish jewellery industry. Of the few who made the successful transfer from St Petersburg to Helsinki was Alexander Tillander, who was one of the very few Finnish
masters who was running both a workshop and a shop in St Petersburg. The case of Tillander will be discussed later in this paper.

**The institutional environment: The role of embeddedness in St Petersburg**

The small worldliness of the St Petersburg jewellery production network is quite evident. Fabergé himself was half-Swedish on his mother's side, and surrounded himself with Finno-swedish workmasters and metalsmiths (Tillander 1990). The metalsmiths formed a foreign elite in St Petersburg, a tightly knit society of specialists, connected both by a common trade as well as family links. (Jangfeldt 2000) The Finns in St Petersburg had their own newspaper, charitable organisations, temperance associations and shared a cultural life (Engman 1980).

The transfer of knowledge was facilitated both by organizational proximity (The House of Fabergé), and relational proximity (shared metalsmith expertise; the tight knit community of the foreign elite), thus displaying strong resemblance to the more recent literature on communities of practice (Brown and Duguid 1996). People who have similar practices also share an identity, which, to some degree, separate them from other groups (Brown and Duguid 2000) It might not have been so much the information they shared that makes them different, but rather the attitudes and the shared background (Brown and Duguid 2000).

When the studio of Carl Fabergé closed its doors in 1917 after the revolution, there were quite a few Fabergé-trained metalsmiths who returned or fled to Finland. Some of them became teachers at the goldsmith school in Helsinki, others started their own goldsmith workshops in the city, while others took up employment at existing workshops. But very soon after the metalsmiths returned the non-embeddedness (both socio-geographical and organisational) and the effect this would have on the flow of knowledge became evident. The Finns returned and found themselves foreigners in their own country. Some were second and third generation Finns from St Petersburg, who hardly spoke a word of Finnish, others were first generation Finns who spoke Finnish fluently or with a slight accent. They were met by suspicion and were called “country traitors” and “ruskies”. (Hollming 2003) The embeddedness of the craftsmen
aristocracy of St Petersburg was gone. So were the common norms and conventions. In many cases the level of trust did not bolster between the returning masters and the young Finnish aspiring metalsmiths who wanted to learn the trade. Some kept their background secret altogether, and never told of their background. The woman who had designed the celebrated Winter Egg, Alma Pihl, took up work as a second grade art teacher, and never told any of her students of her past. And thus never transferred her knowledge to the Finnish jewellery industry. Her brother, who had been a leading craftsman at Fabergé, also took up a teaching position at an art school, but was convinced by a local professor to take up work at Tillander’s firm in Helsinki. Tillander, who had also returned from St Petersburg knew the man’s reputation and made him head-designer for the firm. But in that case the knowledge stayed within a small family-run business (in this case Tillander).

Others of the returning craftsmen were almost immediately drafted and sent to war in the 1930s and 1940s. Some of them returned but the war had left their scars and the motivation for passing on the knowledge and secrets of the trade were not always the highest. Seppä recalls how he learned a specific technique, which had been perfected by the House of Fabergé:

“I would sneak out to this old fellow who had been working for Carl Fabergé. And he was very, very sort of a dour guy. He did not want to talk to anybody. He just did his work and got his pay. But I snuck over his shoulder and watched how he worked… And [his work] was perfect every time. Great admiration for craftsmanship. But he would not teach me how to reticulate [a silversmith technique].”

This quotation illustrates two points about learning and teaching: For one, from the learning perspective it is an example of “stolen knowledge” (Brown and Duguid 2000), made possible by organizational proximity. It also serves as an example, and a warning, to remind us that from a teaching perspective, organisational embeddedness and a community of practice, is not very useful without the right socio-cultural and geographic embeddedness.

There are also examples of how the Fabergé legacy was lost due to the lack of organisational embeddedness: some of the craftsmen and designers still felt bound to “the code of Fabergé”, which forbade them to pass on the secrets of the House of
Fabergé, even years after the house had stopped existing (Godenhielm-Tillander 1991).

The narrow knowledge of the specialist versus the broad knowledge of the apprentice

Before a formal school was established, the only way to be trained as a metalsmith was to get accepted as an apprentice at the workshop of some metalsmith master. The period of training was rather long, about 5 years, and about two third of the apprentices passed the test for becoming a journeyman. (Vainio-Korhonen 1994) The journeyman period was rather extensive, as it took in average 10 years before they could present themselves for the master craftsman’s certificate. The time as journeyman included an obligatory journeyman’s ramble, which was a kind of study trip made though the home country or abroad. This trip was very important not only for the young journeyman but for the whole industry in order for new tendencies and new techniques to spread. (Kruskopf 1989)

The system with journeymen and masters was terminated towards the end of the 19th century, when freedom of trade was eventually initiated. Due to this the relationship between the journeymen and the masters slowly transformed into that of employer and employees, thus many of the masters perceived a future threat of competition from the apprentices, and turned increasingly unwilling to take them in. (Fagerström 1983)

Also at the house of Fabergé the business was divided into several small workshops, each with its own specialty. Consequently, each metalsmith turned increasingly specialized. Seppä remembers the situation in Finland as:

“Even though you chose to become, let’s say like I did, a silversmith, you still had to keep your hand in engraving, in goldsmithing, in gemology, and even enamelling. So those skills were not getting away from you. You still have to be with them, although less time than those who majored in them. So that general knowledge was seldom found in the profession.” (Seppä 2001)
When the metalsmiths returned to Finland, there was an overflow of highly specialised masters, but no market for such costly jewellery. Rather, the industry inquired about artisans with general knowledge and a broader base of skills.

“So the tradesmen -- although the field was very narrow, but they were masters. When you had an engraver who had nothing but engraving, he was doing very well, I mean, much better than our students. But, our students also knew what was involved. So, I mean, the overall value of a trained student was really sought by the industry.” (Seppä 2001)

Hence a need for a Goldsmith school increased even more, and finally after 20 years of planning it was established in Helsinki in 1938 by the Finnish Goldsmith Association. Some time later the city of Helsinki bought the school as it run into some financial problems, and again later is was bought by the city of Lahti. (Seppä 2001)

The Goldsmith school is today a part of the Polytechnic of Lahti, and is one out of four institutions where you can study for a Bachelors degree (three years). (Finnish 2004)

**The generational gap: Artist or artisan?**

In an industry were one generation of artisans teaches the next, the perceived “foreignness” of the returning Fabergé artisans did not help to diffuse the Fabergé techniques into the next generation of Finnish jewellers. Neither did World War II:

Due to the war the generations did not really meet until the 1940s, when the war had taken its toll on both the next generation of Finnish jewellers, and the returning St Petersburg jewellers. In this sense there was a “lost generation” of Finnish jewellers, those who would be the main vessels for the Fabergé knowledge.

There was also another emerging aspect that did little to bridge the gap between the generations: The identity of being an artisan or artist. Most of the old guard as well as the “lost generation” of Finnish jewellers considered themselves artisans, whereas the 2nd generation of Finnish jewellers who were educated in the 1960s and 1970s increasingly identified themselves as artists. This coincides with the relocation of the Helsinki goldsmith school to Lahtis. The identities of the artist and the artisan is to be separated, according to Seppä this division of identities can largely be credited to educational institutions:
“The term, which surfaced about 30 years ago in art schools was that now you are in the art school, we're going to make you an artist prompted me to face that statement and say: You cannot claim to be an artist. The world will claim you to be an artist. So, no mind what schools you go into, the result is not a guaranteed artist. So understand this and don't call yourself an artist ever. I have never. I'm a metalsmith... But, those people who get it from other places than academia are not likely to call themselves artists because they have never even heard the word. Some customer might say oh, but you are an artist. This is art. But it does not sink as deeply into the mind of the student as it does in the academia. It's almost taken for granted. I'm in art school! I'm become an artist! And the one sort of layman kind of way of going into it doesn't hear that. He's not brainwashed to believe that he's an artist. He's just making things and being prominent by the customers.”

In many ways this division further sealed the fate of the Fabergé knowledge in the Finnish jewellery industry.

**Discussion and Conclusions**

In the early 20th century there were five regional clusters which stood above the rest in regards of jewellery production. Of these, Arezzo, Valenza Po in Italy; Birmingham in England, and Amsterdam in the Netherlands remain at the competitive core of its nations cultural industries. One of the regional clusters, St Petersburg, with its enigmatic core company Fabergé, has disappeared from the map. As has been outlined in this paper, not only has the cluster disappeared, but so has the knowledge that it produced.

We have presented the central role that the foreign workforce played in creating the most competitive jewellery cluster to ever have existed. In the light of our high technology society of today, the mobility of the workforce that located in the 19th century St Petersburg is rather striking. There are interesting parallels to be drawn between the success of Fabergé and the influx that the foreign-born workforce has had in the high-tech industry in e.g. Silicon Valley (Saxenian 1999). The House of Fabergé can be considered as a knowledge-based firm on an international competitive market.
Previous research has shown that firms with a common geographical background and history can share knowledge resources, which can provide them with a collective competitive advantage (Pinch et al. 2003). Following the “learning region” approach (Lundvall and Johnson 1994) it can be argued that it is unlikely that this locality, the St Petersburg jewellery cluster, seen as a container of the most tacit dimensions of the metalsmith trade, could have emerged or, indeed, relocated anywhere else. However, in this case, the necessity of the region is more rooted in the production of knowledge, rather than the transfer of knowledge. Transfer-wise it can be argued that the essence of the metalsmith trade, both design and technique-wise, was not contained to the Fabergé organization. The complex relational proximity was embedded both in the specific culture (of being foreign in St Petersburg, thus feeling kinship with other foreigners) and family (the artisans helped family even though they did not necessarily work for the House of Fabergé). The transfer was thus facilitated by a number of untraded interdependencies, which are hard to reproduce anywhere else; common codes of communication, shared conventions and social norms; and personal knowledge of each other based on past history of both formal collaboration, informal interaction, and familiar kinships. It was not uncommon that the established metalsmiths helped their kin who arrived in the city, although these could be seen as competitors in the jewellery industry (Hollming 2003). The uniqueness of the region’s ability to spur on innovation was further enhanced by the spillover effects from other cultural (arts and crafts) industries present in the city. Innovation in the House of Fabergé was not as Coe and Bunnell (2003, p.438) put it; “a series of isolated events associated with heroic individuals” associated with “traditional innovation”, but rather a result of situated social relations between actors in an localized organization plugged into an extra-local networks.

In many ways the St Petersburg case bears many similarities to an industrial district as defined by Becattini (Becattini 1990). By this definition the district is a socio-economic and territorial entity characterised by an active community of people, institutions and firms specialised in operating in a naturally and historically bounded area (Becattini 1990). However, the St Petersburg district differs from the traditional Italian jewellery district as described by e.g. Lazzeretti (2003) and Santagata (2004), by not being an agglomeration of small firms, by rather an agglomeration of small
firms emergent around one large nodal company. A lot of the small independent workshops were working exclusively for Fabergé. However, it might be argued that St Petersburg could have developed more into what we see in places like Vicenza, Valenza Po, and Arezzo had the revolution not intervened. It is possible that workers employed by Fabergé would have left and set up small shops of their own in the area. This is, however, speculation, and as can be seen in the case of the jewellery sector in Finland, the Fabergian knowledge was seemingly rather immobile.

The division of knowledge made by Lam can easily serve as a theoretical reference for explaining the knowledge transfer and learning within the jewellery industry at arrival of the Faberge metalsmiths and in modern times. As the types of knowledge present different characteristics, they are likely to be acquired and transferred through different mechanisms. The encoded knowledge is mostly the kind of information provided nowadays in the schools of professional training, where the students are confronted with what Ryle (1949) would call “know-what”. It might be represented by the knowledge leveraged into information systems and CAD software. If everything goes well, the student is able to turn this into embrained knowledge depending on his conceptual and cognitive skills.

The embodied knowledge is the kind of knowledge that is most personal and inherent within the jeweller, determining his initial attributes for professional advancement. This knowledge will not emerge from the professional education, but is rather likely to develop as the jeweller starts practicing his profession. This knowledge seemed to be present in a large extent in the Faberge metalsmiths as they were representing the top tier in their profession. The embedded knowledge is likely to develop jointly between the jewellers in a workshop. Thus, where several jewellers are working together the main challenge would be to transform the embodied knowledge into embedded knowledge that individuals could share. In the artisan industry where tacit knowledge constitutes a large part of the professional skills, interaction between individuals is fundamental for the transfer of skills. Here encoding the total pool of knowledge is not a reasonable aspiration. Also the examples given by Heikki Seppä of learning through observing (or spying on) other, more skilled metalsmiths working illustrate this way of acquiring knowledge.
According to (Lam 2000) the structure of the organization may depend on the kind of knowledge most valuable for the activities. An organization relying on knowledge of more explicit form is likely to have a more formal power and control structure, and formalized tasks and routines. Conversely, an organization where the tacit part of knowledge is more important is more likely to rely on informal structures, autonomy and commitment on part of the employees that enhance the mobility of the knowledge. In the jeweller industry this can be identified in the return of old fashion Faberge type workshops where independent handicraftsmen are joined together, sharing for example tools, technical equipment and marketing. This is according to Weckström (1998) the future for the Finnish jewellery industry, as they are flexible and able to adapt quickly to changes in customer needs. The jewellers should take example from Faberge in marketing their own brand name instead of just manufacturing their products as standardized goods.

The traditional forms of innovation are now faced with more high-tech influences from other sectors and industries. The CAD-software has been in use for a good ten years, and is used by most designers. But the technological innovations are not limited to the design process, for example the art of engraving is almost lost due to the influx of technology and laser-engraving. The fact that hand-engraving is still thought at the Lahti school is considered an advantage for the Finnish jewellery industry (Seppä 2001). The industry now faces further competition from machines in areas thought too tacit for technological replication. A partnership comprising an Italian creator of jewellery, an Italian technological research centre, a Swiss supplier of precious metals, a German laser designer, a subsidiary of one of Europe's leading microelectronics companies has resulted in the use of laser beams for of cutting and piercing precious metals, welding them without the addition of extraneous materials, and applying granulation and decorative engraving techniques. The cuts are more precise and reduce raw material losses (Vitobello 2001). The very high cutting speed makes it possible to produce haute-couture jewellery at industrial prices: a nightmare scenario for many a craftsman. The case shows how the goldsmith industry is the end user of a new technology, which has been developed within another industry (optics). Although this technology has been enhanced and formed in cooperation with and by
the jewellery industry, this innovation is more likely to be attributed to the optical industry in high-tech sectoral classifications such as that of OECD.

In this context is noteworthy that Fabergé in many respects embraced new technologies wherever it was deemed not to produce inferior qualities to that of handicraft. There were several automated machines used in the Fabergé production process (Lopato, 1991).

The craftsmen have been forced to refine and reinvent their own techniques. The perfection of the so-called anticlastic method in the silversmith industry is a fine example of continuous artisanal innovation: a method developed by Heikki Seppä, and perfected by his students, a method that is impossible to replicate by methods of mass production, which makes it possible to form silver in numerous ways, which have not been possible by traditional techniques (Haapanen 2003). The craftsmen have for a long time been stifled by the taught that the tacitness if one hundred year-old techniques is not reproducible by machines, and that innovative design will keep them one step ahead of mass production. Ironically the technological transformation and codification of knowledge can be seen as a slow wake-up call for the Finnish jewellery industry. Here we see a divided industry between those embracing new technology to bolster competitiveness, against those turning to forgotten history and forgotten forms of tacit knowledge in order to bolster artisan innovation. The keepers of the tacit knowledge are now forced to innovate once more, turn to forgotten techniques and reinvent materials in face of competition.

We need to ask ourselves how much has actually changed with the introduction of newer spatially bridging technologies for the production and transfer of knowledge? It is questionable if the workforce is more mobile today than 100 years ago in the jewellery industry. The markets were not local then, as are they not today. And in many respects that is what set Fabergé apart, the effective use of a local production system and the use of global networks for attracting talent and distributing products. Fabergé and its workforce were part of an ecology that very much resembled what we might label a learning economy.
Henry Ford (1916) reportedly once stated that: “...History is more or less bunk. It's tradition. We don't want tradition. We want to live in the present and the only history that is worth a tinker's damn is the history we made today.” In the face of this statement, its source, and his legacy on the artisan industries, it seems only fitting that the jewellery industry digs even deeper into tradition and history in order to rediscover and reinvent its once so illustrious innovation process.

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PAPER 4

The sharing, protection and thievery of intellectual assets
The case of the Formula 1 industry

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Abstract
Purpose – The purpose of this paper is to analyze how the Intellectual Capital perspective can be altered in order to include ethically questionable practices of knowledge acquisition.
Design/methodology/approach – The paper explores the relationship between formal and illicit forms of intellectual capital acquisition through a case study of the Formula 1 industry. The paper is based on secondary data from public sources.
Findings – Ethically questionable practices are a part of the knowledge economy. In the case study, the view on what was ethical and accepted was changed due to uncovered practices of espionage.
Practical implications – Firms in knowledge-intensive industries often employ unrecognized informal channels for intellectual capital acquisition. Managers should consider the boundary between right and wrong in their particular industry, and whether they have the tools for dealing with ethically questionable practices.
Originality/value – The paper suggests a complementary interpretation of the Formula 1 industry not only as a best-practice case of how community and trust knowledge spillovers facilitate innovation, but also how ethically questionable practices of intellectual capital acquisition exist as an accepted part of the process.
Keywords Intellectual capital, Knowledge management, Job mobility, Intangible assets

Introduction
Traditionally a firm’s tangible assets – those that can be listed in the company’s balance sheet, such as financial capital and real estate – have been seen as the main drivers of financial value. However, with the rise of the knowledge economy, economic research has gradually shifted focus towards intangible assets such as organizational knowledge and relationships (Almeida, 1996; Stewart, 1997; Romer, 2000; Augier and Teece, 2005). From the Intellectual Capital (IC) perspective, the firm’s competitiveness is increasingly dependent on its ability to continually manage its stock of IC in order to generate innovations and new product ideas (Mouritsen and Larsen, 2005), which in turn can increase financial value (Edvinsson and Sullivan, 1996). But the emphasis on IC for competitiveness also leads to questions on how firms can simultaneously protect their IC and share it both inside and outside organizational boundaries (Baughn et al., 1997; Erickson et al., 2003; Solitander, 2006).
Maintaining the balance is not simple: the shared nature of the innovation process emphasizes the need of sharing, benevolence and trust, but there is also the commodification of knowledge, where knowledge is turned into property of the firm. In terms of the former, a research trend has been an emphasis on non-economic mechanisms as means for competitive advantages (Thrift, 1999, 2005). Managerial discussions of the knowledge economy are loaded with a “supposedly caring and sharing ethos” (Thrift, 2005, p. 11). This is highlighted in the increased research interest in, e.g. learning (Senge, 1990; Lennon and Wollin, 2001), creativity (Borghini, 2005; Gurteen, 1998), social interaction (Von Krogh, 1998), communities (Kramer, 1999; Wenger, 1999) and trust (Barney and Hansen, 1994; Adler, 2001). The dominant view is that “knowledge is not a solitary venture” but rather produced within communities (Amin and Cohendet, 2004, p. 142). Communities span intra- and interorganizational networks, which has led to increasing efforts to understand the interconnected processes of knowledge creation and flows in networks. In this context, the role of trust in economic exchanges has been extensively emphasized. Trust is sometimes even seen to substitute the need for written agreements or contracts, and decrease intangible risks and liabilities (see, e.g. Barney and Hansen, 1994; Huang and Chang, 2008). According to Adler (2001) firms increasingly adopt knowledge management (KM) approaches that rely specifically on community and trust. But the focus on trust within the community, and a suggested shift from the “predictable systemic exploitative logic” of industrialism (O’Donnell et al., 2003, p. 87) also hides practices that diverge from a “sharing and caring ethos”.

Does a proposed shift towards a “soft” knowledge economy really exclude the dark side of a market economy? By the dark side we refer to ethically questionable practices and conventions that contribute to financial profit, such as exclusion, deception, exploitation, and theft of trade secrets. According to Henderson (2007, p. 503) knowledge spillovers are increasingly considered “not accidental or the result of espionage but rather... the product of deliberate exchanges”. Practices such as industrial espionage are associated with the ethos of “old” industrial capitalism, or with “catch-up economies” (Jacobs et al., 2001; Stedman, 1991; Yonehara, 2002). But as we argue in this paper, ethically questionable practices of knowledge acquisition exist inside the knowledge economy – not outside it.

The use of questionable practices is partly visible in the response to such activities, i.e. protection. Firms develop new mechanisms to protect investments, e.g. intellectual property rights, intangible asset security (Harvey and Lusch, 1997), and secure KM (Randeree, 2006). KM literature has mostly focused on practices of protecting IC through patents and legal protection mechanisms (Garcia-Muiña and Pelechano-Barahona, 2008; Lang, 2001; Williams and Bukowitz, 2001), whereas analysis of which organizational practices these mechanisms derive from is largely absent. Even though there has been certain conceptual interest in the IC risks of deliberate spillovers such as alliances (Baughn et al., 1997; Martin de Castro and López Sáez, 2008), the conventions of opportunism and non-cooperative knowledge acquisition, embodied in practices such as industrial espionage have been largely overlooked in KM research. In this paper we further address the “intellectual myopia” (Ferdinand and Simm, 2007, p. 301) that disregards practices of espionage and other questionable practices of IC accumulation as part of the “messy reality of innovation” (Newman, 2006, p. 42).
Purpose and aim

While there exist some previous management studies on the subject of industrial espionage, most of these have been either conceptual (e.g. Ferdinand and Simm, 2007; Macdonald, 1993, Wright and Roy, 1999); focusing on economic espionage, i.e. theft of trade secrets where the perpetrator is a “foreign” government or agent where the act is seen as a threat to national security (e.g. Correa, 2000, Potter, 1999); espionage in alliances when entering foreign markets (e.g. McGaughey et al., 2000, Maskus and Reichman, 2005) and issues around protection from cyber-attacks (e.g. Andrijcic and Horowitz, 2006). With the exception of the conceptual articles of Macdonald (1993) and Ferdinand and Simm (2007) we have not been able to identify any research that focuses on espionage as a form of learning and IC acquisition – i.e. there is a lack of research focusing on espionage as a practice within knowledge companies, not just an act they are to protect themselves from. In this paper we apply the framework of IC theory to form an understanding of industrial espionage as a form of IC acquisition. While we believe IC theory can provide some valuable insights through its focus on professional practice and the knowing capability of the social collective in the creation of value (Marr and Roos, 2005), we suggest a stronger focus on practices of value creation that occur outside the sphere of community and trust. Informed by Adler’s (2001; Adler et al., 2008) work on community, market and hierarchy as co-coordinating principles, the paper analyses how the IC perspective could useful for understanding the ethically questionable practices of knowledge acquisition that are inevitably part of the “messy realities” of innovation. We argue that the existence of opportunism in the acquisition of IC should not be understood as mutually exclusive to community/trust but rather as inherent and interlinked parts of the knowledge economy.

The paper moves beyond a conceptual understanding of the practice by examining the case of the Formula 1 (F1) industry. In previous research, F1 has been portrayed as best-practice of how community and trust, knowledge spillovers and common conventions facilitate innovation (Pinch and Henry, 1999, 2004; Mariotti, 2007). We argue that previous studies have not shown a complete picture of the conventions and practices that form the basis for innovation capabilities and competitiveness of the F1 industry. Looking at the industry as a whole rather than a particular firm, facilitates the understanding of espionage as part of industry culture rather than the deviant behavior of “rogue” employees. The papers shows how, with an increased demand of knowledge in a market with a limited supply, firms will seek out surreptitious knowledge through unrecognized informal channels (Cassidy and Loree, 2001, p. 150). In the latter part of our paper we discuss the dark side of intellectual capital accumulation, where trust-based conventions are tangled up with conventions of opportunism. The paper concludes with a discussion on the viability of the conceptualization of IC in terms of intangible assets and liabilities, and the difficult relationship between innovation and the practice of espionage in the knowledge economy.

By highlighting ethically questionable practices we do not endorse their use, rather we question if an understanding of the knowledge economy and the mechanisms of value creation is complete without recognizing their existence. As our main focus and conceptual interest is ethically questionable practices of knowledge accumulation, following Crane (2007) we do not as such distinguish between legal competitive intelligence gathering and illegal industrial espionage. Thus, we do not make any claim
to contribute to literature on intellectual property rights nor do we address the judicial implications of the case studied (for an overview on the theft and protection of intellectual assets in IPR-literature see, e.g. Potter, 1999; Schankerman, 1998).

**Methods**

Owing to large media interest there is much secondary data available on the espionage case uncovered in 2007, among them full court transcripts and dozens of interviews with engineers and designers. Our research relies on secondary data of about 300 pages of material collected mainly from online-line sources, industry and academic journals. Important documents include transcripts from FIA hearings on June 26 and September 13, 2007 regarding the “spy scandal” between Ferrari and McLaren, the FIA hearing on December 6 2007 regarding another unrelated spy incident between Renault and McLaren, and statements from different key actors of the industry published during this period. One of the main reasons for the scarcity of studies on industrial espionage is simply the lack of access to information about known cases. Firms are generally unwilling to disclose information and discuss such issues even when such practices are known to exist. Thus, the data available on the F1 industry are quite unique.

While public access to the material strengthens the case study, the fact that the documents were not produced for research purposes, is a methodological constraint that needs to be taken into consideration. In this case, the parties in the FIA hearings were obviously defending their own actions; hence the sources of the statements were taken into account throughout the coding and analysis the material. Still, the interpretation of the material through a specific lens is what brings them to live (Thierny, 1997), not the purpose for which they were created. The issue investigated in the documents is the same as the main focus of the paper, i.e. the occurrence of ethically questionable practices within F1. Furthermore, this paper is not about uncovering the “truth” of the cases, rather it argues that the statements made in the material mirrors the situation in the industry and analyzes it as such through the lens of IC theory.

Appendix 1 lists the transcripts used for the qualitative analysis. The 5 key documents[1] were organized using N*Vivo software. After the documents were entered into N*Vivo both researchers coded text sequences, specifically in terms of different forms of transfer of intellectual capital. The coding process went on until both researchers felt they not identify additional themes. After this both continued the analysis of different categories found, i.e. into different levels of “legal” and “illegal” transfers.

**Intellectual capital: an overview**

Intellectual capital can be defined as the stock or flows of knowledge within an organization (Bontis, 1998; Edvinsson and Malone, 1997; Stewart, 1997) that can be converted into financial value. IC research is manly focusing on the creation and leverage of intangible assets within the organization, dividing them into three aspects: human, structural and relational capital (Sveiby, 1998, 1997; Stewart, 1997; Saint-Onge, 1996), corresponding to the experiences of the employees; organizational culture; and external relationships that collectively create value (Davis and Harrison, 2001; Stewart, 1997). The different kinds of IC are not seen as hierarchical; rather they complement each other creating value from the interplay between them (Edvinsson and Malone, 1997; Stewart, 1997).
The rise of IC research is linked to a focus on issues of community, trust and commitment in economic research in general. Such issues are posited as “distinct from the traditional industrial-era managerial paradigm founded on opportunism, distrust and control” (O'Donnell et al., 2000, p. 196). Knowledge flows are mostly perceived as a positive phenomenon by research. As stated by O'Donnell et al. (2003, p. 87): “Keep off the grass” signs rarely appear in this IC rain-forest and people, ideas, stocks and flows of knowledge travel wherever, whenever and however they can.” When knowledge flows it grows, as the person sharing doesn’t lose it and hence knowledge has doubled from an organization’s point-of-view (Sveiby, 2001). Assuming that this is one of the important points of departure for the IC-perspective, it is clear why negative issues have received limited attention.

In order to get a deeper understanding of the transfer of IC we look at the functioning of the knowledge economy, following Adler (2001). In Adler’s terms there are three kinds of ideal organizational forms for coordinating tangible and intangible assets:

1. market, that relies on price as a coordinating mechanism;
2. hierarchy, based on authority; and
3. community, which is coordinated by trust.

Adler (2001) argues that economic action between suppliers and an anonymous buyer of standard goods is coordinated by price when interaction takes place on the market. However, the price mechanism is not efficient for optimizing creation and transfer of knowledge, as knowledge is seen as public good (Augier and Teece, 2005). The strong intellectual property rights present in a market situation does support creation of knowledge, but hinders transfers.

Following Adler’s argument, in a hierarchy legitimate power creates division of labor. As knowledge is seen as a scarce resource, it is concentrated to specialized functions and higher organizational levels. The hierarchy effectively accomplishes routine tasks, but does not provide space for innovation or the creation of knowledge. In hierarchy and market people are considered costs.

Within communities coordinated by trust, value is created by the combination of knowledge, relationship and ideas by people (O'Donnell et al., 2003). Trust supports coordinating knowledge-related activities both within and between organizations. (Adler, 2001, 2008). In terms of both the creation and transfer of knowledge, the IC approach has focused on trust as a coordination mechanism for economic activities. Empirically, organizations typically consist of a combination of these three coordination mechanism, even though modern knowledge economies supposedly rely more on trust in interactions. It can be argued that the IC approach upholds a contradiction. On the one hand, it theoretically puts forward trust as the co-ordination mechanism and knowledge as a public good, but on the other hand it normatively focuses on management control, especially through efforts to measure the IC level of a company, following the idea of “what gets measured gets managed” (Chaharbaghi and Cripps, 2006, p. 34), more in line with the mechanisms of authority and price.

The IC term (through the metaphor of “capital”) also implies the mechanism of price, rather than community. An exception is Sveiby (2008), who advocates the term intellectual assets, using the term capital only as financial capital. Critics argue that IC frameworks are “primarily aimed at ensuring that capital providers maximize the...
return of firms through the maximization of their market value” (Abeysekera, 2008, p. 40). A focus on “community” serves to legitimize the disassociation of IC from the “predictable systemic exploitative logic” of industrialism (O'Donnell et al., 2003, p. 87). We see this as detrimental in the sense that it portrays IC as something unquestionably good, hiding practices of exploitative logic, unethical practices within firms.

On the other hand, it should be acknowledged that the value of the IC framework in terms of its focus on the processes of value creation that comes about through active engagement of employees, i.e. people, as human involvement is the catalyst for realizing the economic value of applied knowledge. In summary, IC research is theoretically well equipped to understand the knowledge economy through a “rainforest approach” (O'Donnell et al., 2003), emphasizing complex interrelations between market/price; hierarchy/power and community/trust, and by going beyond the previously dominant imperative of market and hierarchy. However, positioning community/trust as the most central mechanism of the knowledge economy, all but neglects the interrelations to market/price; hierarchy/power in the innovation process. We will argue through our analysis of the IC accumulation processes in the F1 industry, that assigning primacy to the community/trust dimension strengthens intellectual myopia by excluding central processes of the knowledge economy. In the following section we present the F1 industry and the espionage case that provides the background for our empirical observations.

The F1 industry

A large part of the motorsport industry is concentrated to Motorsport Valley, a geographical cluster in central-south England. The Valley hosts the leading production centre of racing cars for various motorsport series around the world. In the UK alone the industry’s annual turnover is around $10 billion, employing approximately 40,000 people, of which 25,000 are engineers (Henry and Pinch, 2002). At the centre of the cluster is the F1 industry, largely considered the pinnacle of motorsport due to high levels of innovation and large international exposure as a sport. The F1 industry is made up of a number of teams herein referred to as constructors. Constructors are core firms that “integrate the various components and knowledge domains to assemble the final motorsport vehicle” (MRA, 2003, p. 6). The main revenue source for constructors are sponsorship contracts, globally the commercial rights of F1 generate $1 billion per year. The 11 constructors who compete in the F1 championship have an average budget of $254 million, of this $95 million is spent on the production of the car (Sylt and Reid, 2008). Each constructor employs hundreds of engineers, who are continuously trying to come up with new innovations (Jenkins, 2004). The “products” are embodied in racing cars that are constantly updated with new technologies and design (Jenkins, 2004). As one senior manager describes:

There isn’t much on the car that stays the same … From the moment the car is formed in January to the last race in October, we make an engineering change on average every twenty minutes” (Jonathan Neale, McLaren Racing’s managing director in Blitz, 2007).

Even if the car designs are often evolutions of previous years’ cars, only about 5 percent will be carried over into next year’s project (Blitz, 2007). As all constructors work within the same constraints and regulations only constant refinement and innovation provides competitive advantage (Cross and Clayburn Cross, 1996).
Figure 1 illustrates the IC-dimension of the F1 industry, and the transfer of IC from one firm to another. The application of the IC-framework galvanizes some important foundations of the innovation system in F1:

- **Relational capital:** The production system relies on vast supplier and partnership networks. Whereas the constructors largely design the cars in-house, they are so complex that equally important to in-house development is the integration of supplier knowledge. Constructors have international partnerships, e.g. for engine development and fuel systems. As one team manager explains: “I can just pick the phone up and say: ‘I can’t solve this problem, I need some help…’ I can’t possibly expect to have the world’s leading know-how in fuel lubrication, bonding and adhesive material, yet I need all of that to compete. So how do we get that? We plug into our partners. I have access to global research and development in fuel lubrication” (Jonathan Neale, McLaren Racing’s managing director in Blitz, 2007).

All constructors operate with complex supplier networks; the major manufacturers can have 750 suppliers who produce the approximately 16,000 parts of a F1 car (Blitz, 2007). A majority of these also supply to rival firms. Previous research (Henry and Pinch, 2000) has noted that even if suppliers do not willfully leak trade secrets from one buyer to another, informal knowledge transfer still occurs, e.g. as “a component supplier subtly steers a constructor away from a sub-optimal way of doing something” (Henry and Pinch, 2000, p. 199). Such learning exemplifies how knowledge is accumulated through relational capital in the form of joint-suppliers, who transfer this knowledge to the structural capital of rival constructors. Within the industry such transfers are largely accepted and conventionalized. One reason is the rapid innovation pace. Constructors know that it takes some time for their rivals to adopt and convert competitor intelligence into components that fit into their complete product. Once a competitor has adopted the new knowledge the originating constructor has...
advanced to a second generation of its development. Constructors also accept that they have more to gain from a system with less regulated, red-taped knowledge flows through the vast relational capital as this advantage is shared by all constructors (Henry and Pinch, 2000, p. 202).

- **Human capital.** It is clear that in the F1 industry organizational value is interdependent on the accumulation and nurturing of top engineering talent. The industry has been conceptualized as having at its core a knowledge community: “a group of people . . . often in separate organizations but united by a common set of norms, values and understandings, who help to define the knowledge and production trajectories of the economic sector to which they belong” (Henry and Pinch, 2000, p. 194). The community aspect has been highlighted as increasingly important in F1. Historically innovations were embodied through the head-designers in charge of drawing the cars, and success was often directly attributed to key individuals. But in the last ten years, success is more attributed to the management of groups of engineers, whereas the role of the head designers are defined in terms of coordinating and managing knowledge resources rather than being responsible for drawing the chassis (Ron Dennis, CEO McLaren Formula One, FIA transcripts, 26.07.2007; Bob Bell, technical director Renault, FIA transcripts, 6.12.2007). Indeed, the increased complexities of the car have meant that different departments are responsible for specific parts of the car, which in turn has lead to a “natural tendency to have a not-made-here syndrome between groups or ‘empires’” (John Howett, President Toyota F1 team, Toyota F1 Media, 2006), thus further emphasizing the need of coordination and management.

For the creation of knowledge communities the movement of personnel is seen as central; as “personnel move, they bring with them knowledge and ideas about how things are done in other firms helping to raise the knowledge throughout the industry” (Henry and Pinch, 2000, p. 198) The movement of personnel is especially important from the network perspective as it “raises the knowledge base of the industry as a whole within [Motorsport Valley].”

- **Structural capital.** As in all industries different firms follows slightly differing production and management philosophies internally. E.g. McLaren have become known for the implementation of a matrix system making them less susceptible to damages of the movement of key personnel, whereas Toyota has implemented its Toyota Production System and kaizen thinking from its road car production to its F1 operations.

On the level of the industry as a whole, the prevalence and a culture of gossip, rumor, observation in the innovation process is seen as integral yet external to the constructors’ innovation process (Henry and Pinch, 2000, p. 202). This includes conventions of “legal spying”, which are accepted within the industry on a similar basis to that of the supplier leakage.

- **Financial capital.** Covering the large cost related to R&D external funding is crucial in F1. The constructors are largely funded by large multinationals such as ING, Vodafone and Red Bull. According to Financial Times estimates (Sylt and Reid, 2008) the partner companies of the constructors invest as much as $834 million a year. By including financial capital (Figure 1) as a framework for the
different forms of IC we wish to underline how all forms of human, relational and structural capital, – while being constituted by the non-economic such as social relations – are never disconnected from the circuit of financial capital. In F1 all relationships, including non-market transactions, are heavily mediated, connected and dependent on the flows of financial capital. This does not as such deny that in the knowledge economy “the intangible ... is gaining ascendancy over the tangible” (O’Donnell *et al*., 2003, p. 83), but rather underlines how the two are interconnected and how Adler’s (2001) control mechanism of community and trust is interlocked with market/price and hierarchy/power. The importance of financial capital does not exclude its dependence on IC; the investors (sponsors and technical partners) are partially drawn to F1 to get access to the large amount of relational capital, e.g. F1’s image as a technological pinnacle, and the media attention towards the sporting side.

**The spying scandal**

In 2007 two separate industrial espionage cases were revealed in F1. The first one involved the two largest constructors, the UK-based McLaren and the Italian-based Ferrari. The case involved accusations that a senior British engineer at Ferrari had handed over a 700-page dossier of confidential technical and strategic information to the head designer of McLaren. The two engineers had also contacted a third constructor, Honda, apparently with the intent of seeking new employment. The case was taken to court both as a civil lawsuit in Italy (unresolved at the time of writing), and Britain (where it was dropped after Ferrari had reached an out of court agreement with one of the defendants), and to the court of the international governing body of all motorsport events, the FIA. In its verdict in September 2007 the FIA found McLaren guilty of possessing or at least being aware of stolen Ferrari intellectual property – and sentenced to pay a fine of $100 million. Almost immediately after the verdict of the FIA case had been announced, another FIA case was revealed. It involved a former McLaren engineer taking with him the intellectual property of McLaren to his new employer at Renault. In a subsequent FIA trial, Renault was found to have technical information of the McLaren F1 car. The two 2007 espionage cases were preceded by a less publicized case where two former Ferrari engineers were sentenced to prison in Italy for disclosing trade secrets to rival constructor Toyota (Lostia and Elizalde, 2007). It is quite evident from the information at hand, that on top of these cases there is a history of industrial espionage in the industry, but the ones that have surfaced are from recent time when the media attention has grown and court cases on stolen IP have become more common.

**The public and private life of knowledge**

One of the most striking characteristics of F1 setting it apart from many other industries, is the large public interest in the persons and the technologies. Media follow closely personnel movement and the influx of any new innovation. There are specialist journals that employ technical experts to draw detailed sketches of new technologies and designs as soon as they appear on the cars, and former engineers to analyze their effects (Baker, 2007). Frequently, this leads to rival constructors developing similar solutions. Much of the discussion in the legal proceedings on what constitutes espionage in F1 addressed the question of what information was generally available
through various technologies used. For example, FIA court transcripts show that the exact increase in Ferrari’s wheelbase length in 2007 was deemed to be in the “public domain” (FIA report, 5.12.2007) and that it was “common knowledge” that McLaren run a seamless shift gearbox (FIA transcript, 6.12.2007).

Another particularity of F1 knowledge is the short lifespan of innovations, and thus the usability of competitor intelligence. As a former technical director of Honda comments:

[stolen knowledge] would just be enabling you to produce what that team had already produced and therefore you would always be playing catch-up, however good your manufacturing and design and operations loop is it is going to take you four to six weeks to get those sort of components on a car... what you want is an understanding of why you have come up with those engineering solutions and not what those solutions are (Geoff Willis, at Canadian GP Press conference 8.9.2007).

This corresponds to the industry convention identified by previous research (Henry and Pinch, 2000, p. 202) that “as long as a team knows it can keep ahead of its rivals it is not a major problem”. The fact that four to six weeks are considered a healthy margin to the competition is a good testimony of the pace of innovation. Another aspect highlighted is that technology itself is useless unless you have the “know-why”.

It is not “one thing that makes a cargo quicker but a huge amount of small details and all the philosophy that has developed in a team over years” (Pat Symonds, executive director of engineering, Renault, Canadian GP Press conference, 8.9.2007). The explicit knowledge (what is done) is thus less interesting than the tacit practices, the philosophy, routines (how things are done).

The traditional way of looking at IC assumes that routines, philosophy, how things are done, cannot be stolen and cannot be owned (Williams and Bukowitz, 2001). This is not to say that knowledge emanating from other constructors’ cars is uninteresting or that there is no market for it. The designers acknowledge that knowing where your competitors are strong will help the innovation process:

When you are designing a car, particularly when you are looking at your competitors, [you want to know] where is the other person’s advantage — is the aerodynamics better, or is the car lighter or is the centre of gravity lower or is the engine more powerful... [It] helps you to focus a bit more on where you develop the car and in the absence of that information all the constructors are doing a lot of competitor comparison analysis to try to focus on exactly where their shortcomings are. We do that all the time (Geoff Willis, Technical Director Red Bull Racing, Canadian GP Press conference, 8.9.2007).

This also reveals another previously identified convention of the industry: observation and competitor comparison analysis, i.e. “legal spying” that the constructors engage in on a frequent basis. Such conventions have been recognized as one of the sources of high innovation levels in the industry (Henry and Pinch, 2000). The high innovation pace ensures a market where demand for knowledge is high but where firms have taken several steps to reduce supply and protect their knowledge. Under these conditions firms will often actively seek out informal channels such as staff poaching, observation and ultimately, industrial espionage (Cassidy and Loree, 2001).

“Legal spying”. Even though procedural and institutional barriers exist within the industry, such as contracts of the engineers, which stipulate all inventions as the property of the constructors, knowledge transfers through informal channels are
accepted as both inevitable and effective. A McLaren employee summarizes the
convention of legal spying explicitly when stating that acquiring knowledge on rival
constructors is “part of work” that “everyone” does “every day” (Pedro de la Rosa,
test-driver McLaren, FIA transcript, 13.9.2007 p. 61). The most common channel is
direct observation. Knowledge is acquired informally for competitor comparison
analysis to understand where and how progress in design could be made. Constructors
directly observe each other at race weekends, when they are gathered in close quarters
and surrounded by media, who photograph and film the cars as closely as possible. As
the CEO of McLaren describes: “Everyone walks up and down the Grand Prix grid,
looking closely at other cars. Everybody commissions photographers to take pictures
of cars” (Ron Dennis, FIA transcript, 26.7.2007, p. 38).

Modern technology has brought more advanced methods for analysing informally
gathered intelligence. Constructors frequently hire experts to “parametise the
photograph for height, length, width and position” so that they can be turned into
CAD drawings. Also images of cars that are lifted on cranes are shown of TV,
constructors perform “image analysis to determine the car’s weight distribution” (FIA
transcript, 13.9.2007, p. 41). Constructors also perform sound analysis based on
onboard camera footage from rival cars, to determine and map details about engines,
and do this “on every race [they] can” (Pedro de la Rosa, test-driver McLaren, FIA
transcript, 13.9.2007, p. 50).

As often with externally acquired information received through informal channels
the line between what is considered “normal” and what is illicit can elude the external
observer. Knowledge gained by rivals through sound analysis is not knowledge lost
and will not affect productivity of the originating firm. The procedures described
above still require various stages of conversion before they constitute knowledge and
become valued IC for the constructors. Information on details on the cars might not be
valuable without an understanding on how they fit into the system of the car, and
successful conversion of externally acquired knowledge requires human capital.

Employee mobility. The fiercest competition in the F1 involves accumulation of
human capital. Human capital is the cumulative tacit knowledge of employees within a
firm (Bontis, 1996). In F1, the composite designers, mechanical engineers, aerodynamic
designers, vehicle dynamicists and drivers embody the continuous innovation process.
The cars are designed by teams, but all design teams have key personnel, such as the
technical directors and head designers, for whom there is a constant demand in the
market. There are some designers considered so valuable that the constructors pay
around 10 million dollars in salary for their services (Ron Dennis, CEO McLaren, FIA
transcript, 26.7.2007, p. 20).

Employee mobility is the basis for part of the spillover and innovation, as there is “a
constant stream of exchange, with people taking what is in their heads. I can tell you
comfortably where materials originating from McLaren sit on many other cars”. (Ron
Dennis, in FIA transcript, 26.7.2007 p. 38) The impact an individual can have in the
innovation process varies, but individual engineers and their movement is seen as
central as illustrated by another CEO:

[... every time we take an employee from BMW, or we lose one to Honda, or a Renault man
goes to so-and-so, there’s always some transfer of information ... Sometimes it’s very little
information, sometimes it’s of tiny value, and sometimes it’s worth a tenth or two of a second
per lap. It varies (Frank Williams, Williams F1, in Goren, 2007).]
In terms of IC theory authors such as Sveiby (2001) posit that intangible asset will not leave its creator in a transfer, and Stovel and Bontis (2002, p. 304) note that when an employee leaves a company a subsequently shares his knowledge with competing firms, “not only do firms lose the human and relational capital of the departing employee, but also competitors are potentially gaining these assets”. In F1 firms consider high turnover as something inevitable in a competitive environment, yet they are continuously trying to prepare for knowledge attrition, as McLaren’s COO notes:

Inevitably, if you are a successful F1 team, then your staff are [sic] attracted to other [constructors]… if you have a successful formula, people will try to aggressively attract your staff. If no one was interested in your staff, then I would be worried. So I would rather have the challenge of holding onto our staff (Martin Whitmarsh in Goren, 2007).

The knowledge spillovers and disclosure of trade secrets due to employee mobility are available to all actors, and if mobility would seize it would probably hurt the industry more than it would gain an individual firm. Furthermore, it is very difficult to take the issue to court, as the firm then would have to disclose the trade secret. Courts may also be reluctant to enforce restrictive non-compete covenants, as they want to safeguard employees’ freedom to change employers.

Another source of knowledge is “grapevine knowledge”. Inherently intertwined in the social relationship that exists between employees of different constructors, grapevine knowledge includes rumours and pieces of information the organization can access, it’s hence part of the relational capital. Drivers and engineers have their sphere of acquaintances and friends within the industry:

Somebody will always open their mouth. You go for dinner, and somebody will say ‘We are running this weight and doing that.’ So most of the time you can find out what people are running anyway (Juan Pablo Montoya, former McLaren driver, in Noble (2007)).

It appears that the industry acknowledges the value of the knowledge accessible as relational capital, as it seems to be instilled in drivers that they should be “listening and doing [these] things every day. That is part of work. We are always in contact with people doing similar things... Information flows” (Pedro de la Rosa, in FIA transcript, 13.9.21007, p. 61). This stands in contrast with the image of rogue employees who behave opportunistically, as illustrated in management’s comment on the transfer of trade secrets: “This is the action of two rogue employees definitely looking to find a future for themselves” (Ron Dennis, CEO McLaren, FIA transcript, 26.7.2007, p. 20).

The depiction of the rogue employee bears strong similarities to the depiction of rogue traders in the finance industry (Clark, 1997). Rogue employees, no matter the industry, deserve to be seen in their context and culture (Clark, 1997, p. 233). In F1, employees are expected to bring knowledge when switching jobs, some firms even make sure to do a thorough debrief “of newly arriving engineers about the level of their knowledge about what happens in other organizations” (Bob Bell, Renault technical director, FIA transcript, 6.12.2007, p. 37).

The rules of knowledge diffusion are both tacit, as outlined above, and explicit: An industry insider reveals how when engineers sign a contract with a manufacturer “it is usually spelt out in great detail that all inventions are the intellectual property of the company”. However, self-regulation is at the heart of the industry, concurring to the perspective of the non-rational management perspective with its emphasis on trust that is at the center of much of IC theory (Chaharbaghi and Cripps, 2006).
“Illegal spying”. Within F1 it seems like the convention of acquisition of trade secrets is deeply rooted – it is just not seen as morally apprehensible but rather as another form of informal knowledge transfer. According to a former F1 driver (in Autosport, August, 2007) “Everyone copies. It’s just the way F1 works”. The behavior is so naturalized in the industry that until the spying scandals emerged there was little reflection of such practice. There is also anecdotal evidence suggesting conventions of engineers bringing articulated knowledge with them to the new employer:

It is also quite well known that in the recent past an engineer moving from, one British F1 team to another arrived with a complete set of drawings on CD of his previous team’s car. His new employer hired a company to convert the files into their own CAD format (Race Tech, 2007 p. 16).

Constructors argue to know the difference between what is legal or not recognizing “an important distinction between obtaining information on a competitor’s car from improper resources and obtaining such information from accepted or legitimate sources” (FIA report, 5.12.2007, p. 4). Yet there is little evidence of clear-cut distinctions as the external learning processes are very similar no matter if the employee arrives with ideas he obtained at his former employer in his head or on a CD.

In the investigations of the McLaren-Ferrari espionage case, the president of the regulating body remarked how thin the line between legal and illegal transfer of knowledge is in F1:

[...] everything … tends to reinforce the suggestion that a certain legitimate form of industrial espionage is standard practice in F1. The only difference between what [the accused spy] … would normally do and what was done on this occasion was the presence of stolen goods (Max Mosley, FIA transcript, 26.7.2007, p. 38).

This also underlines that the process of external learning is exactly the same through “observation” – i.e. what the accused technical director “would normally do” – as it is through spying, i.e. what he was accused of. This also underlines the difficulty in one day see the process as knowledge sharing between “old friends”, and the next see it as transfer of stolen knowledge between “rogue employees”.

But what breeds conventions of industrial espionage in a textbook example of a knowledge community? One possible explanation is that as investors back up the F1 industry the salaries of engineers have soared. Firms compete for the best designers and engineers, and expect them to bring competitiveness. This puts increasing pressure on engineers to hoard knowledge as possible, making them attractive investments for the knowledge seeking employers:

There are USD +10 million designers on the market and that is [the spies’] motivation. They, in turn, claim to be able to solve manufacturers’ uncompetitiveness problems … Two of the largest, most powerful companies in the world, in Formula 1, have consistently failed from the day they entered this sport[2]. That is why this has happened. “Buy me, I will give you competitiveness.” (Ron Dennis, in FIA transcript, 26.7.2007, p. 20).

The F1 community is built on constant innovation, putting immense pressure on each individual. A former chief designer described the environment as one where “[y]ou gotta go quicker, gotta go quicker … and you get more and more sort of – panicky, almost” (Gordon Murray, in Cross and Clayburn Cross, 1996, p. 93). Yet opportunism alone cannot explain the illicit practice as industrial espionage can also be anchored in
the insecurity of employment and high staff turnover. According to an anonymous F1 designer it is common practice that engineers take home drawings and keep copies of their work and the motivation might not be simply greed and intent to sell trade secrets:

[...] they are frightened about losing their jobs. Insecurity drives their action. People squirrel away nuggets of information to ... improve their employability but I’ve never heard of a case of anyone being released by a team because they didn’t bring the secrets of their previous team with them (Race Tech, 2007, p. 20).

This resonates with the reason of the engineer implicated in the Renault-McLaren espionage case. He explained his actions of taking with him blueprints:

[...] mainly in order to maintain a record, for myself, of the work I had done at McLaren and of which I am very proud; the other reasons had to do with professional interest and some insecurity at joining my new job (Phil Mackareth, FIA transcript, 6.12.2007, p. 23).

Thus, some of the tenets of IC theory, and indeed the communal learning economy itself, becomes undermined by its own consequences: it is difficult to build trust and communities in firms and industries “which are, at the same time, being ‘delayered’, ‘downsized’ and ‘re-engineered’” (Thrift, 2005. p. 49).

Discussion and conclusions
A question raised by the F1 case is if such practices are as common in the knowledge economy, as they were in the industrial era. Indeed, there are several parallels to the entrepreneurs of the British Industrial Revolution and their casual attitudes towards industrial espionage (see Macdonald, 2003). In F1 the ethically questionable practices are contextualized in the very basis of the interest in IC – the constant pressure of continuous improved performance. The case serves to partially dispel the myth that industrial espionage is something only firms from newly industrialised or laggard economies engage in. Our literature review showed a lack of studies within KM literature that a) considers the industry as a whole, rather than, e.g. a single alliance b) considers espionage a practice rather than an act that firms need to protect themselves from. Herein we also see good potential for future research, while we recognize the difficulty of getting access to firm-level data..

In terms of theoretical positioning, we concur to Adler (2001) and O’Donnell et al. (2003) in considering value creation as not only anchored in the imperatives of market/price and hierarchy/power but also in what they refer to as the rationality of the “people/community/trust dimension of intellectual capital creation” (Adler, 2001, p. 85). However, a challenge in present conceptualizations of IC is that the latter rationale has become so dominant that it does not seem to take the existence of the former two into account, rather than seeing it in terms of the “tangled landscape of the IC-forest” (Adler, 2001, p. 86) that is money/power/trust and the complex interdependence between them (Adler, 2001). Constructors are for example tempted to believe that they can buy success when adding a well-known designer or engineer to their team. This also tends to give instrumental market rationality greater weight (Adler et al., 2008). Further, it should be noted that the rationality of the people/community/trust does not necessarily exclude practices of deception, fraud and selfishness. To the extent that IC is attributable to community and trust, the processes of IC creation are neither normatively good nor morally neutral/positive. In this sense IC theory could well be more informed by
economics and transaction cost theory’s understanding of opportunism, without losing its focus on the focus on the knowing capabilities of the social collective.

The commodification of the intellect in IC puts forward two possible interpretations. First, commodifying the labour aspect of IC, i.e. intelligence as capital, strengthens the interdependency to the rational of market/price and hierarchy/power. “Measurement and reporting techniques of IC that shift human capital represented by labour into systems and processes over which the firm has greater control” (Abeysekera, 2008). Second, it struggles with the conceptual base of community and trust, and the result of its practices: intellectual property regimes and metrics of KM, i.e. market/price mode in Adler’s (2001) conceptualization. In the case of the F1 industry a constant voluntary and involuntary employee turnover is the basis for the dynamic labor market, which itself is an important source of IC for the firms. The limited market drives up salaries of top engineers and drivers, which as seen in the case of theft of trade secrets in F1, makes betrayal and self-interest profitable. If F1 is to be seen as a microcosm of the knowledge economy as suggested by previous research, then there is little to indicate that the knowledge economy will progressively displace the dominant role of the market (Adler, 2001).

A central premise of IC theory is that intellectual capital is a stock of capital, i.e. assets of the firm. This also implies that individual knowledge is seen as property of the firm regardless of whether an individual leaves or stays with the firm (Abeysekera, 2008; Mouritsen et al., 2002). However, we argue that knowledge flows are not necessarily limited to organizational boundaries or its property regimes, and should not be viewed as such in IC. In this context, it is interesting to note how the firms involved in the espionage cases attempt to distinguish the responsibilities of the firm from those of an individual employee. In other words, how much responsibility does a firm have for the behavior of an employee, when are they considered acting on behalf of the firm, and when on their own? The firms attempt to blame the scandal on rogue employees that act opportunistically for personal gains, outside the scope of their duties as part of an organization. Interpersonal relationships differ in many ways from relationships between organizations, but they are instrumental to a firm’s success or detriment. Employees might sometimes pursue their own interests instead of those of the organization (Galaskiewicz and Zaheer, 1999). The distinction is also worth considering for managers. As the number of collaborative agreements of different forms increase, the interface between employees grows i.e. as they are sent on secondment to partner organizations. This is naturally a requisite for collaboration, but it also brings along the need of creating awareness of the risks. When employees in F1 are discursively transformed from human capital to “rogues”, there are similarities to the finance industry and the juxtaposition of rogue traders (e.g. Nick Leeson and Jérôme Kerviel) and industry culture. The emphasis on rogue employees served to dilute questions about the culture of finance, because “[b]ehind the facade of rogues and scoundrels are corporations and industry practices” (Clark, 1997, p. 232). Communities are functions of the internal attributes of the individuals working and living there. This means that espionage just as any other form of external learning might be a community convention. Hence, an interesting paradox between “the good side” of knowledge transfer, meaning social relationships and knowledge sharing; and the “dark side”. It would be simplistic, if convenient to assume that one form of external learning is characterised as attributable to the
(rogue) individual while another would be confined to the (good) community. For IC theory the case can act as a reminder that in the knowledge economy, knowledge is not disconnected from economy. There seem to be a tendency to disconnect community and trust-based learning from learning based on acts of opportunism and self-interest. These two can and will exist simultaneously, and firms will most likely continue to be both the source and targets of various forms of external learning, many of these processes bordering or dipping into what is illegal. The climate of a ‘learning races’, ‘the panicky feeling’ described by one designer (Murray, in Cross and Clayburn Cross (1996, p. 93)) is common in most knowledge intensive industries, and this climate is strengthened by both academics through theory and industry through practice.

Implications for managers from the case are manifold, if complex. F1 is a hotbed of innovation where knowledge flows freely, more so than in many industries — there is no regime of patents. Patent regimes is often turned to as a means of maintaining the value of IC. The case study seems to support a view that secrecy and patent regimes impede IC flow and transactions, which could ultimately force firms to innovate in isolation (Macdonald, 2003):

Preventing this fate is the conviction of those who actually do innovate that their innovation is dependent on the efforts of others, that this information cannot be acquired unless other information is given in return, and that individuals are best equipped to effect these transactions.

From this perspective the case gives some basis for further research in terms of the effectiveness of patent regimes, and how they may impede on innovation.

While firms need to ask themselves if they have the tools when a trusted colleague turns rogue, there are also questions about the firm’s responsibility in creating the norms. Firms in knowledge intensive industries seem to employ unrecognized informal channels for knowledge acquisition. Especially in environments with cut-throat competition and extreme innovation speed, managers might not even find time to consider issues of ethically questionable practices. The finance industry, similar to F1, is a highly competitive and innovative, with high employee turnover rate, and highly regulated. Especially with the current financial crisis, focus has been put on how financial institutions are developing new types of loans to try to work around the rules, often resulting in financial losses for the institutions and/or customers. As the case shows, every manager should with good reason consider the limit between right and wrong in their particular industry. In the F1 industry, certain conventions were thrown upside down due to the spying scandals. Behaviour that, according to the pre scandal conventions, was acceptable suddenly became not only ethically unacceptable, but even illegal. The F1 industry is not unique; we can assume that similar tacit conventions exist in other industries.

Notes
1. The FIA hearing regarding Renault and McLaren was analyzed on a paper copy, since the only version available was a scanned version of the transcript in PDF format, and hence not supported by N-Vivo.
2. This implicates Honda and Toyota.
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Further reading

Appendix. Material used for analysis in N*Vivo


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PAPER 5

Governmentality and the creative class: harnessing Bohemia, diversity and freedom for competitiveness

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Abstract: Richard Florida’s works are the holy writings of the ‘creative economy’. Some commentators have stressed the elitist, insidious neo-liberal implications of this new ‘class’ discourse. Drawing on Foucault’s concept of governmentality and the framework introduced by Dean, we study:

1 what is being governed: the creative class… and everyone else
2 how government is achieved: through the introduction of the three Ts (technology, talent and tolerance) and the correlations established between them and economic success
3 who we become when governed: workaholic, consumerist and apolitical ‘Bohemians’ who value individuality, meritocracy, diversity and openness – and flexible immaterial labour, working in increasingly precarious conditions
4 why we are governed this way: because being part of the creative class is both socially worthy and personally desirable.

These norms are instrumental in the reproduction of a deeply unequal economic and social system, designed to exploit both the conspicuous winners and the excluded losers.

Keywords: Richard Florida; creative class; governmentality; competitiveness.


Biographical notes: Martin Fougère is an Assistant Professor in Politics and Business at Hanken School of Economics in Helsinki, Finland. He has a special interest in critical management studies, more particularly in the critical study of managerial discourses. He has previously published in journals such as the Scandinavian Journal of Management and the Journal of Organizational Change Management, he co-authored a book on marketing discourse and contributed to several edited books.

Nikodemus Solitander currently works as an Assistant Professor (Acting) in Supply Chain Management and Corporate Geography at Hanken School of Economics in Helsinki, Finland. He has a special interest in sustainable development and the creative industries. He has previously published in journals such as Management Decision and Corporate Social Responsibility and Environmental Management, and contributed to several edited books.
1 Introduction

“The creative sector... it is the leading defining force for change, it creates competitive advantage. It is changing everything, the way we dress, the way we work, what kind of communities we live in, it’s blurring the boundaries between home and work, it is changing the way we use our time, it is changing our society.” (Florida, 2006a)

In the omnipresent contemporary discourse prophesising and celebrating the advent of the ‘creative economy’, creativity is claimed to transform the economic landscape and the practices of contemporary societies. At the centre of this ‘defining’ makeover towards creative capitalism stand the writings of Richard Florida. In Florida’s (2002, 2005, 2007) view, the world is in the midst of a sweeping transformation: organisations are moving from the relatively dull practices of the service economy towards a cool and caring creative economy, one where organisations generate wealth by harnessing intellectual labour, intangible goods and human creative capabilities. These alleged sweeping and all-encompassing changes are claimed to necessitate new strategies of government that support the upgrading of the workforce into a creative class as ‘our workplaces are either consciously or unconsciously expecting creativity as a component of our processes and outcomes’ [Gibb and Waight, (2005), p.273].

Discursively speaking, a Floridaesque ‘creative capitalism’ [also encountered in, for example, Bilton (2006), Hartley (2005) and Landry (2000)] produces a new subject position that is articulated around the notion of creativity; a new subject who is cooler, hipper, more urban, more tolerant, more talented, more caring and humane and, most importantly, more competitive than in the previous articulations, including the still trendy ‘knowledge economy’. This new creative ethos has hitherto been confined to the most developed Western economies – and, as explicitly stated in Florida’s writings, to about a third of their population, forming the creative class. However, Florida is no less explicit in claiming that more and more people from the other ‘classes’ (especially what he calls the ‘service class’) and the rest of the world could climb the creative ladder. Creativity is increasingly seen as ‘generated by employees in any job and at any level of the organisation, not just jobs that are traditionally viewed as necessitating creativity’ [Waight, (2005), p.151]. In creative capitalism, it is seemingly possible that every worker will eventually be part of the highly competitive creative class. Although it has not been as touched as could be expected by the ‘creative wave’ stimulated by Florida – especially in comparison with regional and urban studies – management literature has been eagerly researching how to harness and tap into the creative potential of the workforce (see, e.g., Bilton, 2006; Gibb and Waight, 2005; Madjar et al., 2002; Mumford et al. 2007; Perry-Smith and Shalley, 2003; Tan, 1998), thereby creating ‘new employment paradigms’ [Gibb and Waight, (2005), p.273].

But Florida’s ideas have also led to considerable debate and critique from different perspectives: conservatives have mainly focused on cultural issues, such as how Florida’s work questions traditional family values and promotes ‘leftist agendas’ (e.g., Malanga, 2004), while progressive commentators have stressed the elitist implications of this new ‘class’ discourse, accusing it of insidiously promoting a neo-liberal agenda (Gibson and Klocker, 2005; Kipfer and Goonewardena, 2007; Peck, 2005). In this paper, we elaborate on the latter critique from a critical management studies (CMS) perspective, seeking to address the concern that ‘critical management studies [may have] missed the rise of this new spirit of capitalism in which creative destruction, chic slacker-cool and designer
resistance are now celebrated in organisations advocating freedom around normative inputs’ [Fleming and Spicer, (2008), p.303]. Drawing on the concept of governmentality (Foucault, 1991; Dean, 1999; Rose, 1996, 1999), we describe how ‘creative class’ members are meant to be governed by the new creative ethos.

The paper is structured as follows. After this introduction, we discuss governmentality as introduced by Foucault and elaborated on by writers such as Dean and Rose. We then discuss Florida’s articulation of the creative ethos in general terms. Our fourth, fifth, sixth and seventh sections correspond to our analysis of Florida’s notion of ‘creative class’ as developing a particular governmental rationality. Following the framework introduced by Dean (1999, p.17) [for an application in management studies, see Skålén et al. (2006)], we study in turn:

1. what is being governed
2. how government is achieved
3. who we become when governed
4. why we are governed that way.

We close the paper with a reflexive discussion and some conclusions.

2 Governmentality

One of the most useful analytical tools for understanding the methods of acting upon others to produce subject effects is the concept of governmentality (Thrift, 2000). As an analytical guideline, it gives priority to questions of how we govern and how we are being governed. Governmentality expands the analysis from a focus on describing how authority operates in particular situations and spaces to include the practices of government, which ‘form the basis on which problematisations are made and what happens when we govern and are governed’ [Dean, (1999), p.28]. In this section, we give a basic introduction to the concept of governmentality and how it can be used and deployed as an analytical framework following Dean (1999).

Foucault initially introduced the concept of governmentality in a 1978 lecture at Collège de France in a lecture series entitled Sécurité, Territoire, Population (see Foucault, 2007[1978]). By deploying the concept of governmentality, Foucault provides a guideline for analysing technologies of power, and more importantly their political rationality (Lemke, 2001). The semantic linking of ‘government’ with ‘mentality’ implies a fusion of new technologies of government with a new political rationality (Clegg et al., 2006). In his essays on governmentality, Foucault (1991) looks at what he calls the ‘conduct of conduct’, i.e., ‘all endeavours to shape, guide, direct the conduct of others’ [Rose, (1999), p.3]. A focus on governmentality implies investigating the formation and transformation of theories, proposals and strategies for the direction of conduct of others, rather than framing investigations in terms of state or politics (Rose, 1999). In other words, by using a governmentality perspective we look at rationalised schemes and techniques that aim to shape the conduct of others in order to achieve certain objectives (Rose, 1999). Government enables problems to be addressed and suggests particular strategies to deal with these problems. These attempts of governing
might be formal, as in policy documents or economic theories, or less formal as in practical rationalities. But most importantly, an analysis using governmentality is not a ‘mere’ description of the empirical routines of government; rather it is also an attempt to understand how these routines and regimes have to be thought [Dean, (1999), p.29].

Foucault uses the term to link power relations to the process of subjectification (Lemke, 2001). Governmentality aims to create common sense-making frames wherein people voluntarily delegate moral autonomy and responsibility to a moral force external to the self (Clegg et al., 2006). But as Rose (1999, p.4) observes: “To govern humans is not to crush their capacity to act but to acknowledge it and to utilise it for one’s own objectives”. By governing *through* the population, governmental powers operate by facilitative rather than prohibitory mechanisms (Clegg et al., 2006): ruling thus is seen as a reflexive activity. People govern themselves and others towards what they see as the ‘truth’ and what they see as ethical. In contemporary society the true behavioural norms and conventions are mainly developed within human and behavioural sciences, which prescribe how people in the domains addressed by these sciences should constitute themselves (see, e.g., Townley, 1994). This emphasises the strong coupling between:

1. power and knowledge
2. practices of government
3. practices of the self; a coupling that enables the formation of a discursive totality.

A central aim in the analysis of government hence lies in interrogating the governmental rationality that is embedded in discourse and that produces subjectivity (Dean, 1999; Rose, 1999).

The concept of governmentality has been developed into a more coherent perspective through its rapid adoption in order to analyse a wide range of societal phenomena (cf., e.g., Allen, 1991; Barry et al., 1996; Dean, 1999, 2007; Hannah, 2000; Huxley, 2007; Miller and Rose, 1990; Perry, 2003; Rose, 1990, 1996, 1999), many of which can be seen as closely connected to how ‘advanced liberal government’ relies on ‘freedom’ to govern populations (Dean, 1999; Rose, 1996, 1999) and how this manifests itself in times of neo-liberalism: the subject tends to govern her/himself by aspiring to norms that are both ‘socially worthy’ and ‘personally desirable’ [Rose, (1999), p.76].

Within management and organisation studies, analyses largely inspired by a governmentality perspective have examined: issues of power and organisational subjectivity (e.g., Dixon, 2007; Jackson and Carter, 1998; van Krieken, 1996); HRM-related questions such as employee development, effectiveness and performance (e.g., Brewis, 1996; Kelly et al., 2007; Townley, 1994; Townley et al., 2003; Triantafillou, 2003); the ‘neo-liberalisation’ of society as seen through evolutions within public sector management broadly speaking (e.g., Clarke and Newman, 1997; du Gay, 2000; Stokes and Clegg, 2002) and health and higher education more specifically (e.g., Dent, 2003; Doolin, 2002; Ibarra-Colado, 2001; Larner and Le Heron, 2005); marketing and customer orientation (du Gay and Salaman, 1992; Hodgson, 2002; Skålén et al., 2006); as well as inter-organisational project management (Clegg et al., 2002). In this paper, we read some of Florida’s (2002, 2005) main works through the analytical lens introduced by Dean (1999, p.17), addressing the ethical (self-)government of the self through four aspects:
1 Ontology: What is being governed through the creative ethos?

2 Ascetics: How is government achieved? In particular, how is the normative claim made legitimate – e.g., through what technologies and scientific procedures?

3 Deontology: Who do we become when governed through the creative ethos? What subject positions are made available and valuable to us?

4 Teleology: Why are we governed that way? This entails a deconstruction because it covers two dimensions: on the one hand, for an individual, why is it fundamentally good to be part of the creative class; and, on the other hand, from the perspective of government, what may be the instrumental value of a dominant creative ethos in society?

3 The emergence of the creative ethos

“The nurturing of a creative class is seen as the foundation of prosperity and civilisation.” [Gibb and Waight, (2005), p.273]

The growth of creative economy discourse has led to envisioning new modes of self-regulation of knowledge workers, which enables the formation of a new creative and flexible subject position. Here, we look at some of the methods through which these new subject effects may be produced and how identities may be fixed.

The establishment of the creative ethos as part of a governmental rationality needs to be understood in terms of the knowledge economy discourse, and specifically how the latter portrays scalar governance and territorialisation, seeing Western regions as besieged by ‘behemoths like India and China’ who offer ‘huge markets, capable workforces and cost advantages’ to Western multinational corporations, thanks to their ‘low-cost, low-skilled end of the labour market’ (Florida, 2006b). Under these circumstances, multinational companies are naturally gravitating towards those environments that create and maintain the ‘sources of competitive advantage’ (Porter, 1990). As the movers and shakers of the economy, the mobility of multinational capital is a cause of explosive tensions through interstate and intercapitalist competition:

“[T]he scales on which this territorialisation process occurs are no longer spatially co-extensive with the nationally organised matrices of state territoriality that have long defined capitalism’s geopolitical and geoeconomic geographies.” [Brenner, (1999), p.435]

Headquarters, R&D and production are spreading across national borders, but they also agglomerate in particular regions, thereby shifting the issue of inequalities in wealth distribution from the national scale to the regional scale. As a result, regional politics has changed towards focusing less on welfare and more on issues of local economic development and competitiveness, based on productivity (Bristow, 2005; Schoenberger, 1998).

In this new form of regionalism, the identity of knowledge workers is increasingly discursively articulated through the competition of intrastate regions, most visibly the competition between ‘Western’ developed regions and the ‘behemoth’ regions of the fast-developing parts of the non-West – the ‘most ferocious onslaught of global competition in more than a century’ [Florida, (2007), p.19]. It is within such discourse
that creativity has become a central element, as ‘creativity and competitiveness go hand in hand’ [Florida, (2007), p.9]. Globalisation, through conditions of rapid change, technological obsolescence and interregional competition, necessitates citizen subjects who are enterprising, entrepreneurial, flexible, innovative (Bunnell and Coe, 2005) and now also creative (Thrift, 2000).

In the following sections, we will more closely examine how this creative ethos may be transforming how we are governed and how we conduct ourselves.

4 An elite for everyone – what is being governed

The constant need to remain one step ahead of emerging developing regions produces and reproduces a discourse of innovation based on the commodification of knowledge. This, in turn, has led to an appropriation and increased emphasis on the process of creativity (Thrift, 2000), which produces a new subject position in the division of labour, what Florida (2002) has referred to as ‘the creative class’.

But this allegedly does not refer to class in the traditional Marxian sense wherein ‘we are still talking about a basic structure of capitalists who own and control the means of production and workers under their employ’ [Florida, (2002), p.68]. As Florida (2002, p.68) further argues:

“[L]ittle analytical utility remains in these broad categories of bourgeois and proletarian, capitalist and worker. Most members of the creative class do not own or control any significant property in the physical sense. Their property… is an intangible because it is literally in their heads.”

This creative class is allegedly made up of people who control and own the means of production, i.e., creativity, thus rendering old class understandings all but obsolete, because even though Florida acknowledges that “Marx had it partially right when he foresaw that workers would someday control the means of production”, it is only to stress his point that ‘more workers than ever control the means of production because it is inside their heads: they are the means of production’ [Florida, (2002), p.37]. This also suggests a shift in power structures:

“The ultimate ‘control’ issue is not who owns the patents that may result, nor is it whether the creative worker or employer holds the balance of power in labour market negotiations. While those battles swing back and forth, the ultimate control issue – the one that we have to stay focused on, individually and collectively – is how to keep stoking and tapping into the creative furnace inside each human being.” [Florida, (2002), p.37]

It becomes the duty of workers to innovate faster and faster, adhering to short-term financial audits, while tapping into the creative self (Thrift, 2000). Issues of societal power and control are of secondary importance in this new project of self-management.

Florida (2002, 2005) is explicit in his writings that the new subject, the creative ‘worker’, is to be differentiated from managers – and generally departs from ‘organisation man’. Thrift (2005, p.47) makes a distinction between the subjecthood of the manager and that of the worker in the new economy, which entails ‘super-exploitation of both managers (who are expected to commit their whole being to the organisation) and workers (who are now expected to commit their embodied knowledge to the organisation’s epistemological resources as well)’. The latter are to be understood, in
Florida’s terms, as members of the creative class. Unlike organisation man, the creative class is portrayed as striving to be themselves, finding meaningful work, searching for (non-suburban) communities that let them validate their identities, identities portrayed as increasingly independent from corporate identities. What is left unproblematised is the paradox of workers increasingly committing their embodied creativity to the organisation.

Florida divides the creative class into the ‘super creative core’ and ‘creative professionals’. The former includes ‘scientists, engineers, university professors, poets and novelists, artists, entertainers, actors, designers and architects, as well as the thought leadership of modern society: non-fiction writers, editors, cultural figures, think-tank researchers, analysts and other opinion makers’ [Florida, (2002), p.69]. These envisioned subjects are largely Western individuals who are governed and governing through what they see as the ‘true’ behavioural norms and conventions of the creative economy. The ‘creative professionals’ are considered slightly less creative: they ‘work in a wide range of knowledge intensive industries such as high-tech sectors, financial services, the legal and healthcare professions and business management’ [Florida, (2002), p.69]. For these workers creativity is not part ‘of their basic job description’ but they are ‘required to think on their own’ [Florida, (2002), p.69]. In Florida’s articulation they share the ethos of the core, but because of their economic function they are not fully tapping into their creative furnace.

The identity of the creative class is most significantly defined by what it is not. In Florida’s view, those who are excluded from the creative class belong to either the ‘service class’ or the ‘working class’. If, as Townley (1994, p.31) argues, “a taxonomy… has the function of characterising and constituting classes”, then Florida’s is the mother of all taxonomies, arbitrarily classifying – i.e., including and excluding – people according to what segments of the workforce they belong to at a given point in time. According to Florida (2002), the creative class makes up around one-third of the US workforce. It is supported – both figuratively and literally – by the service class (allegedly 43% of the US workforce) and the working class (25%). While the former is discussed at length and visibly part of the audience targeted by Florida’s texts – and by the emerging creative governmentality – the latter seems to be more excluded as having values that are fundamentally incompatible with those of the creative class, although Florida often claims that the door is open to everyone.

The service class allegedly unites people with ‘low-end, typically low wage and low-autonomy occupations’ [Florida, (2002), p.71] in the service sector. These people have the potential to be creative but they cannot be part of the creative class because their economic function does not allow them to commodify their creativity to the extent of the creative class. Their creativity is not valued in the financial sense, but it might be if they start embracing the creative ethos:

“What about the other two thirds who are toiling in manufacturing or service?… We… [have]… got to… show [that] we can build a creative economy that includes everyone… a society where everyone… is valued [emphasis added] for their creativity. That’s the model we need.” (Florida, 2006a)

Thus, the people in the service class can move into the creative class. Exactly how this would be achieved is sparsely elaborated but we get some hints. For example, the rationalisation of the workforce might be one such wormhole to the creative class. Florida
(2002) gives the example of the secretary working in the downsized office that takes on ‘a host of tasks once performed by a large secretarial staff’ [Florida, (2002), p.70] and thus becomes ‘a true office manager’ who channels information and takes key decisions. In Florida’s view, this clearly adds creative value and it will surely eventually be financially compensated, not because of the balance of power in labour market negotiations, but because ‘organisations value [creativity] for the results that it can produce and individuals value it as a route to self-expression and job satisfaction’ [Florida, (2002), p.71]. So, there is still hope for some of the members of the service class, they just have to keep putting in those extra hours, take the extra step beyond their job descriptions, tap into the creative furnace and take on some more creative tasks formerly distributed onto a larger workforce and then they will ‘truly’ be part of the creative class. The rewards for flexible work hours will be guaranteed once they move up to the creative class where one is ‘well-compensated’. Flexibility is a defining value of the creative ethos.

Still, their creativity aside, there are service workers who ‘are not on track to join’ the creative class. Their economic function is defined by ‘deskilling’ and ‘decreativity’, they are an ‘economic necessity’ [Florida, (2002), p.71] as they are the supporting framework for the creative class and their growing leisure and work needs. There is little elaboration in terms of how to curb the ‘deskilling’ and the growth of this class, as one could instead assume that they need to grow vis-à-vis the growth of the creative class (Peck, 2005). Even though the service class is the single largest class, it is portrayed as a rather non-creative and non-describable bunch who never established either cool values (unlike the creative class) or traditional values (unlike the working class). As alluded to above, this lack of clear identity for the service class is also what makes the (lack of) values of its members compatible with a possible upgrading into the creative class.

Even though ‘the creative class do not yet see themselves as a unique social grouping’, its members are claimed to ‘actually share many similar tastes, desires and preferences’ [Florida, (2002), p.68]. Their creative ethos ‘marks a strong departure from the conformist ethos of the past’ [Florida, (20020, p.31]. A radical – yet benign – element of creativity is heavily emphasised, not least in the form of new values. These defining values are:

1. individuality
2. meritocracy
3. diversity and openness.

Let us look closely at each of these values in turn.

Individuality is framed in a highly oxymoronic way, defined as an unwillingness to ‘conform to organisational or institutional directives and resist traditional group oriented norms… [which] represents a new mainstream value’ [Florida, (2002), pp.77–78]: the claimed subversive potential seemingly is immediately co-opted and rendered harmless. The creative ethos presents individuality as a basis for class cohesion. Since the individual worker is now in control of the creative means of production, why would he need organised labour and trade unions? The emphasis on individuality also lays the foundation for government though freedom (Rose, 1999). In the subjectification process of the new creative worker, self-management, self-learning, self-help and self-empowerment are central notions. Workers are claimed to prefer to ‘move around’
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[Florida, (2002), p.110] and proactively accept that ‘their only real job-security comes from their capabilities and continued productivity’ [Florida, (2002), p.110]. Creativity being an individual input, it is the task of each individual to ‘take care of [their] creativity – investing in it, supporting it, and nurturing it’ [Florida, (2002), p.114]. Creative class members thus allegedly accept that a significant amount of their working time is invested ‘in taking care of their creativity’ through education, learning and picking up new skills, ‘all of it unpaid’ [Florida, (2002), p.114] during leisure time. The corporation should not heed the bill, as ‘it no longer pays for companies to invest significantly in developing their people’s skills and capabilities, when people leave for better opportunities’ [Florida, (2002), p.114]. People allegedly conduct themselves as they ‘now expect [emphasis of the original text] to manage their working lives… [coming] to terms with the new labour market’, which means that they accept the possibility of lay-offs and understand that they are ‘truly on [their] own’ [Florida, (2002), p.115]. This is a prime example of responsibilisation (Rose, 1999), wherein indirect techniques are developed for leading individuals without being responsible for them. Through their adhering to the creative ethos the subjects supposedly become ‘responsibilised’ through the naturalised understanding that social risks, in the form of poverty, illness, illiteracy and unemployment, are not anymore the responsibility of state protection systems but rather the responsibility of the individual: this represents the issue as a matter of self-care (Rose, 1999; Lemke, 2001). On the other hand, it goes without saying that sense of individuality notwithstanding, the creative class are expected to commit their embodied knowledge to their organisation’s epistemological resources without hesitation (Thrift, 2005). Creativity is enhanced and produced for the organisation but it is the individual worker who is responsible for the production costs.

Individuality is closely connected to meritocracy:

“The creative class favours hard work, challenge and stimulation... The companies that employ them are often under tremendous competitive pressure and cannot afford much deadwood on staff: Everyone has to contribute. The pressure is more intense than ever to hire the best people regardless of race, creed, sexual preference or other factors... [M]eritocracy ties into... values and beliefs we’d all agree are positive – from faith that virtue will be rewarded, to valuing self-determination and mistrusting rigid caste systems.” [Florida, (2002), p.78]

Typical for the discourse of the creative economy is the idea that in order to create an environment that attracts the creative class there is a need to focus on the most ‘intelligent’ subjects irrespective of their nationality or ethnicity (Bunnell and Coe, 2005). Thus, meritocracy is portrayed as intertwined with the values of diversity and openness.

Finally, diversity is considered a key feature of creative class values. It has been singled out as the most important trait that the creative class looks for in the location of the potential employer: values of openness and tolerance should thus govern the conduct of firms and local politicians. Signs of openness to diversity include a ‘people of different groups and races, different ages, different sexual orientations and alternative appearances such as significant piercing or tattoos’ [Florida, (2002), p.226] and a ‘tolerance for strangers and intolerance for mediocrity’ [Florida, (2002), p.227]. With the explosive growth of the creative class come radical behavioural shifts, as in the following example:
“In some creative centres like Silicon Valley and Austin, the traditional office Christmas party is giving way to more secular, inclusive celebrations. The big event is now the Halloween party: Just about anyone can relate to a holiday that involves dressing up in costume.” [Florida, (2002), p.79]

Elsewhere, the values of the creative class are helping to break down the social backwardness and traditionality of ‘the other’ in relation to the progressive (and creative) ways of the West, as ‘new software forms in Bangalore are helping to break down the old caste-like system of social relations and establish more democratic and egalitarian business and social cultures’ [Florida, (2007), p.109]. ‘Openness’ is seamlessly linked to neo-liberalism.

5 A third T for good measure – how government is achieved

As was discussed above, the subject positions are engineered around the defining values of individuality, meritocracy and openness. From these central values, it is clear that there are important ways in which the creative class is chiefly characterised by its freedom: freedom of acting as an individual, freedom to aim for the top, and freedom of mind. Members of the creative class are thus meant to be ‘governed through [their] freedom’ [Rose, (1999), p.62], in line with the neo-liberal mode of government(ality). Once these values are adopted and conformed to by the creative class, specific locales and the firms within them are portrayed as having a better position to compete with other regions. Through a ‘scientific’ approach based on interpretations of statistical data a link has been established between creativity and regional economic outcomes. In Florida’s view, economic development should be measured, but not only by traditional financial measures; to add a basis of scientific legitimacy making quantitative operationalisations possible – or, as Townley (1994) drawing on Foucault (1970) may put it, to add ‘mathesis’ (a measurement-based ordering) to ‘taxinomia’ (a classification based on descriptive language, such as his articulation of the three classes) – he introduces what he calls ‘the 3Ts of economic development’, and he posits that “[t]o attract creative people, generate innovation and stimulate economic growth, a place must have all three” [Florida, (2002), p.249]. These three Ts around which statistical correlations are calculated are technology, talent and tolerance.

In Florida’s articulation, technology and talent are clearly interrelated. In order to understand the relationship between the two, Florida and his team developed and used four regional measures: the relative concentration of the creative class in a region, plus its talent index (a simple human-capital measure of the percentage of the population with a bachelor’s degree or above), its innovation index (patents granted per capita) and its high-tech index – a number based on the Milken Institute’s tech pole index, which measures the size and concentration of a region’s economy in growth sectors such as software, electronics, biomedical products and engineering services [Florida, (2002), pp.251–252]. The findings of this research have been interpreted by Florida (2002, p.252) as though they show that “both innovation and high-tech industry are strongly associated with locations of the creative class and of talent in general”. Beyond the very narrow definition of ‘talent’ as the proportion of the population with a certain educational level, these findings, related to the first two Ts, are not particularly counter-intuitive. If Florida’s contribution was limited to this correlation it could not really be framed as ‘extraordinary’, ‘revealing’ or a ‘revolutionary idea’ (as written in the unanimous praise
Florida’s scientific measurement of Tolerance is largely based on census data. It relies on the ‘composite diversity index’, which is made up of three separate indexes:

2. the ‘Bohemian index’ (‘measures the number of writers, designers, musicians, actors and directors, painters and sculptors, photographers and dancers’) [Florida, (2002), p.260]
3. the ‘Gay index’.

The latter is particularly interesting in that it has raised most controversy. Considered ‘a good measure for diversity’ [Florida, (2002), p.255], this index has been derived from an analysis of census data. Until the year 2000, however, the US census did not ask for people’s sexual orientation. The researchers who developed the Gay index searched for ‘couples that were not married [who] identify themselves as ‘unmarried partners’, different from ‘roommates’ and ‘unrelated adults’’ and ‘[they] identified gay and lesbian couples’ by checking ‘which unmarried partners were of the same sex’ [Florida, (2002), p.255]. This type of interpretation ‘closets’ gays and lesbians who do live in family households and those who are partnered but do not live in the same household. Through these kinds of scientific and bureaucratic rationalities, we see only certain types of gay people through census data (see Brown, 2000). It is thus Florida’s text that constructs the ‘gay spaces’ of cities such as San Francisco, Boston, Seattle and Los Angeles, whereas cities such as Louisville, Jacksonville, Memphis and Detroit are rendered inherently ‘un-gay’. As Brown (2000) points out, it is not possible to ‘break down the closet’ without inevitably reconstructing it somewhere else.

As Rose (1999) and Brown (2000) remind us, governmental power is not simply the power to pass laws, it also lies in the ordinary, mundane bureaucratic practices, such as the census. The government’s knowledge of its population powerfully frames terms through which its citizens can see themselves. As Rose (1999, p.218) puts it, the census in the USA was designed from the beginning in order to “[govern] diversity in the name of the common good”. The rise of statistical epistemologies clearly has been crucial to governmentality (Brown, 2000; Hacking, 1991; Rose, 1999). More elaborate ways to use and analyse statistics enable more powerful forms of governmentality: “Numbers do not merely inscribe a pre-existing reality. They constitute it” [Rose, (1999), p.212]. Consider Florida’s discussion of the ‘Bohemian index’: he sees it as “an improvement over traditional measures of a region’s cultural amenities, using reliable census data” [Florida, (2002), p.260]. The reliability of the census is guaranteed by ‘clinical’ methods and the regularity of the intervals at which it is conducted, while its validity is achieved through its comprehensive coverage. In the USA, the citizen can be fined or imprisoned for ignoring the census. However, more importantly, from the perspective of self-governance, the census relies on self-reported information; and “Because the data are more or less publicly available, census data isn’t simply the state’s knowledge: it is everyone’s. People see themselves through the census” [Brown, (2000), p.95]. Even though the Gay index and the Bohemian index are supposed to apply to places, they
provide possible subject positions to the people who dwell in these places and identify with them.

6  Apolitical, consumerist bohemians – who we become

“The reign of such a one-dimensional reality does not mean that materialism rules, and that the spiritual, metaphysical and bohemian occupations are petering out... such modes of protest and transcendence are no longer contradictory to the status quo and no longer negative. They are rather the ceremonial part of practical behaviourism, its harmless negation and are quickly digested by the status quo as part of its healthy diet.” [Marcuse, (1964), p.16]

If the ‘Bohemian index’ is of value to Florida’s work, it is because the creative subjects as articulated by Florida allegedly see themselves as some sorts of postmodern bohemians. Their identities are qualified by Florida in oxymoronic ways, since they are apolitical and consumerist workaholics, all characteristics that at first sight do not fit so clearly with a bohemian view of life. But as Marcuse (1964, p.16; see above) showed more than 40 years ago, in our late modern times a boom in self-defined bohemian identities, far from being indicative of a subversive dimension, is ‘no longer contradictory to the status quo and no longer negative’, or then only in a ‘harmless’ way. Florida’s oxymorons can be seen as serving the purpose of annihilating any subversive potential within the new, emerging lifestyles in today’s society. Marcuse (1964, p.93) also demonstrated how ‘the unification of opposites which characterises the commercial and political style is one of the many ways in which discourse and communication make themselves immune against the expression of protest and refusal’. Today it literally becomes impossible for protest to ‘find the right word’ [Marcuse, (1964), p.93] since all the subversive signifiers have already been appropriated by the mainstream(ing) discourses, including Florida’s articulation of creativity. As Boltanski and Chiapello (2005[1999]) argue, the ‘new spirit of capitalism’ has managed to render critique inefficient by:

1  appropriating the formerly highly subversive ‘artistic critique’ (rooted in Bohemianism) that culminated in the late 1960s against the alienation of everyday life and integrating it into its productivist ethos while at the same time

2  discrediting the Marxist ‘social critique’ that has always rejected individualism and all forms of cultural elitism.

This has led to the emergence of a ‘neo-bohemia’ whose members can ‘[resist] the stratification and injustice of corporate capitalism while working 12-hour days making recruitment ads for Nike’ [Lloyd, (2006), p.240].

The subject that is being engineered in Florida’s works is the creative worker, ‘independent’ from her/his employer (and the welfare policies of the state) but fully expected to commit all her/his embodied knowledge and creativity as an epistemological resource for the company. As noted by Thrift (2005, p.47), “the net effect may well be to reduce the different conceptions and comportments of the person which are to hand and, worse, to transfer these reduced conceptions and comportments to other spheres of life”. The ‘reduced’ creative worker who emerges from Florida’s work is:
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1 apolitical

2 consumerist

3 a workaholic whose leisure life is profoundly limited by the demands of her/his challenging and stimulating job(s).

Let us discuss these aspects in turn in the next three paragraphs.

In many ways, the creative class is portrayed as apolitical. Referring (with his own labels) to Robert Cushing’s classification of US communities into four distinct types, Florida (2005, pp.45–46) proudly posits that the less creative communities, ‘classic social capital communities’ and ‘organisational age communities’, ‘score high’ or ‘higher than average in political involvement’, while the more creative ones, ‘Nerdistans’ and ‘creative centres’ have ‘low’ or ‘lower than average political involvement’. He implicitly points to a negative correlation between creativity and political involvement. If you are one of the ‘cool’ bohemians of the creative class, you are not concerned with seemingly outdated political matters. This way of presenting politics as irrelevant is visible in all of Florida’s recent works. Reviewing some of the critiques that were targeted at his 2002 seminal work, Florida (2005, p.2) discarded them as ‘overly ideological’ – similarly to his way of discarding the working class as having outdated values – which is revealing. Florida’s articulation of the creative class can be seen as an enterprise of de-ideologising ‘class’ and thus social inequality, by making class distinctions a straightforward matter of economic value to society. Since meritocracy is the name of the game, there is nothing unfair about the elevation of the creative elite: it is all about tapping in everyone’s creative potential. However, one important issue that Florida hardly mentions is the flip side of the celebrated ‘quality economic growth’ in “regions [that] are losing low-income but gaining high-income workers” (2005, p.23; emphasis in the original): what becomes of the low-income workers? This clearly points to gentrification, which Florida alludes to without elaborating much. This lack of elaboration is highly surprising since the ‘out-migration of bohemians (especially low-wage end bohemians…’ [Florida, (2005), p.25; emphasis in the original) that he briefly mentions should presumably be considered a very serious issue to such a self-proclaimed proponent of Bohemianism. What the commodification of creativity signals is a phenomenon of gentrification where the independent artists who cannot afford to remain in the ‘well-compensated’ creative class literally disappear from the picture.

Within the neo-liberal governmental rationality that supports the rise of creative subjects, they are envisioned as ‘active’, ‘entrepreneur[s] of [themselves]’ [Rose, (1999), p.164]. The creative class are good citizens, which means that they are consumers: their ‘activity is to be understood in terms of the activation of the rights of the consumer in the marketplace’ [Rose, (1999), p.165]. What and how they consume is strongly connected to their entrepreneurial project of identity: even if Florida denies that the creative class corresponds to Brooks’ (2001) caricature of ‘Bobos’ (bourgeois-Bohemians) and that it is ‘primarily a lifestyle-and-consumer thing’ [Florida, (2002), p.199], it remains the case that where creative class members buy food, where they furnish their homes, what clothing they wear, etc., are all crucial elements of their self-entrepreneurial projects. However, Florida also argues that in addition to this more ‘traditional’ form of consumption, the creative class is characterised by its members’ interests in consuming ‘experiences’, in order to ‘reinforce their identities as creative people’ [Florida, (2002),
Central to the creative economy and the subjects it produces are the increasingly blurred boundaries between leisure and work. On the one hand, leisure invades the workplace, which provides more and more extra-professional facilities, sending the message: ‘no need to go wandering off; stay right here at work’ [Florida, (2002), p.123]. On the other hand, the creative self also has to be nurtured and kept up during leisure time away from the workplace, so that the organisation can at all times, and when needed, get access to the individual’s epistemological resources of knowledge and creativity. Being an ‘active’, ‘enterprising’ subject also means accepting a great deal of flexibility in one’s work (Rose, 1999). No matter how ‘well-compensated’ they are, members of the creative class are often flexible immaterial labour, working in increasingly precarious conditions.

7 Beautiful losers – why we are governed

The question of why we are governed entails a deconstruction because it covers two dimensions: on one hand, for an individual, why is it fundamentally good to be part of the creative class; and on the other hand, from the perspective of government, what may be the instrumental value of a dominant creative ethos in society?

In Florida’s articulation, the values of the creative class are posited as those that are desirable not only to creative workers but to everyone in society: it is offered as a norm for contemporary American/Western subjects, being at once ‘socially worthy… and personally desirable’ [Rose, (1999), p.76; emphasis in the original). What makes this emerging norm socially worthy is clear in the following two citations from a speech he gave in 2006:

“...We... [have]... got to... show... [that] we can build a creative economy that includes everyone... a society where everyone... is valued for their creativity. That’s the model we need... what is so interesting about this new time is that for the first time in human history this creative economy annihilates all the social boundaries, all the social barriers, all the social categories, we as people have imposed on ourselves.” (Florida, 2006a)

“I don’t have a diversity agenda... I don’t care about multiculturalism... it’s just economic common sense.” (Florida, 2006a)

Here, an ethical argument about how social boundaries can be annihilated thanks to the creative economy is combined with a pragmatic, bottom-line argument about what makes sense from the economic viewpoint. Once we get to believe in the validity of these arguments, we can be governed and conduct ourselves as appropriate creative subjects. But being part of the creative class is also personally desirable: we do not want to be
excluded from the wonderful, open and equal society that is promised in the former citation. We are of course aware that this utopian society will never come about, but we can still believe that the creative path favours the better good; if even that does not hold true, we can always get our relief from the fact that we are members of the one elite that matters in society. Let us face it: being talented, tolerant and cool is fundamentally good; we are the winners of the creative age, the ones who drive the economy through our creativity and our active participation in the consumption society, so anything that is for losers (e.g., unions, job security, limited working hours) is not for us.

We are sorry for getting carried away for a second. It seems that in subjecting ourselves to the creative ethos we have made fools of ourselves. True, being active, cool, creative, enterprising, fashion-conscious, hard-working, self-actualising, talented and tolerant all at once is most valued in today’s society and those who manage this tour de force are the conspicuous heroes of our time. But why are these characteristics valuable to (neo-liberal) government? Because they lead us to (among others):

1 alienate ourselves from (the need of) social protection systems
2 flexibilise our work conditions
3 take care of the development of the means of production (our creativity) ourselves and without compensation – all seemingly by our own will.

How convenient for government: these ‘free’ choices on our part make the management (or should we write the exploitation) of people’s creativity and efficiency so much smoother. This is a clear example of government through freedom (Rose, 1999), through people’s will to enact their lives in terms of activity, enterprise, choice and creativity.

8 Discussion and conclusions: reflecting on ourselves and others

The powers of freedom shape today’s Western societies, which makes it harder to resist being governed in a neo-liberal way. Are we not all seeing freedom as our most precious value, the one that makes it possible for us active citizens to choose our ways of self-actualisation? As researchers working on stimulating topics and trying to be productive subjects in the political economy of academic publishing, are we not actively participating in the creative society that Florida is celebrating? Our governmentality perspective provides a contribution that helps us understand how the reflexive management of the self by the self leads more and more of us to construct them/ourselves as creative subjects. By moving between ‘they’ and ‘we’, we have tried to show how contemporary forms of government(ality) make it possible for people to actively govern themselves towards norms that they see as both socially worthy and personally desirable, while they could easily be aware that these very norms are instrumental in the reproduction of a deeply unequal economic and social system, designed to exploit both the conspicuous winners and the discarded losers. Our analysis has been exclusively focused on Florida’s texts on the creative class, which we see as both foundational and exemplary of the creative age; empirical studies examining identity construction processes at work in ‘creative industries’ would be needed to understand better how individuals relate to the subject positions provided by contemporary creativity discourses.
Based on this study, we would concur with Florida (2002) on the fact that the ‘rise of the creative class’ is indeed ‘transforming work, leisure, community and everyday life’. Work and leisure are more flexible concepts, with more job insecurity, longer working hours and blurred work/leisure boundaries. Communities are increasingly apolitical, indulging in a benign, surface alternativism that is but a harmless negation of the mainstream, which becomes ‘a new mainstream value’ [Florida, (2002), pp.77–78]. Everyday life, presented as aconflictual by Florida (since there allegedly is now a chance for everyone to thrive as long as they are active, enterprising and creative) is on the contrary characterised by increasingly intense competitive pressures caused by the rise of creative governmentality. In the new class structure analysed by Florida, inequalities are rampant and keep growing; and the old story of the division between those who own capital and those who have to sell their – however creative, stimulating, challenging and fulfilling – labour still holds. Among the ‘creative workers’, those who are competitive and manage to enterprisingly sell themselves in these new conditions may have found a path to happiness, or better, the sacrosanct permanent self-actualisation. Others… well, once their existence is verified, their problems measured, and their capacities mapped, the caring creative class will start working on their case.

References


**Notes**

1 Richard Florida currently is a Professor at the Martin Prosperity Institute at the Rotman School of Management, University of Toronto. The release of his book *The Rise of the Creative Class* (2002) made him (and his consultancy firm, Creative Class Group) a highly sought-after consultant both in the US and internationally for cities and regions that sought to improve their competitiveness. He was recently named ‘European Ambassador for Creativity and Innovation’ as part of the European Commission’s strive to 'raise awareness of the importance of creativity and innovation for personal, social and economic development' (http://create2009.europa.eu/).
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Chapter 3

Better by Design? A critical appraisal of the creative economy in Finland

Author: Nikodemus Solitander

“Design is a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in whole life cycles. Therefore, design is the central factor of innovative humanisation of technologies and the crucial factor of cultural and economic exchange.”

- The International Council of Societies of Industrial Design

INTRODUCTION

In Finland the design sector evokes a mythical and romanticised image of the small nation overcoming the hardships of WWII, the establishment of a national identity through design and architecture, and successfully turning this identity into an export commodity, in the form of cultural products. Historically the creation of “Finnish Design” was also in many respects, similarly to that of “Scandinavian Design”, a conscious effort of branding, promoted through international touring exhibitions, expositions and competitions (Stenros 2004). On an international scale Finnish design products struck a chord with consumers in the 1950s and 1960s as they mirrored the spirit of the times and the changes in Western society: e.g. women’s equality, urban migration, and new forms of modern life (ibid). In many ways, however, the impact of Finnish design was perhaps more important on an imagined level and in the construction of subjects - rather than having a visible impact on export numbers. In the late 1950s and 1960s traditional heavy industries such as forestry, dominated export numbers almost completely (Oinas 2005). In modern times, especially throughout the 1980s and much of the 1990s, the design sector has in many ways struggled to internationally live up to the legacy of the international success cemented in the 1950s and 1960s both in terms of international recognition and in forming the
identities of Finns. Design remained something of a myth in the Finnish economic landscape, present in the background but not at the centre of economic discourse.

After the turn of the century, however, the design sector has propelled to the centre of Finnish economic policy initiatives, both on the regional and national level, in imagination and in practice. As I will argue in this chapter, the re-emergence of design into the economic landscape is inherently tied to the rise of a new spirit of creative capitalism in which “creative destruction, chic slacker-cool, and designer resistance are now celebrated in organization advocating freedom around normative inputs” (Fleming and Spicer 2008: 303). Following the much-cited emergence of a “network society” and a “knowledge society” (e.g. Drucker 1993; Castells, 1996) creativity is heralded as the next big thing that will transform the economic landscape of Western regions. The establishment of a “creative economy” has become an imperative for nations seeking to be competitive in the global economy (Thrift 2005, Jeanes 2006, Jones and Boon, 2007). The creativity gospel is eagerly reproduced and diffused by various academic disciplines, ranging from urban studies (see e.g. Florida 2002, Landry 2000,) to economic geography (see e.g. Desrochers 2002, Drake 2003, Scott 2000, Power and Hallencreutz 2004, Törnqvist 2005) and to management and organization studies (see e.g. Gibb and Waight 2005, Wilson and Stokes 2005, Bilton 2006). At centre stage of the diffusion of creative capitalism stand the writings of Richard Florida (Gibson et Klocker, 2004; Peck, 2005). Florida’s texts (e.g. 2002, 2005, 2006b) relay the essence of the creativity discourse: the (Western) world is in the midst of a revolutionary economic transformation, societies are moving away from the uninspiring practices of a service economy towards a cool and caring creative economy, one that generates wealth by harnessing intellectual labour, intangible goods and human creative capabilities. This mantra has found a willing audience as policymakers are increasingly looking towards creativity for regeneration, employment opportunities, and most importantly, competitive advantages (Porter 1990). A recent report commissioned by the European Commission states that “there is a competitive race to attract talent and creators ("the creative class") to localised environments supporting the clustering of creativity and innovation skills” (The Economy of Culture in Europe, 2006, 8). The regional “race for talent” has produced a large amount of strategy projects addressing the link

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1 For a critique of the creativity discourse see e.g. Thrift 2005, Peck 2005, Jeanes 2006,
between place-competitiveness-creativity. On the city-regional level there are projects such as “Creative London”, (www.creativelondon.org.uk), “Creative Tacoma” (www.creativetacoma.org), the “Creative Industries Precinct” in Queensland, Australia; on the national level there is the “Better by Design” programme in New Zealand (http://www.betterbydesign.org.nz/), Singapore has initiated a “Creative Industries Development Strategy” (http://www.mica.gov.sg/mica_business/b_creative.html); and UNESCO has established an international network called The Creative Cities Network (www.unesco.org). In this new creative age industrial design and designers are elevated to centre stage of discourse. Design and especially industrial design often serve as a link between culture and economy, art and industry, and between “soft” and “hard” capitalism. Industrial design combines discourses and language of management, technology and arts. This has also enabled an appropriation of the language (and critique) of art to further strengthen neoliberal discourse, something that I will further explore and elaborate on in this chapter.

The creativity discourse is increasingly, and even particularly, evident in Finland where policy makers have been eager to refer to best-in-creativity-class rankings presented by international research (see e.g. Florida and Tinagli 2004, Sorvali, Hytönen, Nieminen 2006, World Economic Forum 2005). In 2004, Finland took steps towards producing a national creativity strategy in order to “develop the prerequisites of creative activity” (Ministry of Education, 2004, 5), the strategy was described as a “key strategy in international competitiveness” (Koivunen 2004, 5). In 2002 Finland also launched a national design programme, which aimed to improve competitiveness and internationalisation of the design sector. Design is also an explicit part of the Finnish national system of innovation (Järvinen and Koski 2006). Industrial design has his historically been at the heart of what Finns have considered being a national competitive advantage, but the infusion of creativity as a central sign in the language of business and management has further cemented and revitalized its position in the Finnish economic landscape. While it is easy to be sympathetic to the promises of a creative economy, and the rise and centrality of industrial design in making the economy more human-centred, more beautiful and safe (see e.g. Järvinen and

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2 The strategy was eventually not included in the new government’s policy portfolio in 2007.
Koskinen, 2001, 10). There are pervasive reasons for research to critically analyse the celebratory discourse they are (re)producing, the emerging tensions and the unexplored silences. As as ten Bos (2006, p.30) reminds us, there is ‘some strangeness in a world that generally does not manifest any doubt whatsoever about the goodness of its own endeavour’. In many ways the creative economy and by that industrial design is part of such a world.

In the chapter I critically examine, mainly by drawing on insights from poststructuralist critique (e.g. Thrift 2005, Dean 1999, Rose 1996), the discourses, practices and impacts of the creative economy, and specifically on how design and industrial design is presented and used in discourse. By doing this, I wish to emphasise the necessity of analysing the rise of industrial design within the larger discourse of the creative economy. With creativity discourse I largely refer to texts that position creativity as production factor in relation to (international) competitiveness. I am particularly interested in the role of space in constructing a new subject position (the creative class) based on “a new creative ethos” - in this chapter illustrated through the re-emergence of the design industry in the economic landscape in Finland. The chapter is thus situated within economic geographic research. The aim is to expose the complex and competing forces shaping the creativity discourse, and thus help researchers and practitioners to ask important questions about the re-presentation of spaces of creativity, and how these are used to produce collective bodies and identifications, foremost the “creative class” (c.f. Florida 2002). The chapter is structured as follows: in the first part I critically analyse the re-emergence of the Finnish design economy in the context of creativity discourse and the subject positions it produces, with a specific emphasis on the naturalisation of creativity discourse on various territorial scales in Finland. In the second part I illustrate the practice of creativity discourse by analysing the establishment of the “City of Art and Design” in Helsinki, Finland, putting special emphasis on the role of space in the creation of creative subjects.
THE RISE OF CREATIVITY DISCOURSE

By combining the language of technology, business-thinking and arts/culture, industrial design becomes a central signifier and illustration of what is referred to as the creative economy. A recent report by UNCTAD (2008, p.iii) on the creative economy states that “the interface among creativity, culture, economics and technology, as expressed in the ability to create and circulate intellectual capital, has the potential to generate income, jobs and export earnings while at the same time promoting social inclusion, cultural diversity and human development. This is what the emerging creative economy has already begun to do as a leading component of economic growth, employment, trade, innovation and social cohesion in most advanced economies”. Such language also mirrors the essence of industrial design, as design is posited to provide a “competitive advantage to firms...creating additional value for customers...as well as “humanifying” technology” (translated from Lindström, Nyberg Ylä-Anttila 2006, 29) and it also helps to make the “world a better, more beautiful, a safer, and a smoother place to live in” (Järvinen and Koskinen, 2001, 10).

“The Finnish world known designers and architects Alvar Aalto, Tapio Wirkkala and Kaj Franck were all humanists. Their work was based on the respect of nature and draw its inspirations from the best traditions and achievements of human culture...Design for all, or putting people’s needs first has become important mission of the European Union. It sees that it is both socially necessary and economically beneficial to build an accessible and barrier free society. It increases equality and expands market possibilities. This mission is shared by the Finnish technology giant Nokia, which sees technology as an enabler of sustainable development.” (Sotamaa 2006b, 6)

Industrial design is thus envisioned to both support the essence of capitalism- unlimited economic growth- but also provide it with a soft-makeover, picking up the pieces where capitalism has failed as an enabler of “sustainable yet unlimited” economic growth. Art provides the “humanist face” to capitalism and technology acts as the enabler. But in the new economy the humanists “respecting nature and advancing culture” are not individuals such as Aalto and Wirkkala but multinational
corporations such as Nokia. In this discourse free society and democracy is equalled with “expanded market possibilities”. Industrial design acts as an important mediator between seemingly competing discourses, such as economy and art. I will elaborate on this point further, but will begin by presenting the historical background to the rise of the creative economy, before further showing how this also contextualises the (re)emerging interest in industrial design.

Central to globalization discourses is a focus on increased and accelerated circulation of people, corporations, capital, commodities and images (Brenner 1999). Geographical places, hopelessly immobile and unable to circulate is mooted to the outskirts of the language of modernity (Zukin 1991). When information and transport technologies increased mobility and decreased geographical transaction costs, for some it also implicated a discursive erasure of place (Cairncross 1997, O’Brien 1992). Economic geographic research fiercely contested such understandings. In the contestation, place was infused as a central sign in the globalization discourse, and the rearticulation invested new meanings to geographical places. In the knowledge economy, the mobile actors, most visibly multinational corporations, gravitate towards places that create and animate the “sources of competitive advantage” (Porter 1990).

In his influential book “The Competitive Advantage of Nations”, Michael Porter suggests that a shift in geographical scales “represent a new way of thinking about national, state, and local economies” (Porter 2000, 16). With this perspective followed an understanding that globalization is not a discursive eradication of geography, but rather a shake up of the territorialisation process. The geographical scales we observe are “no longer spatially co-extensive with the nationally organised matrices of state territoriality” (Brenner 1999, 435), which had for so long been the naturalised understanding of capitalism’s economic geographies. In the knowledge economy, the headquarters of multinational corporations, their research and design departments, and production units, are spreading across national borders with increased ease, but simultaneously they are agglomerating in particular regions (Dicken, 2007). This idea is reproduced in various geographical concepts such as innovative milieu (Camagni 1991), industrial districts (Piore and Sabel, 1984), clusters (Porter, 1990, 2000), and world/global cities (Friedmann, 1986; Sassen,
Each of these concepts is constituted in relation to (international) **competitiveness**. The all-pervasive, yet abstract quality of competitiveness has become a hegemonic category referring to ‘the capacity of a firm to compete, grow and be profitable in the marketplace’ (Bristow 2005, 287). When applied to regions and more recently to city-regions competitiveness becomes even more abstract. Yet with its increased hegemony, and naturalised acceptance and understanding, it becomes almost impossible to question (Schoenberger 1998). A strategy report on the Helsinki Metropolitan Area states that the evolution of cities “…depends on their international competitiveness. Earlier, urban areas were “subordinate” to national policies of growth and competition … Finnish urban regions, too... are specialising in internationally competitive expertise to create a unique and sustainable role in the international scramble between urban regions.” [emphasis added] (Kulkki, 2004, 19)

By this understanding competition is increasingly occurring between urban regions, which calls for “spatial selectivity” (Brenner 2004); political strategies that target particular regions in order to position them “optimally” in the global “scramble” for mobile capital.

A reoccurring critique against the reformulation between competitiveness and regions, most notably the form popularized by Porter (1990), has addressed the monofocus on economic imperatives over concerns over standard of living, welfare and redistribution (Bristow 2005, Schoenberger 1998, Bunnell and Coe, 2005). But this critique is increasingly appropriated through the fusion of the economic, social and cultural landscape into the language of capitalism. This can be seen as what Thrift (2005, 4) refers to as performative capitalism, wherein a defining feature is capitalism’s ability to be highly adaptive and a constantly mutating formation. It includes adopting the language of its critique (ibid.). Industrial design is a case of point: while having strong technological and commercial aspects it also has strong associations to arts, individuals and the cultural sphere in general. In creative economy discourse the language economic success is presented as emanating from “soft” characteristics, such as knowledge, learning and creativity, rather than straightforward technological or cost advantages (Heelas 2002, Ray and Sayer 1999, Thrift 2005). Such language is becoming increasingly dominant in both policy making and academia. A strategy document prepared as a basis for a creative strategy for the city of Toronto declares: “…development of the creative economy ... enhances
a city’s quality of place, helps to reclaim and revitalize neighbourhoods, enables more innovative thinking and problem-solving across all sectors of the economy...Creative and cultural activity is also a powerful vehicle for community development and engagement, providing opportunities for economically disadvantaged neighbourhoods and social groups.” (Imagine a Toronto-Strategies for a Creative City, 2006, 7) The creative economy is described as subversive, a vehicle of empowerment for the “economically disadvantaged”, a way to “reclaim neighbourhoods”, all while reproducing a neoliberal syllabus. In line with the images of dressed down, caring and compassionate capitalism, design is also often portrayed through its will to make “the world a better, more beautiful, a safer, and a smoother place to live in” (Järvinen and Koskinen, 2000, 10). In industrial design this is evident e.g. in design theory such as sustainable and green design, wherein the design element often acts as the caring and compassionate element of a product. A rather striking recent example from Finland of the connection between design, consumption and the “care for nature”, is “Plup Water -Beverages That Clean The Baltic Sea” (www.plup.com), a Finnish bottled water aimed at international markets. The bottle is designed by the renowned and internationally acclaimed Finnish designer Stefan Lindfors. The strikingly designed bottle is produced in “recyclable plastic” and “the equivalent of 10 Euro Cents [is donated to] pollution- or disaster related matters on the earth”. This is a product that through its design elements makes the world a better place by using recycled plastic, donating 10 cents to charities and providing an aesthetically pleasing experience to the hip yet conscious consumer - but only for as long as the consumer does not question the necessity of the commodification of public goods, such as water. Yet the product is in many ways typical for the creative economy, wherein the primacy of increased consumption is rarely questioned.

The infusion of soft characteristics is also posited to require new ways of thinking about both the economy and its subjects. Such new thinking necessitates the formation of new creative subjects who are (increasingly) creative, innovative, and entrepreneurial – yet caring. Soft capitalism increasingly manages the production and exchange of knowledge through the production of academic theories, texts, and practices that embody them in subjects (Thrift 2005, p.46). An illustration from a national level is the Finnish national design programme which started in 2002, with one of its main objectives to improve the competitiveness of the design education and
The final report of the programme highlighted how the "[e]ducation of design should more firmly connected as a part of technical and business education...“ The most visible outcome is of this thinking is the creation of the so-called Aalto University[^3], which merges the Helsinki University of Technology, the Helsinki School of Economics and University of Art and Design Helsinki. The idea that international competitiveness necessitates new designer subjects to be more entrepreneurial is apparent throughout Finnish policy documents on the development of the education system. The former dean of the University of Art and Design, who is one of the foremost proponents of the idea (even if the fiercest opposition has come from the students at the University of Art and Design), concludes that “[g]lobal competition has forced us to think increasingly critically about competitiveness and the foundations of sustainable wellbeing. The future is seen as innovation driven, and specifically innovation ability and creativity are sources of competitiveness that all of the more developed countries strive for.” (Sotamaa 2006, p.9)… “Even arts has..to be linked in diverse ways to the innovation process” (p.11), the new creative subjects (students, i.e. future creative workforce) will be exposed to “a creative atmosphere, path breaking thinking, entrepreneurial spirit and intellectual stimuli” (p .13)

**Together alone -Creating creative subjects**

"The road towards a more creative Finland goes through an attitudinal change and by changing the ways of thinking…” (Ministry of Education 2006, 4)

In creativity discourse the identity of (creative) workers is increasingly articulated through competition between intrastate regions and/or interstate regions. Such a competitive environment - born out of economic globalisation - necessitates new citizen subjects who are entrepreneurial, flexible, innovative and now also creative (Thrift 2000, Bunnell and Coe 2005). The reason of new subject positions is anchored in the rhetoric on the radical alterations “in the ways that cities and regions maintain competitive advantage” (Florida, 2006b, 49). Florida (2002, 2005, 2006) refers to the new subject position as “the Creative Class”. Although a central tenet of the creative

[^3]: The name obviously draws on the images and myth around Finland’s most famous international designer and architect, Alvar Aalto.
discourse is “that everyone is creative”, “only some function socially...to create economic or cultural value from it” (Hartley, 2005, 28). Florida divides the workforce into three main classes: the creative class, the service class and the working class. The creative class is supported by the serf-like service class, people with “low-end, typically low wage and low-autonomy occupations” (71), who “exists mainly as a supporting infrastructure” (ibid) for the rapidly growing Creative Class and its consumer, leisure and work needs. The super-creative core includes “scientists, engineers, university professors, poets and novelists, artists, entertainers, actors, designers and architects, as well as the thought leadership of modern society: non-fiction writers, editors, cultural figures, think-tank researchers, analysts and other opinion makers” (Florida 2002, 69). Designers and industrial designers are through such conceptualization seen as epitomising the Creative Class. They are well-educated professionals who combine creativity and research to develop functional and aesthetically appealing design for new products, and satisfy increasing consumer needs, yet doing it sustainably and by “respecting nature”.

Industrial designers are not identified by industry, but through their economic function, this is a central assumption in the construction of the Creative Class. Industrial designers, much like the whole Creative Class, span a vast variety of industries do not “identify with the industry as a whole” (Hartley, 2005, 28), i.e. if your work as an industrial designer in the car industry you do not necessarily identify with the car industry as a whole. According to Hartley (2005, 28) designers increasingly normalize “casual, part-time, freelance...”portfolio” career with several employers, which means that they see “little common cause with each other”. Instead of identifying with an industry as a whole, the assumption is that individuals come to see themselves through a creative ethos, wherein coherence is built on “similar tastes, desires and preferences” manifested both in work a leisure (Florida 2002, p.68).

Florida (2002) refers to class not through its Marxian conceptualisation, as in this “little analytical utility remains” (68). According to Florida, in Marxian class is inscribed an outdated “basic structure of capitalists who own and control the means of production, and workers under their employ...the Creative Class do not own and control any significant property in their physical sense. Their property - which stems from their creative capacity - is an intangible because it is in their head” (ibid). The
implication is that workers are now in control of the means of its sustenance. This conceptualization owes much to what Bell (1973, p.374) refers to as the “Knowledge Class”: “First, the major class of the new society is primarily a professional class, based on knowledge rather than property”. Bell’s conceptualization begs the question of what analytical deficits shackle knowledge as opposed to creativity. Both creativity and knowledge discourse evolves around commodification; both are portrayed as a property that can be managed and exchanged. According to Lyotard (1984, 4) “[k]nowledge is and will be produced in order to be sold, it is and will be consumed in order to be valorized in a new production: in both cases, the goal is exchange.” Creativity cannot be traded to the extent of knowledge can, as the essence of creativity is portrayed as if it cannot be codified, and thus not easily sold and bought on the market. It is inherently entwined with labour, and labour is not, as Karl Polanyi (1944) observed, produced for sale like other commodities, but rather emanates from society, i.e. through education and training. According to Florida (2002) the creative economy is characterised by that the commodity is inside the heads of the workers, and maintains that “…the ultimate ‘control’ issue is not who owns the patents that may result [from creativity]” (37). However, even at the most immaterial end of the labour spectrum, intellectual property regimes govern the commodification of creativity (Thompson, 2005). But traditional Marxian conceptualizations of class and labour power cannot be easily dismissed. As Thrift (2005, 47) notes regarding the subjecthoods in the new economy, the discourse reproduces a conception of the person involving both the super-exploitation of managers - who are now expected to commit their whole being to the firm, and the workers - who are expected to commit their embodied knowledge to the organization’s epistemological resources without hesitation. The difference to 1930s ‘organization man’ is that this is achieved without bureaucratic control or hierarchical structures, instead it is achieved through government through freedom (Dean, 1999, Rose 1996, 1999), wherein the subject govern himself by aspiring to norms (creative, caring, entrepreneurial individualists) that are both socially worthy as personally desirable (Rose 1999: 76).

Basing the subject position on creativity, seemingly enables the bridging of what Bell (1976) saw as two conflicting elements, social structure, ruled by economic principles and defined by efficiency and rationality, and culture, the “prodigal,
promiscuous, dominated by an antirational, anti-intellectual temper in which the self is the measure of the aesthetic worth of experience” (Bell, 1976, 37). The portrayal of these conflicting elements connects to the rebranding of cultural industries to creative industries. The push from “cultural industries” to “creative industries” marks several shifts of meaning in discourse. Central is wrenching away the meaning of creativity from the artistic domain and public sphere. The adoption of “creative industries” enables an understanding that goes “beyond the idea that creativity is the exclusive domain of artists” (Landry, 2000, p.xv). Such an understanding facilitates the removal of “artificial boundaries” between culture and creative, and arts and industry. Again, “design” is central to the discourse: “...design is one of the most dynamic and diverse of the creative industries...design is one of the key-instances of creativity...” (Cunningham 2005, p.290). Industrial design, with its strong commercial and technological aspects can still utilize the language of aesthetics and arts without appearing subversive or threatening when applied in a business setting. Competitiveness is normalized is the industrial design sector, unlike in many other cultural industries, such as performing arts or crafts. In the Finnish case, in the creation of the Aalto University vocal critique was raised by the student union of the University of Art and Design on how, in policy documents, no other activity but industrial design at University is highlighted or mentioned when explaining the necessity to merge the schools (TokyoWiki 2007). The critique also highlights that “art” can be appropriated to strengthen the necessity of a merger, and at the same time completely art and its critique is marginalized as it does not fit the language of competitiveness (Hirvonen 2007).

Creativity is diffused into the spheres of technology/innovation, and this enables an understanding of creativity in relation to large parts of the ICT-sector, not least in the terms of software and content-production. The relation between creativity and the non-economic, enables that many other tenets of life outside the economic is now understood in relation to competitiveness - from art, education to the wellbeing of everyday. What it risks doing is also an exclusive focus on sectors that are seen to specifically combine technology and culture, while pushing other sectors of the cultural to the margins of “uncompetiveness” (see figure 1.). Unlike art, industrial design is not pure “art”, but it requires aesthetic elements and artistic creativity (Holm 2006).
The shift from culture to creativity has also been a gateway to circumvent a number of issues connected to culture/cultural industries, most notably perhaps the position of fine arts, and the critique of Theodor Adorno and Max Horkheimer of the commodification, industrialization and marketisation of culture. Cultural industries is still widely understood through its relation to the Frankfurt school and the critique that cultural industries is a governing mechanism that controls the population serving market interest, and that the needs served by the cultural industry are false needs (Adorno 2001). Even when stripped of its Marxist past and even through “morally neutral use of the term “cultural industries” has proven limiting in the policy context” as it fails “to combine art and culture, culture and creativity [emphasis of the original text]” (Hartley 2005, p.14) Creativity will help reveal “the realities of contemporary commercial democracies” (ibid., 8), presumably leaving in its shadows the opposing and subversive elements of the arts domain. A recent report initiated by the European Commission (The Economy of Culture in Europe, 2006) suggests that the creative and cultural sector should be distinguished in terms of the latter’s “cultural outputs
having no secondary “utilitarian” function” (ibid.,45) the outputs being “exclusively “cultural”” (53), whereas the “creative sector” “gathers the remaining industries and activities that use culture as an added-value for the production of non-cultural products”. (53). In the discourse designers act as a link between the cultural and commercial, as “[d]esigners know how to turn cultural understandings into products” (Järvinen and Koskinen, 2000, 15).

Designing “Creative Finland”

From a creative economy perspective Finland has had two economic sectors that rise above others; from a historical perspective the ‘cultural industry’ has played an important part in establishing the Finnish knowledge economy on the international map (Stenros 2004), but during the last 20 years the ICT sector has surpassed and left the cultural industry in its shadow as the spearhead of Finnish competition (Castells and Himanen 2002). Through both sectors successful internationalization they have had a central role in the establishment of a Finnish post-war identity, establishing a legacy and myth of “Creative Finland”. Giving exact statistical figures on the size of either the creative economy or the industrial design sector in Finland is not easy. As Alanen (2004) notes the size of the Finnish creative industry\textsuperscript{4} varies according to which definition is used, but estimations stand at around 3-5% of employment (Alanen 2004), 6% of the firm population, and approximately 3% of the GDP (Ministry of Education 2008). The exact size of the Finnish design sector is also unclear, due partly to how design processes span industry borders but also due to the lack of well-defined and regularly collected statistics (Salimäki, Ainamo, Salmenhaara 2004). Following Finnish statistical classifications, the design sector’s impact of the Finnish economy is relatively small: in terms of number of firms in 2003 there were 2300 design companies, of which 1416 were architectural firms, 846 firms in industrial design (ibid). The size of the design sector grew in terms of GDP only from 0.2 in 1995 to 0.4 in 2002 (Lindström, Nyberg Ylä-Anttila 2006, 15). However, in competitiveness indexes measuring the design economy, Finland usually does very well as these are not bound by industry classifications but instead use

\textsuperscript{4} Includes advertising, architecture, arts, crafts, design, cinema and videoproduction, music, other performing arts, publishing, programming and radio and TV production.
measures such as company spending on research and development and brand value (e.g. NZIER 2003, Sorvali, Hytönen, Nieminen 2006, World Economic Forum 2005)

But the design sector has always had an important role in the imagining of international competitiveness and in the creation of a national identity (Stenroos 2004). In the 1950s the Finnish identity was formed by the success of individual Finnish artists and designers that ventured into the international market. Names such as Alvar Aalto (architecture, furniture and glass), Tapio Wirkkala (designer), Timo Sarpaneva (designer), Maija Isola (printed textile design) embodied the spread of “Finnish Design”. Finnish design was constructed internationally through the commercial success of such individuals. For ICT, the success of Nokia would have a similar effect of the way Finland and Finnish culture was perceived abroad and how Finns saw themselves. Nokia in a way epitomises the creative economy, located in a small economy, commercially and internationally successful and competitive, fusing high-technology and cultural understanding into a “design house for mobile communication” (Kotro and Panzar 2002, p.36). In the 1990s, after years of decline, the notion of “Finnish design” once again became the metaphorical heart of Finnish competitiveness.

The notion of Finnish design - what it constitutes, and what its geographical implications are – is not easily deciphered. Creativity might be less codifiable, and thus more place-based than knowledge, but it is not a national trait when analysing through the lens of international competitiveness. The case of linking Nokia to “Finnish design” is interesting from a geographical perspective. Nokia is selling a technological product, the mobile phone, for a global market. It acknowledges design as an important strategic “asset” (Järvinen & Koskinen 2001, 77). The success of Nokia is often referred to in Finland as linked to the notion of (modern) Finnish design, for example in comparisons of different countries competitiveness is the design field, Finland often comes out on top not least due to the strength of Nokia’s design brand (e.g. NZIER 2003). Research has also found that Nokia’s had a great effect on the development of Finnish design (Valtonen 2007). The linking of Nokia to Finnish design is well illustrated in the report on global competitiveness of national design sectors by the New Zealand Institute of Economic Research (NZIER 2003,9): “Finland’s design culture has always been strong. In the 1950s and 1960s, Finnish
designers and architects such as Alvar Aalto were the embodiment of ‘hip modernity’. However, it has only been in the presence of a suite of national design policies that the Finnish brand has become truly global...The single biggest success story from Finland’s design program is Nokia.”

But Nokia is also raises questions if - when understood in relation to international competitiveness - the notion of “Finnish design” does not lose its meaning, and if referring to Nokia as “Finnish design” does not overemphasise the importance of “global competitiveness” for the rest of the design sector, especially when referring to global competitiveness rankings to support policy decisions. Drawing strong connections between Nokia and Finnish design is contestable in many ways. Today Nokia has its main design studios in London (UK) which host 40% of Nokia’s in-house design force, Espoo (Finland), Beijing (China), and Calabassas, LA (USA), with newly opened satellite studios in Bangalore (India) and Rio (Brazil) (Nokia 2008, Exon). In 1990s Frank Nuovo acted as Nokia’s chief designer, he was an Italian-American based at Nokia’s design centre in Los Angeles, California. Currently the position is held by Alistair Curtis, who holds a Master of Arts degree in Industrial Design Engineering from the Royal College of Art in London (www.nokia.com). Nokia’s new design phone features music composed by Grammy winning Japanese composer Ryuichi Sakamoto, who is based in New York and Tokyo. In a recent interview Curtis spoke on the reasons for having Nokia’s design centre in Los Angeles during the 1990s: “It was partly due to where Frank Nuovo was based. L.A. has always had a strong pool of design and creativity. Most if not all auto manufacturers in the world have an L.A. design studio. The speed of product development was slower in those days. You could afford to be farther away from the machine. “ (Curtis quoted in BusinessWeek, 17.6 2006)

Today, Nokia employs about 300 designers in its global team, working from four main studios in Finland, the UK, the US and China, as well as a number of second-tier offices, it also employs utilizes its large network of consultancies and subcontractors for design purposes (Järvinen & Koskinen 2001, 95). In August 2007, Nokia opened its first design studio in Bangalore, India characterised as a “design

5 Prior to joining Nokia as head designer Nuovo had worked 10 years for BMW Group DesignworksUSA in Los Angeles.
hot-spot” and a “design oasis” by Alistair Curtis (BusinessWeek, 2006). When speaking about Bangalore, Curtis’ language mirror’ that of Florida’s in terms of the “creative class”, but here the description is not that of the western-based subject, and there is no emphasis on “Finnish” design:

“A local creative university sponsors, it's an area where we can interact with local creatives in order to sort of look at the culture of that country. We can look at specific design issues we want to develop with them. We are a global organization and there is diversity in the marketplace. It's about being able to tap that better. What are those differences? Are the drivers the same? In many cases they are, but you may need to tweak products to make them more appealing from a Rio perspective or a Russian perspective.” (Curtis quoted in BusinessWeek, 2006)

Curtis’ also draws on the national imaginations of India as “a dynamic and inspiring place for designers with its diverse mix of cultures, traditions and colour” (Curtis quoted in BBC, 2007). These narratives both confirm and question a geographical understanding of creativity, on the one hand it shows that there might be little utility left in the notion of “Finnish design”, on the other hand it seems to conform to the understanding that creative subject positions are neither formed by nationality nor strict industrial boundaries. I thus return to the question of what actually “holds together” the creative class.

**True values of creativity**

The creative class is governed and govern others through what they see as the “true” behavioural norms and conventions of the creative economy. We can discern what behavioural norms are seen as true and valued by looking at the “similar tastes, desires and preferences” (Florida, 2002, 68) of the creative class: values that stem from the economic function of individuals. These ‘mainstream’ values are individuality, meritocracy, and diversity and openness (Florida, 2002).

Florida sees individuality as an unwillingness to ‘conform to organizational or institutional directives and resist traditional group oriented norms’ (Florida 2002, 77-78). In the subjectification of the new creative worker, notions such as self-
management, self-learning, and self-empowerment are central to the creative ethos. Workers prefer to ‘move around’ (Florida 2002, 110) and “their only real job-security comes from their capabilities and continued productivity” (Florida 2002, 110). They accept that a significant amount of their working time is invested “in taking care of their creativity” (Florida 2002, 114) through education, learning and picking up new skills, “all of it unpaid” (Florida 2002, 114) during “spare” time. Creativity is enhanced and produced for the firm but the individual worker is responsible for the production costs.

In their portfolio careers – often typical within the design sector - members of the creative class govern themselves as they “now expect to manage their working lives’ (Florida 2002, 115) “we have come to terms with the new labor market…we simply accept [lay-offs] and go about our busy lives. We acknowledge that there is no corporation or large institution that will take care of us-that we are truly on our own” (Florida 2002, 115). Coming to terms with the new labour market, ties back to the issue of labour power and apolitical values: “…the ultimate ‘control’ issue is not who owns the patents that may result, nor is it whether the creative worker or employer holds the balance of power in labour market negotiations. While those battles swing back and forth, the ultimate control issue – the one that we have to stay focused on, individually and collectively – is how to keep stoking and tapping into the creative furnace inside each human beings.” (Florida 2002, p. 37) In terms of “labour market negotiations”: Organized labour-as with most political activity-is presented as uninteresting to the creative class. By definition they span a vast variety of industries and do not “determine the shape or structure of the social organization of creativity” as they do not “identify with the industry as a whole” (Hartley, 2005, 28) Individuality is a prime example of responsibilization (Rose 1999), wherein indirect techniques are developed for leading individuals without being responsible for them. By naturalizing the values of the creative ethos, subjects become “responsibilized” through the naturalized understanding that social risks, such as poverty, illness, housing, exclusion, illiteracy and unemployment, are not the responsibility of state protection systems but rather the responsibility of the individual. Instead such issues are represented as matters of self-care (Rose 1999, Lemke 2001).
“The Creative Class values hard work, challenge and simulation… The companies that employ them are often under tremendous competitive pressure and cannot afford much deadwood on staff: Everyone has to contribute. The pressure is more intense than ever to hire the best people regardless of race, creed, sexual preference or other factors…meritocracy ties into… values and beliefs we’d all agree are positive – from faith that virtue will be rewarded, to valuing self-determination and mistrusting rigid caste systems.” (Florida 2002, p. 78)

In order to create a true competitive environment, which can attract the creative class, there is a need to focus on only the most “intelligent” and “best” subjects irrespective of their nationality or ethnicity (Bunnell and Coe 2005). By valuing only merit meritocracy becomes inherently intertwined, and at times indistinguishable from the value of “of openness and diversity.” The creative class should show “tolerance for strangers and intolerance for mediocrity” (Florida 2002, 227). As “merit” is a central value issues such as race and sexuality becomes almost a non-issue. Florida does, however, recognize that such an emphasis on meritocracy might divert from the relationship between the cultural and educational advantages that lead to “merits”, and issues on race and sexuality, but as is typical of the creative discourse these issues are conferred to the periphery. Meritocracy is thus closely connected to diversity, which is portrayed as the most fundamental value of the creative class. Diversity is singled out as the most important value that the creative class looks for in the location of the potential employer: values of openness and tolerance should thus govern the conduct of firms and local politicians. Such values are not strange to the design profession, the International Council of Societies of Industrial Design defines the task of designers as “…supporting cultural diversity despite the globalisation of the world” (www.icsid.org). In practice signs of openness to diversity include a “people of different groups and races, different ages, different sexual orientations and alternative appearances such as significant piercings or tattoos” (Florida, 2002, 226).

As has been discussed in this chapter, new subject positions (the creative worker) are engineered around a number of central values, i.e. individuality, meritocracy, diversity/openness. From these central values, the creative class becomes characterized by its freedom: freedom of being an individual, freedom to be the best, and freedom of mind. Members of the creative class are “governed through [their]
freedom” (Rose 1999, 62), in line with the neoliberal mode of government. Once these values are naturalized and conformed to in specific places and within firms in such locales, they will accrue competitive advantages in relation to other places.

Creating creative Finland

Place is paramount in the creativity discourse. Herein I specifically focus on performative spaces; spaces where people act and try out new subject positions (Madge and O’Connor 2005). In doing this I continue to look at the establishment of a design-driven and creative economy in Finland in more general, but also use the case of Arabianranta – the City of Art and Design - as an example of performative space.

Arabianranta is an urban district in Helsinki and a major new urban development projects in the metropolitan area. It is a public-private partnership, wherein the City, who owns the land, gives private actors land for development, while providing infrastructure and municipal services (City of Helsinki, 2006). The emphasis of the project lies in residential and housing development. But the most talked about and most publicised aspect about this housing project is that as a “subproject”, the City aims to establish Arabianranta as “the leading centre of art and design by the end of the decade” (www.helsinkivirtualvillage.fi) and as a “leading hub of design in the Baltic context” (Kangasoja and Schulman, 2007, 17). The public private partnership is operated through a company called Art and Design City Helsinki Ltd. (ADC), its shareholders are the City of Helsinki, the Ministry of Trade and Industry, the Foundation for the Support of the University of Art and Design, the Foundation of the Pop and Jazz Conservatory, Arcada Polytechnic\(^6\), Iittala Group and Arabian Palvelu\(^7\).

The Arabianranta district plays a central role in the overall innovation strategy of Helsinki. The mayor of Helsinki contextualises Arabianranta in the larger competitiveness/globalization discourse: “The goal for the Helsinki region’s innovation strategy is the success of Finland and the metropolitan area’s in the global competition. Arabianranta is seen in this strategy as the significant development

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\(^6\) a homeware design company that owns the Arabia brand
\(^7\) the area’s property service company
environment for especially the creative industries.” (Pajunen on www.helsinkivirtualvillage.fi)

The values of the creative class (individuality, meritocracy, diversity; and urbanity) are acted out through practices. This relates strongly to performativity; what people do and act out is connected to the practices that reproduce discourses while enabling and disciplining subjects and their performances through “the saturation of performers with power, with particular subject positions” (Madge and O’Connor, 2004, 85). Arabianranta can be seen to be a performative space in which “subject positions are ‘tried out’ in and through which practices of everyday life and these acts, or fabrications, produce over an time identity ‘effect’.” (Madge and O’Connor, 2004, 85) The identity effect alluded to is the creative worker; creativity becomes actualised through performance and through performative spaces. As subject positions are formed, the subjects start governing themselves according to the values and norms that they see as ‘true’ and valuable.

In the following sections I will look at some technologies and means by which creative subject positions are formed in the context of Arabianranta. I do this by looking at three dimensions of the performative space of the ‘City or Art and Design’, I base these three dimensions on the so-called “3Ts of economic development”, Talent, Technology and Tolerance (Florida 2002). From a governmental perspective, they are part of creating an environment advantageous for creativity: ‘To attract creative people, generate innovation and stimulate economic growth, a place must have all three’ (Florida 2002, p. 249). I thus look upon how Talent, Technologies and Tolerance are utilized to form creative subject positions.

TALENT: How we became talented

In the creation of an environment beneficial to the design industry and favourable for creativity, it prescribes the co-presence of the most creative subjects (Bunnell and Coe 2005). In the Arabianranta/Finnish case the creation of a creative subject has been promoted in several ways. When creating an image of Finland, the history of Finnish design and creativity is often drawn upon. Names of industrial designers from
the 1950s such as Alvar Aalto, Tapio Wirkkala, and Timo Sarpaneva are often drawn upon to verify creativity as a national characteristic. Other historical images used for establishing a creative history, are the success of Nokia, design firms such as Artek, the Finnish furniture company founded by Aalto, and Arabia, a (designed) tableware company which employed several of Finland’s foremost industrial designers in the 1950s. Arabia is especially significant in the sense that it shares history with the district. Arabianranta is Finnish for “Arabia’s shore”. It was the site for Arabia’s porcelain factory throughout the 20th century and now houses the University of Art and Design.

Arabianranta is portrayed as the birthplace of Helsinki City, it is described as “the almost mythic site of medieval Helsinki” (Bunschoten et al. 1996). Arabianranta was also the site for the first steps towards industrialisation in Finland, and fostered a number of smokestacks. History is used in juxtaposition with the high technology infrastructure of the “new” Arabianranta: “The spirit of the place - genus-loci- is a unique weft of the synergy born out of history, wild nature as well as art, media, business and industry.” (www.helsinkivirtualvillage.fi) It is notable that genus loci is used similarly as “industrial atmosphere” was in new regionalism literature. As is typical for the new economy discourse, “natural” places and surroundings are given specific importance. The landscapes also include more active landscapes, “landscapes of interactive lifestyle” (Bunnell and Coe 2005, 840), parks, jogging trails, skate parks etc. These play an important governmental role, in allowing relaxation from the “mental strains” of creative work (ibid), but also for “self-development”. The creative class is induced to realize themselves through the active use of these landscapes of interactive lifestyle.

The postmodernism architectural vision is dominated by the image of difference and diversity where modern glass-plated office buildings exist alongside historic buildings as if to foster “a cosy ambience” (Philo and Kearns 1993, 6). Arabianranta is surrounded by the former working class quarters with low wooden buildings from the 19th century. The demand to preserve old buildings, on the basis of cultural rather than direct economic value helps to reconcile the contradiction between market and place. The partial preservation of old building and surroundings constitutes a market for the special characteristics of place (Zukin 1991). The site was chosen as much for
its metaphor as its location. The postmodern architectural vision, as used as a means of place marketing and selling places, stands in contrast to the modernist vision that ignores history and in so doing alienates people from the surroundings and from place itself (Jacobs, 1974; Philo and Kearns, 1993). The spirit of creativity is inscribed into the built landscape, where visions of diversity and difference are replacing the modernist homogeneous concrete buildings (Philo and Kearns 1993). This echoes the position of Jacobs (1974), whose ideas Florida claims to reproduce, that the preservation of old buildings is a necessity to foster social diversity. As Zukin (1991, 193) shows, gentrifiers’ capacity for connecting to history gives them “license” to reclaim places for their own use.

Scattered around Arabianranta are pieces of public art. The city has stipulated that property developers have to allocate 1-2% of the acquisition costs for artistic projects. The “theme” of these projects is to be based on the “area’s history and nature”. (www.helsinkivirtualvillage.com) People are constantly exposed to the artistic element of Arabianrant. Such place-based association with arts invests the neighbourhood and the new developments with an “aura of authentic cultural consumption” (Zukin 1991, 192), and more importantly in Arabianranta’s case, production. The public art in Arabianranta is seen as “important for forming the identity of the area” (http://www.uiah.fi/). They are equally important for forming the subject positions and identities. Of course it visualises the idea that creative industries include not only the private but subsidised public art. People who are potential dwellers of Arabianranta are portrayed as becoming part of the creative class through location. It can also be understood as participating in modes of self-government based on lifestyle choices (Bunnell and Coe, 2005). The relocation to Arabianranta is not, however, only about art, or real estate, it is also about getting access to the frontier of information technology. This brings us to the second dimension of performative space, technology and virtual space.

**TECHNOLOGY: Helsinki Virtual Village**

”... One of the aims of the Arabianranta region is to create a resident-centred, communal urban area, which communicates in a versatile way with the help of
technology. The area can act as a national test bed for experimental projects in the creative industries.” (Eskelinen 2005, 6)

The physical performative space of Arabianranta is mirrored by a (cyber)space of performativity, Helsinki Virtual Village (HVV), a password protected web forum for residents only. All the buildings and apartments in Arabianranta are equipped with a state of the art fibreoptic networks and wireless infrastructure. By having every building connected to the global networks and providing wireless internet access around the neighbourhood the boundaries between work and leisure become blurred. Florida reflects on this by describing how the new suburban high-tech campuses have “virtually everything a worker would want or need – from espresso bars and free food to on-site day care, state of the art health facilities, outdoor Frisbee fields and concierge services. The message and function are clear: ‘no need to go wandering off; stay right here at work” (Florida 2002, p. 123).

HVV can also be seen as a performative space, as subject positions can also be tried out and through practices of everyday life. These (cyber)subjectivities may then spill over to place-based identities either by supporting, blending in or by undermining it (Madge and O’Connor, 2005). According to one resident “...as soon as the discussions started on [HVV] I started to identify with the new place...I started to feel that I belong to the house, and also to the place as a whole.” (in Kangasoja, 2007, 151). For others, the (cyber) subject position is felt as clashing and undermining their identities. The new subject position, mediated through constant exposure to technological possibilities and images of an internet savvy, creative, fast subject, was resisted by some of the residents. Some people felt inadequate and anxious as society imposed these new technological identities to them (Kangasoja, 2007).

Living Lab is another performative (cyber)space of Arabianranta, The idea is that the residents are using and testing prototypes and products in their homes as well as providing information to companies about their lifestyles over the local network: “The Helsinki Living Lab concept aims to be as close as possible to the end user and the use of the service in everyday life and in genuine conditions of normal use. As result we can create products and services that people truly consider necessary, useful and positive.” (www.helsinkilivinglab.fi) Here, although the participants are
voluntary “producers”, instead of consumers, the residents do not, of course, choose what they produce. They are being told what to consume and experience (Kangasoja, 2007). HVV and Living Labs are not platforms for networked democracies; rather they are technologies that strengthen subject positions, governing how inhabitants see upon Arabianranta, and ultimately themselves and others.

**TOLERANCE: Not in my neighbourhood**

“The places that are open and tolerant — the places where gays, bohemians and immigrants feel at home and where there is greater racial integration - tend to have a culture of tolerance and open-mindedness ... Regions and nations that have such ecosystems... gain a tremendous competitive advantage.” (Florida and Tinagli, 2004, 25-26)

Tolerance is posited to be perhaps the most central value of the creative class. This is something of a conundrum for the Finnish self-image. They might see themselves as talented and technologically savvy, but how about tolerant? Finland is a country with a fairly homogenous population compared to other EU countries; the proportion of immigrants is very low in Finland. At the end of 2002, the number of foreigners amounted to 1.99% of the population. A recent study had Finns looking at themselves through numbers that stated that 78% of the population do not approve of alcoholics as neighbours, 44% do not want people with mental illnesses as neighbours, 1/3 do not want skate parks in their neighbourhood, and about 20% do not want people who have AIDS, who are homosexual or immigrants as their neighbour (Suomen Gallup, 2007) Yet, creativity indexes point to the tolerance of Finns, is not creativity a sign of tolerance? Florida (Florida, 2004) suggests that tolerance might be a latent value in Finns: “To realize this latent advantage that stems for their underlying attitudes and values, these nations [such as Finland] will have to liberalize their immigration policies and become more open to talent from around the world.” Diversity and openness is often reproduced in strategy and policy documents: “In order to attract and keep creative talents, the Helsinki Region will have to provide creative settings offering high standards in housing, work and leisure opportunities… The entire Helsinki Metropolitan Area must invest in diversified, pluralistic and increasingly international cultural provision so that foreigners will also come to appreciate that the Region provides a satisfying living environment.” (Innovation Strategy Helsinki
Metropolitan Area, 2005, p.22) But the population of Arabianranta is selectively uniform. The inhabitants see themselves as “predominantly families with children, generally affluent people...homogenous rather than representing urban diversity...youthful, middle-aged, relatively highly educated middle class” (Mäenpää, 2007) Only three percent of the population are unemployed, compared to ten percent overall for Helsinki.

Perhaps Arabianranta is most clearly defined in terms of what it is not? The principal of the polytechnic, on the school’s decision to locate in Arabianranta: “In choosing a new campus it was important that the new place would interact with its environment. We were looking for an open and extrovert campus, not some kind of ghetto” (Wolff in Rönkä 2007, 249). With this concluding thought, there is reason to further discuss what the role of economic geographic research should be: Is it demoted to scientifically producing which spaces are ghettos and which are suitable for creative gentrification... or is it something else?

**Concluding comments**

In this chapter I have looked at the subject positions are made available and valuable to us in creativity discourse and the role of industrial design in achieving the establishment of a new creative ethos. In Finland A central tenet in creativity discourse is that creativity – and industrial design - is inherently good as it represents the subversive, competitive, public, private, elitist, communalist, consumerist and sustainable, all at the same time and apparently without contradiction. The values of the Creative Class, meritocracy, openness, and individuality, portrayed as benevolent and good. Why are these values valuable to government? Because they lead us to alienate ourselves from the need of social protection systems; accepting more flexible working conditions (e.g. by glorifying the flexible “portfolio career” of designers) with less employment security and take care of the development of the means of production (our creativity) ourselves and without compensation – all seemingly by our own will. The increased acceptance of the creative ethos can be seen as an example of the government through freedom (Rose 1999), through people’s will to enact their lives in terms of activity, enterprise, choice and creativity.
Space plays an important in forming and stabilizing these positions. Creativity discourse enables a de-emphasis on national policies towards regional spaces, spatial selectivity and “splintered” urban spaces (Bunnell and Coe, 2005, 834) of privatized, highly networked glocal hotspots”. These spaces can be seen as performative spaces, space where subject positions are acted out, where the “right” values are constituted. Research both within economic geography and organization studies can play an important role in looking at these spaces and their role in establishing the creative economy, but research needs to move beyond glorifying certain urban creative hotspots, and window-dressing them in attractive shrouds for the policymakers to admire and reproduce. Creativity is an alluring signifier to place on centre stage of the economic geographic discourse. Together with the city-regions paradigm it becomes a forceful export into other disciplines and a persuading sell to policymakers. The urban creativity paradigm promises to deliver where the hoards of cluster, industrial district and learning region studies might be perceived to have failed. The focus on the individual expands from the purely economic towards what seems a more people-centred approach, similarly when individuality is positioned as a central value it diverts from the previous emphasis on trying to find evidence of local cooperation and strong local ties. Creativity – and its core producer industrial design - is like motherhood and apple pie; it becomes almost impossible to be against and criticise it. Industrial design when fuelled by creativity makes the world a “world a better, a more beautiful, a safer, and a smoother place to live in” (Järvinen and Koskinen 2001, 10). Yet when understood increasingly and exclusively in relation to international competitiveness, it becomes both persuasive and paradoxical. We need to focus on the paradoxes, and explore the silences that creativity discourse produce.

Examples of silences that we risk reproducing includes issues about contradictions between the consumerist lifestyle of the creative class and issues of ecological and social sustainability amidst claims that the creative class is truly caring- as if the access to parks or a design aspect to recyclable water bottles ensured ecological stability. Other contradictions in the formation of subject positions include the increasingly precarious working conditions of the creative class-amidst minimizing the interest towards labour relations and politics. And perhaps the biggest elusive economic issue of all, that of uneven development, remains left to its own device. These issues should not be demoted to the asterisks of research and suggestions for
further research. The creative economy implies little shift if the subversive elements of creativity discourse is downplayed, and the dark side of best-in-class regions are silenced or selectively reported in the hunt for a new economic orthodoxy.

I have also discussed the notion of performative space, and how space can be used to form new subject positions. The question remains can these imposed identities and values be resisted, are there alternative imaginations in the horizon? I will end on an inkling of a positive note, with an example that this may be possible from case of Arabianranta:

Arabianranta had been marketed as a high tech, creative and caring place, child friendly to boot. The advertisements had showed maps with day care centres “in nearly every yard” (Ho, 2007, 236). Yet in 2005 several years after the completion of the neighbourhood there was still an urgent need for care centres, because of “incorrect demographic estimates” (ibid.). Residents were informed that a day care centre was in the pipeline for 2008. As dissatisfaction reached its peak the residents organized a survey via HVV, and in a matter of weeks the number of children living in the area and in need of day care was produced. This was then used in negotiations with the City and in media discussions (Kangasoja, 2007). The image of the inhabitants, in this case mothers using HVV this way might not have been an illustration of the imagined industrial designer inhabiting the City of Arts and Design and drawing on its genus loci to gain competitive advantages or producing more products for us to enjoy, but it can be seen as a competing imagination of what constitutes a creative class. Given, this might be seen as yet another carefully selected, feel-good detail much like what I have previously critiqued. But it is also an illustration of how appropriation works both ways, and how places can matter in resisting the imposed subject positions. Yet these are not the stories and the voices of resistance that we sell to policymakers. Instead, if we do not stop to contemplate the values and images of landscapes that we reproduce, we stand in danger of silencing the very voices we claim to help by reproducing the creativity discourse.
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