

Northern Peripheries & Creative Capital: The Nature of Creative Capital & Its Role in Contributing to Regional Development in Nordic Regions

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Debates exist around the role of a specific type of human capital – creative capital – in regional economic development. Creative capital dynamics are most often analysed using statistics on workers in creative occupations, but beyond this creative capital is poorly understood, particularly in the peripheral context. In this article we explore the nature of creative capital among individuals in creative occupations based in two Nordic regions. In doing this we also aim to assess the contribution of creative capital and creative industries to regional development and innovation. Our aims also require a different methodological approach. Others that have analysed creative capital have used a series of statistical indicators as their primary metrics. Here we take a predominantly qualitative approach, assessing the experience of creative professionals across two Nordic regions. The primary research is based on semi-structured, qualitative research interviews in two regions -Lapland in Finland and Västernorrland in Sweden. For the purposes of understanding broader trends in the study regions, this data is also combined with statistics on creative occupations. We find that social capital is also vital in the generation of creative capital. Based on the nature of creative capital emerging here, it appears an important ingredient supporting regional development in Nordic regions. We also conclude by questioning if higher levels of creative capital can also contribute to the increased well-being of northern societies.

Introduction

Developing human capital is well recognised as an important part of regional economic development strategies (Mathur, 1999; Hoyman & Faricy, 2008). In the Arctic context, focusing on human capacities such as creative capital, as opposed to resource-based development, has been identified as important in revitalising and reinventing these regions for their positive future economic and social development (Bontje & Musterd, 2009; Petrov, 2013; Larsen & Fondahl, 2014; Hirshberg & Petrov, 2014; Mikkola, 2016). Petrov (2013; 2014) identifies a need for the development of new forms of economic competitiveness and diversification of peripheral economies. This should encompass a move away from old, narrow path dependencies reliant on

external agents, such as large corporations or the state, and towards regional economies where there are broader flows of knowledge through a wider range of actors.

Our aim here is to develop understanding of the role of creative capital in peripheral regional development. Limited understanding of the characteristics of creative capital, particularly in the Nordic Arctic context, has been identified (Petrov, 2013; Mikkola, 2016). To do this we explore the nature of this capital among creative professionals based in two Nordic regions. In this context we find that social capital is also important in the generation and utilisation of creative capital.

Defining Creative Capital

We can explain creative capital simply as a particular kind of human capital, which encompasses workers in creative occupations or the creative class (Florida, 2002). Human capital is generally understood to encompass the skills and knowledge of a labour force or similarly the “imbedding of resources in people” (Becker, 1962: 9). Particular ways to invest in human capital identified by Becker (1962) include formal education through institutions, on the job training or more broadly increasing the amount of information available to people, thus informing better decision making. The effect of individuals gaining human capital is described by Coleman (1988: 100) as bringing about “skills and capabilities that make them able to act in new ways”. We can also think of creative capital in terms of different sub-types. For example Petrov (2014) mentions cultural and entrepreneurial forms and finds that individuals possess these in different concentrations.

The creative capital embodied in the creative class is however more than the skills of these individuals gained through education and training. It is a multi-dimensional concept. Human creativity is also a key part of creative capital (Florida, 2002; 2003; Petrov, 2008). Creativity is central to the functions of work carried out by the creative class. This can be to: “combine standard approaches in unique ways to fit the situation...independently try new ideas and innovations” but also at times to: “produce new forms or designs that are readily transferable and broadly useful, such as designing a product that can be widely made, sold and used...composing music that can be performed again and again” (Florida, 2003: 8).

Beyond the fundamental role of human creativity in creative capital, it can also be understood more specifically as encompassing informal knowledge and skills, for example that might be passed through generations and between creative people (Petrov, 2014; Petrov & Cavin, 2013). This could be an artisan technique that is learned by contemporary craft professionals or a more experienced creative passing knowledge on to emerging talent. Informal knowledge cannot be captured by measures of creative capital using metrics such as levels of formal education (Petrov, 2014). Knowledge exchange between people is also important in building wider human capital (Storper & Scott, 2009). This also brings us to a link made between different types of capital – social and human.

Social capital is fundamentally based on social exchanges and results in resources being produced from social connections. Bourdieu (1986: 51) defines social capital as: “the aggregate of actual or potential resources, which are linked to possession of a durable network...or...to membership in a group”. The volume of social capital an agent can mobilise depends on the size of the network the agent is connected with, and also the volume of other types of capital possessed by agents in this network. Generating social capital must continuously be re-affirmed so that trust is built. Bourdieu (1986: 52) notes the importance of “durable obligations subjectively felt (feelings of

gratitude, respect, friendship, etc.)” to building social capital. Coleman (1988) argues that social capital is important in the creation of human capital. In the context of creative capital, both positive and negative linkages have been suggested. Petrov (2014) identifies a likely synergy between creative and social capital. Krätke (2011) argues the creative capital generated by knowledge networks is important to facilitate and increase the capacity for innovation. This leaves creative capital delinked from the idea that creativity is an attribute held by the individual, but rather is socially produced and embedded in the social and economic context from which it emerges. On the other side of the debate, Florida (2002) argues that regions with strong social capital tend to be less innovative, while those with lower social capital are more open and likely to attract creative people that contribute to innovation.

Here we define creative capital as a multidimensional concept which has human creativity at its core, driving human skills and capabilities. It can be transferred between individuals, also enabling creative capital capacity to increase. It is impacted by other capital forms, such as social capital. It can be harnessed towards divergent end goals, from pure artistic creation at one end to commercial content creation at the other.

Creative Capital Versus Human Capital

Moving beyond conceptualisation, debate also exists around which type of human capital is most beneficial to regional economic growth. Florida (2002) argues creative capital is the most valuable form of human capital to help drive growth. This argument is also linked to place attributes (culturally diverse, tolerant and open to new ideas) attracting creative people to locate in certain regions. However there is much debate on this issue and research exists both supporting and refuting these claims. For example, Hoyman and Faricy (2008) find that creative capital is not linked to regional growth, but the broader human capital capacity supports economic development. Conversely, McGranahan and Wojan’s (2007) analysis of rural and urban US counties finds evidence in support of the creative class thesis. Some remain cautious about Florida’s conclusions but argue they still merit further contemplation (Bontje & Musterd, 2009). In the peripheral, regional development context, Petrov (2008) argues that while needing further research, creative capital does appear to improve the economic transformation and development prospects of these types of regions. Some evidence suggests that the existence of creative talents in a place can stimulate further creativity, hinting that creative capital has a potentially mutually reinforcing impact. For example, Cerisola (2017) finds that the presence of creative industries and interactions between different types of creative practitioners in an area is important to increasing local creativity. Symbiotic linkages between the core creative arts and the wider creative sector have been identified (Volkerling, 2001). For example, the arts can have a significant role in supporting the wider creative industries through incubating creative talent and encouraging creative innovation (Centre for Economics and Business Research, 2013).

One area of debate with clear lessons for policy are warnings against the ‘one size fits all’ approach to developing creative capital as part of regional innovation policy (Tödting & Trippel, 2005; Storper & Scott, 2009; Andersen et al., 2010). In this article we also briefly explore the role of creative capital in regional economic development. This can help contribute to the tailored knowledge needed to more effectively evaluate its place.

Methodology

Better understanding the nature of creative capital is important because it is under-researched in peripheral contexts. While there are some exceptions (e.g. Petrov 2008; Bell & Jayne 2010; Gibson, Brennan-Horley & Walmsley 2010) the role of creativity and creative capital as a driver of development has most often been explored in the urban development context (e.g. Krätke 2011; Florida 2003). Analysis of creative capital and the creative class has focused on the use of a series of statistical indicators as key metrics. Here we take a predominantly qualitative approach, assessing the experience of creative professionals in two Nordic regions. We aim to look beyond statistics and at the nature of creative human capital itself.

The primary data informing this research is semi-structured, qualitative research interviews in two regions - Lapland in Finland and Västernorrland in Sweden. The research was carried out as part of a *creative momentum project*¹ that aims to support the development of creative industries in five regions across Europe's northern edge. This three-year, transnational project is co-funded by the EU Interreg Northern Periphery and Arctic (NPA) Programme. For this article we draw on interviews carried out with 13 creative professionals from September 2016 to June 2017. Some interviews were face to face (7) but others were carried out by telephone (6). Most were creative entrepreneurs (11) who had started their own micro businesses in the creative industries, while one ran a local performing arts organisation and one was an employee in a creative business. A range of creative economy sub-sectors were covered, from core creative to the broader creative industries (see Table 1).

Table 1: Breakdown of interviews

Regions	Number of interviews	Creative industry	Core Creative/ Cultural industry
Lapland	7	4	3
Västernorrland	6	3	3
Total	13	7	6

We do not focus on the creative class as defined by Florida (2002; 2003) which covers a range of creative professions, but also science, academia, engineering, business and healthcare. We focus solely on creative professions that are part of the creative industries. This is because we are interested in examining the role of creative industries in peripheral regional development through exploration of creative capital. We focus on the creative class in the context of creative industries, as defined by The Work Foundation (2007). Core creative fields focus on generation of pure creative content which can invoke copyright, such as painters, film-makers, dancers or composers. Cultural industries are closely linked to core creative fields and focus on commercialisation of creative content. This includes for example music, television, publishing and film. The wider creative industries deliver expressive and functional value and include sectors such as architecture, design, fashion and advertising. This classification was used to categorise interviews to ensure coverage of the creative and cultural core, as well as broader creative industries.

For the purposes of understanding broader patterns in the study regions, we also combine this qualitative data with statistical data showing trends in creative occupations in the two regions.

Understanding the role of creative capital in regional development benefits from a mixed methods approach. Developing knowledge on the nature and role of creative capital must go further than describing patterns using narrow statistical indicators, such as percentage of population with a university degree or in creative occupations. A qualitative approach seeks to examine subjective experiences to seek new insights (Robson, 2011). This is lacking in current research.

Creative Capital in Västernorrland & Lapland

Västernorrland and Lapland are regions in northern Europe with low population densities where natural resources provide an important source of economic activity. Lapland's economy is specialised in the areas of mining and quarrying, with tourism another important sector of note. Employment is most concentrated in the public sector, followed by wholesale, retail and manufacturing. Forestry is also important but technological advances mean that labour demand is reducing. Low levels of innovation and enterprise creation are observed as well as the need for development of business linkages outside the region to promote future economic development (OECD, 2017a). Västernorrland's economy is traditionally based around, and specialised in, forestry and processing. As with Lapland, the public sector, followed by wholesale, retail and manufacturing are where employment is most concentrated. Business services and IT have experienced recent growth. While innovation is higher here than other northern regions, nevertheless greater levels are identified as important for future growth (OECD, 2017b). The broad nature of the regional economies described here shows their reliance on traditional sectors and primary production. This points to the need for economic diversification and creative human capital could be greater harnessed as part of this.

Creative capital can be measured in terms of the number of people in creative occupations. Tables 2 and 3 provide an overview of changes in creative occupations in Västernorrland and Lapland in recent years. This occupation data is based on classification codes used by Statistics Sweden and Statistics Finland. These correspond with the definition of creative occupations used by the UK Department of Culture Media and Sport (DCMS) in its Creative Industries Economic Estimates (DCMS, 2016a).² Codes were grouped into the categories outlined in the tables below to help overcome issues of confidentiality due to small population sizes. Assessing patterns of change across the occupation categories, creative capital has overall decreased in these regions in recent years. From 2012 to 2014 in Västernorrland it decreased by 9% and in Lapland from 2012 to 2013 by 5%. However not all creative occupation types experienced a decrease. In Västernorrland, media and craft occupations had the largest increases and in Lapland art and recreation occupations had the greatest rise. Relative to total employment in the region, creative occupations make up 3.6% of employment in Västernorrland and 2.58% in Lapland. By comparison, in the UK creative industries accounted for 5.8% of all jobs in 2016 and in this economy creative industries are considered a culturally and economically important sector (DCMS, 2016b).

Table 2: Number employed in creative occupations in Västernorrland

	2012	2014	% Change	% of total employment in the region (2014)
Media (PR, advertising and marketing)	205	923	+350%	0.9%
Software and IT	2,173	1,778	-18%	1.74%
Architecture, design, photography	816	397	-51%	0.39%
Publishing	466	199	-57%	0.19%
Film, TV, Music, Radio	123	128	+4%	0.13%
Arts and Recreation	228	188	-18%	0.18%
Craft Trades	33	68	+106%	0.7%
Total	4,044	3,681	-9%	3.6%

Data source: Statistics Sweden

Table 3: Number employed in creative occupations in Lapland

	2012	2013	% Change	% of total employed in the region (2013)
Media (PR, advertising and marketing)	256	269	+5%	0.39%
Software and IT	348	292	-16%	0.42%
Architecture, design, photography	711	640	-10%	0.92%
Publishing	167	163	-2%	0.24%
Film, TV, Music, Radio	155	167	+8%	0.24%
Arts and Recreation	110	123	+12%	0.18%
Craft Trades	145	135	-7%	0.19%
Total	1,892	1,789	-5%	2.58%

Data source: Statistics Finland.

These regions also have a small share of total employment in creative occupations. Västernorrland accounts for 1.62% of Sweden's total employment nationally in creative occupations. Lapland is similar with 1.57% (see Tables 4 and 5). Peripheral regions tend to have a lower share of creative employment compared to cities and more densely populated areas. For example, UK figures show that in 2016 creative industries in North East England accounted for 3.2% of employment, while in London this was 11.5% (DCMS, 2016b).

Table 4: Number employed in creative occupations in Västernorrland relative to national level

	Sweden 2014	Västernorrland 2014	Västernorrland as % of national total
Media (PR, advertising and marketing)	65,801	923	1.40%
Software and IT	90,076	1,778	1.97%
Architecture, design, photography	32,991	397	1.20%
Publishing	13,590	199	1.46%
Film, TV, Music, Radio	8,220	128	1.56%
Arts and Recreation	9,551	188	1.97%
Craft Trades	7,607	68	0.89%
Total	227,836	3,681	1.62%

Data source: Statistics Sweden

Table 5: Number employed in creative occupations in Lapland relative to national level

	Finland 2013	Lapland 2013	Lapland as % of national total
Media (PR, advertising and marketing)	27,122	269	0.99%
Software and IT	34,013	292	0.86%
Architecture, design, photography	27,525	640	2.33%
Publishing	9,187	163	1.77%
Film, TV, Music, Radio	6,959	167	2.40%
Arts and Recreation	4,776	123	2.58%
Craft Trades	4,485	135	3.01%
Total	114,067	1789	1.57%

Data source: Statistics Finland

Overall the figures tell us that in these Nordic regions macro trends display a decrease in creative capital stock. It would broadly suggest that the role of creative capital in the development of Nordic regions is reducing. The figures do show a clear presence of creative capital in these regions. However, the figures do not tell us about the nature of existing creative capital and the role regional creative professionals play in their areas' development. We next move to assess the micro perspective to gain insights on these issues.

Nature of Creative Capital

In this section we identify patterns displayed around the nature of creative capital in Västernorrland and Lapland from our semi-structured interview data. Our sample is too small for meaningful comparative analysis. It is however a starting point and future research could look at differences across regions in the nature of creative capital and its impact on regional development.

Building creative capital is a continuous process

When thinking of creative capital in the broadest sense of creative skills, it emerged that skills are continuously built by creative professionals. As we discussed above, a number of key elements are central to creative human capital or skills development. In summary these are: education and training; learning by doing, workplace training; and knowledge exchange. Workplace training did not appear here as important in building creative capital. However this observation is most likely impacted by the fact that many of the creative professionals interviewed were entrepreneurs with their own micro-businesses, often with just one or two people working in the business on a full-time basis. While all of the creatives interviewed had formal education in one or more creative profession, skills development did not end after leaving education. Education appears the basis upon which skills are firstly developed, which are then continually built through knowledge exchange and learning by doing. Knowledge exchange can occur through accessing information from organisations and institutions, such as local groups, business incubation centres and financiers. Knowledge exchange also happens between other creative and non-creative professionals. These patterns are similar to how human capital is generally built.

In the context of building creative capital through learning by doing, being part of a wider community of creative professionals appears central to this process. For example: *“Right after graduation I moved to Stockholm. That was good because I could train every day to keep up and also to build on*

my education...I had the most inspiration to create my own stuff. I started with that in Stockholm also, creating and collaborating with musicians that I met" (Interview 3, Västernorrland). This community may be based locally, but depending on the creative sub-sector, it can also be on the national and international scale. Also linked to learning by doing, building knowledge through trial and error emerged strongly. A curious and experimental nature appears an important trait supporting the continual development of creative capital. In addition, these creative professionals held a willingness to take risks and explore new opportunities. Our data shows that creative professionals don't feel they need to have all the knowledge and skills required to get involved in new projects, or in the case of entrepreneurs to start and run a business. Learning by doing appears central to creative capital. The following comments help to illustrate: *"In my earlier job...I learned from that...I've done my own research...I mainly have collected these skills by myself"* (Interview 13, Lapland). This attitude also widens the type of projects creative businesses get involved in as creative professionals don't feel limited by their current skillset. The comments of one creative professional in digital media help to illustrate: *"That is a project that is very typical to us, before we did it we didn't know exactly how to do it but we knew that there was equipment available...we went forward"* (Interview 10, Lapland).

Complementarity of creative capital types

The creative industries are understood as being composed of a range of diverse sub-sectors from architecture to arts and photography to publishing. Sub-sectors are built on different skills or different kinds of creative capital. The complementary nature of different creative capital types emerged strongly in this research. Short-term cooperation with other creative professionals is common to produce projects jointly (e.g. theatre and dance; visual art and festivals; digital media and design) or sub-contracting of work that other creative professionals are more skilled in (e.g. web development and photography; industrial design and carpentry; industrial design and graphic design; marketing and web development). This can sometimes be a longer term cooperation and the basis of a business where two creative professionals come together to establish a company that hinges around their complementary skill-sets. One business interviewed at its core combined the skills of two creative professionals – a carpenter and a designer. Their complementarity is clear: *"I am really hands-on. I need to start doing straight away. I can do a quick sketch or an initial design but then I need to do it quickly....[my business partner] probably goes a bit more in depth into design and aesthetics and the functionality, then we just do it together until we get everything working"* (Interview 7, Lapland). This also points to the catalytic nature of creative capital. The presence of a variety of types of creative capital within a creative's network appears to facilitate greater utilisation of it to generate innovative new products or services. For example one creative discusses how they were matched with another similar creative on a business development programme: *"We were too similar actually and that's why we weren't able to make something new...I am looking further outside the box"* (Interview 8, Lapland). Collaboration between creative professionals with different creative capital types appears to produce more innovative creative content.

Simultaneous harnessing and building of creative capital

These creative professionals displayed a simultaneous harnessing and generation of creative capital. A number of interviewees not only focus on the core creative products or services their business generates but are also involved in teaching. This can be to others seeking professional training but also to different lay groups (e.g., tourists, children, crafters). A desire to share knowledge exists, but not simply as another revenue stream for their business. It can be with a desire to influence

how emerging creative professionals are trained. One interviewee identified a lack of focus in their own training on entrepreneurship. They continued to be connected to the institution they were trained in and continued to highlight this. Now entrepreneurship is covered on the course programme they originally trained on. A desire to share knowledge to give back to the creative community also emerged. For example: *“I would love to have an apprentice at some point. I feel like I need to give back because I was taught that way”* (Interview 8, Lapland). Through their professions creative capital is harnessed as a resource by these individuals, but this evidence shows how creative professionals also play a role in creative capital generation.

Social capital’s role in building creative capital

Education does not only generate creative human capital but also social capital is built through networks made during education. These networks can be taken forward and drawn upon in a creative professional’s future career. A range of human capital types can be needed in creative businesses and social capital is important to gain access to this. Complementary creative skillsets are an important part of a business network and can be drawn upon to support the needs of a specific project. For example, the following comments illustrate this well: *“The same people that I studied with were also part of my first feature film. The Director of Photography and Sound Designer were my old school-mates...I’m also making commercials with them from time to time”* (Interview 12, Lapland).

Social capital is also central in simulating the human creativity aspect of creative capital. It links people with complimentary creative skillsets to generate for example new content or problem solving ideas. The production of new forms such as content or designs often involves the development of ideas with people that are part of a business network. For example one creative talks about how their services to clients are developed as a collaborative creative process between a variety of individuals: *“We join in right through from concept development right through to realising...We help them come up with content and then produce it for them. Then we’ll draw on our partner network to back us up in terms of production...it’s much more productive when you have other people to feed off”* (Interview 7, Lapland).

While social capital appears important to gain access to creative capital, other factors are also important in generating social capital, particularly the presence of trust. The need for personal connections and formation of trust can limit the social capital (and creative capital) built in the peripheral context. Creative professionals note the importance of direct contact with new members of their business network until this trust is established. While technology can connect people virtually it does not replace the need for face to face contact. This then also limits the geographic reach of businesses located in peripheral Nordic regions, as this interviewee illustrates: *“We can work international. I can work all over Sweden and abroad it doesn’t matter for me because I can work with the computer and Skype...but people want to meet. So often you don’t get a job that is less than two hours radius from you because people want to meet, even if we don’t have to...you need first to make them trust you...it doesn’t work unless you have met once so you can get the connection first. Then it is no problem”* (Interview 1, Västernorrland).

Creative Capital’s Role in Peripheral Regional Development

Up to now we have explored the characteristics of creative capital, how it is generated, accessed and used in peripheral Nordic regions. Next we assess what role it plays in peripheral regional development. Peripheral economies have been described as less innovative than those located in core regions because economic activities tend to concentrate on local service development and primary production (Anderson, 2000; Copus et al., 2008). The nature of creative capital identified

here shows that creative industries are a source of innovation in Nordic regions. Creative capital is a resource supporting regional development in peripheral Nordic regions that leads to job creation and re-imagining of the periphery, while also contributing to more balanced development.

Entrepreneurs can play a strong role in supporting and stimulating regional economic development. While the data presented in Table 2 and 3 show an overall decline in numbers employed in creative occupations, these figures hide the dynamics occurring within this, such as what type of employment (employees, self-employed) is declining and how many new jobs overall have been created. Our data suggests creative entrepreneurs play an important role in harnessing creative capital to create job opportunities for themselves, and sometimes also others, in Nordic regions. Creative capital is a resource that people who want to live and work in these regions can capitalise on to build a business. The issue of precarious labour and job insecurity is present in creative industries (Dissart, 2003; Luckman, 2013). This issue is also present in these regions, but those with creative capital and an interest in entrepreneurship can take more control over how it impacts them, for example: *“I realised that my kind of expertise is wanted and needed but companies can’t hire someone for a longer period because they are working on something that is for a fixed term so then they don’t need me anymore...it was kind of natural to start my own company because of that”* (Interview 4, Västernorrland).

The creative capital these professionals possess also plays a role in re-imagining places. The characteristics of the region itself can become a creative resource. Local landscape, built environment, nature, heritage and tradition are harnessed in a variety of ways. While combined with other sources, these place-based attributes are also a source of inspiration. For example: *“[The city]...it was too crowded for me. I think it maybe held me back a bit...so many creative people...there is no need for more creation, but here there is...space. It is not crowded...with people...or too many creative ideas”* (Interview 3, Västernorrland). Place attributes can also more specifically inspire new products and creative content, for example in Lapland snow has a strong influence. The following comments help to illustrate: *“most important are the surroundings here in Lapland and all the hobbies you can do here, skiing, snowboarding”* (Interview 10, Lapland). Place attributes can become embedded within creative products. For example, one interviewee describes how local heritage and the built environment influences new products: *“We have a few products that are linked to the old city...these cups are also designed based on the interiors of the buildings”* (Interview 2, Västernorrland).

Creative capital can support more balanced development and have wider positive socio-economic impacts in Nordic regions. Research has identified that some creative sectors are highly socially embedded, such as crafts and arts (Bertacchini & Borione, 2013; Bennett et al., 2015). Evidence also exists here of socio-economic development impacts through collaboration with non-profit organisations, social development projects, educational institutions and the cultural sector, such as museums and galleries. For example, one interviewee described their work with different disadvantaged groups. They comment on one project involving refugees: *“I had five or six participants for several months, it resulted in an exhibition and we had some media attention, the local television were here too”* (Interview 6, Västernorrland). Creative entrepreneurs also spend time working to improve the wider entrepreneurial environment in the region, such as being part of local interest groups and staying connected to influencers such as local authorities. Creatives producing physical products also displayed a strong emphasis towards sustainability working to use ecological and natural materials.

In an earlier section we discussed how different types of creative capital complement each other. The interactions of creative professionals with different creative capital types can result in catalysing ideas that contribute to the development of new creative content, products and services. Our evidence would suggest that for creative industry development in peripheral regions, access to a diverse network of other creative professionals is important. More broadly in the context of strengthening creative industries, the importance of exploring interdependencies and relationships between sectors has been highlighted. For example, in the rural context Bell and Jayne (2010) argue future research should look at the interdependencies and relations between creative industry sub-sectors. The development of cross sector linkages between creative sub-sectors and other business sectors has been identified as a key action area for future European policy (European Commission, 2012).

While our evidence suggests creative capital plays an important role in peripheral Nordic regional development it should be seen in context and as one part of a broader regional development strategy. Creative entrepreneurs operate in a competitive, globalised market. It has also been noted that these entrepreneurs are not growth oriented and may not create many new jobs other than their own (Herslund, 2012). This dynamic is also observed to some extent in our data. For example: *“I don’t know if every company is driven...to be bigger and employ a lot of people. That has never been a dream of mine...now we have control and we don’t have to take care of any employees. If we need help, we hire help for that time”* (Interview 1, Västernorrland). That said, it only takes one success story to have a major economic impact on an area. For example, Power (2002) takes the case of IKEA and notes how it continues to positively impact the rural area of Sweden where it was founded. However, such internationally successful examples are not common. Nevertheless, the presence of creative capital in Nordic regions does increase the chances of replicating similar successes.

Conclusion

The evidence presented here shows how higher levels of creative capital contributes to the increased well-being of northern societies. Our qualitative data shows it is a resource creative entrepreneurs use to create job opportunities retaining people in peripheral Nordic regions. However broader statistics suggest an overall pattern of decline in creative capital in these regions. Entrepreneurship emerges as an important factor in retaining more creative capital in peripheral regions. The nature of creative capital also revealed the complementary nature of creative capital sub-types and the catalytic effects when creatives with different forms of creative capital engage and cooperate. Also for creative professionals, accumulation of creative capital extends well beyond formal education. Learning by doing, as well as learning from others, appears central to creative capital generation. Social capital cannot be overlooked if attempting to facilitate the growth of creative capital in the context of supporting creative entrepreneurship.

This research has helped to highlight the nature of creative capital and role it plays in economic development of Nordic peripheral regions. But the wider debate still exists on the specific role of creative capital, as opposed to a broader strategy of developing human capital capacity, in regional development (Hoyman & Faricy, 2008; Petrov 2008). Even when focused on developing creative industries, this is important to explore because creative capital is not the only form of human capital that supports these industries. For example, Freeman’s (2004) ‘creative intensity’ approach to measuring the economic value of creative industries is based on the idea that not all employment

classified under creative industry classification codes is necessarily 100% creative and that creative workers also work outside the creative sector. Future work in the creative industries context could compare human capital, with its narrower form creative capital, examining their value and synergies in peripheral regional development.

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Notes

1. More information on *a creative momentum project* is available at: <https://mycreativeedge.eu/>
2. For the Västernorrland data codes used were SSK 96 for 2012 data and SSK 2012 codes for 2014 data. The Lapland occupation data was classified using ISCO-08. The DCMS system uses SOC 2010 codes. A list with corresponding codes was drawn up to facilitate data comparison across regions. For a list of the specific occupations covered see Annex A in DCMS (2016).

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