



Past - Present - Future



STRATEGIC POTENTIAL OF INDUSTRIAL CULTURE FOR REGIONAL DEVELOPMENT

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TABLE OF CONTENTS

- 0. Summary 3
- 1. Introduction..... 4
- 2. Framing Industrial Culture 5
 - 2.1 Industrial Culture and connected approaches 5
 - 2.2 Industrial Culture in the frame of economic transition processes 7
 - 2.3 Industrial Culture in the frame of political and social transition processes 8
 - 2.4 Industrial Culture in national contexts 9
- 3. The role of Industrial Culture in regional development outside agglomeration areas.... 10
 - 3.1 Industrial Culture - potential for strengthening regional identity and tourism..... 10
 - 3.2 Industrial Culture - potential for securing labour force and binding companies 12
 - 3.3 Industrial Culture - potential for fostering creativity and innovation..... 13
- 4. Conclusion 15
- 5. Project Background..... 17
- 6. References 18

0. Summary

This paper discusses the potential of “Industrial Culture” as an instrument for regional development and especially for re-inventing (old) industrial regions. Until today there is no common definition of this term, respectively a coherent concept. Hence, the paper will illustrate the changes in the understanding of “Industrial Culture” in different contexts for the last decades and will highlight the most relevant features for a re-interpretation of the term. Framing the topic, the paper debates theoretical approaches that are connected to Industrial Culture. Above all there are important issues regarding intangible features of the industrial past and present, such as ‘tacit knowledge’ recurring on existing knowledge, skills, and habits that are influencing Industrial Culture of (old) industrial regions. Additionally, Industrial Culture is integrated in the frame of economic, political, and social transition processes.

Utilising Industrial Culture in the context of regional development will have the potential for securing labour force, as many regions struggle with brain drain, demographic decline and ageing. There is a need to motivate especially young people for staying in peripheral industrial regions based on new jobs through the opportunities emerging from digitalization and Industry 4.0. Developing a special corporate social and regional responsibility using cultural methods - thereby addressing social, cultural and environmental concerns - could increase the binding of workforce to companies and likewise the companies to the regions. Furthermore, in combination with specific local art and culture a “new” Industrial Culture could be developed that might strengthen the regional tourism and the potential of industrial tourism niche. Industrial regions often have a range of certain assets and resources like mind-sets, skills, and traditions that could foster creative industries and pioneering spirit while reusing previous industrial buildings, e.g. as creative hubs. By no means, such strategies should be exclusive to the bigger conurbations.

The potential of tangible and intangible attributes of industrial age and cultural settings of industrial regions could break existing negative stereotypes of “industry”. Industrial Culture might be seen as an important potential for regional development linking the past, present, and the future development of (old) industrial regions. Therefore current definitions and concepts related to Industrial Culture must be reinterpreted and reinvented. The paper will contribute to the development of a dynamic forward-looking concept of “Industrial Culture” in the context of regional development.

1. Introduction

In the context of major societal and economic changes, Europe's industrial societies have transformed over the past decades towards internationally networked information societies increasingly based on knowledge, creativity and innovation as main assets for economic development. However, these developments are affecting regions in very different and uneven ways. Urban agglomerations are often seen as major hubs in this development, as preferred locations for innovation and the knowledge economy, and as gateways to international networks, often merging manufacturing and design sectors. By contrast, small and medium-sized towns in rural environments often continue to have a small industrial base, but they do not succeed in attracting the knowledge economy in the same way as large cities. In Central Europe in particular, the opportunities for knowledge generation and innovation, however, must be seen as ubiquitous. Manifold communication opportunities, easy access to most places around the world, and the ways, how current networking in the economy functions, have integrated former peripheries into the up-to-date economic system. Developing Industrial Culture must be about how to make use of this opportunity.

A major challenge in this endeavour is to overcome institutionalized routines based on old industrial structures, conventions and beliefs. The predominance of industrial production in old-industrial regions has created a special cultural setting, a concentration of certain expertise, attitudes, values, and traditions. The question is, how these unique features of a special Industrial Culture could be transformed in a strategic potential for regional development even in small and medium-sized towns.

Yet, the term "Industrial Culture" has no coherent definition, especially when taking into account different national contexts. It is often, especially in the German context, narrowed down to industrial heritage and archaeology, the physical remains of former industrial sites and their preservation or re-utilisation, often as sites for cultural events, education or other purposes (Harfst et al. 2016). This understanding of Industrial Culture, as captured maybe best in the German expression 'Industriekultur', focuses mostly on the tangible remains of industry, i.e. buildings, infrastructures and landscapes (Pirke 2010).

While this is indeed an important and the most widespread utilisation of the industrial past, previous research has highlighted already broader usage. There are included also intangible aspects of the industrial past, focussing on skills, traditions and mind-sets (Harfst and Wirth 2014; Harfst and Fischer 2015), thereby addressing more the Anglo-American understanding of 'Industrial Culture', as a whole 'milieu' of social and physical remains are included (Byrne 2002).

Eaton (2016) states that Industrial Culture refers to the reservoir of cultural meaning and practices actors construct around existing local development, "and then draw upon in response to proposed future development". Concluding he underlines that "Industrial Cultures are both past and present oriented" (Eaton: 77). Actors would construct critical interpretations for both the legacy of previous and implications for future development.

The aim of this paper is to conceptualise Industrial Culture as a forward-looking concept, building on the strengths of industrial heritage and existing culture.

2. Framing Industrial Culture

2.1 Industrial Culture and connected approaches

Since the late 1960s, the term “Industrial Culture” was established not only in the context of a new and more comprehensive view of the industrial characteristics but also regarding the intellectual and material background of the industrial age and its influence on (post) industrial societies. In the German context, the concept got known through the work of Buddensieg and Glaser, experts in art and culture history. Buddensieg concentrated on the new architecture, design and Industrial Culture of the early 20th century focusing on the independence of the novel industrial construction and the technical achievements of simultaneously emancipating engineer’s profession. In the German-speaking discourse on the expression “Industriekultur”, it has been initially used in a more narrow sense concerning a culture of industry in its purely material shaping. Thus, it is rather related to the terms “Industrial Heritage” respectively “Industrial Archaeology” (Pirke 2010).

Glaser (1980) defined Industrial Culture in a distinctly wider perception as the totality of living conditions among the pervading industrialisation. Later (1981) he concretised it as the comprehensive (cultural) history of the “machine-age”. Pirke enlarged the definition for an applied research on Industrial Culture. He underlines that it is the comprehensive history of the industrial age with its typical forms of life and society and the associated values adding that it is the history and present form of the industrial cultural landscape (Pirke 2010).

Rasmussen and Rauner (1996) published a selection of articles on the subject of “Culture and Production” based on the results of international conferences between 1991 and 1994 discussing the topic in relation to competitiveness. According to them, the ‘Industrial Culture’ research concept would permit an analysis and understanding of hitherto unrecognised interrelationships between the dimensions of different Industrial Cultures and the process of technological innovation in international competition. Industrial Cultures would form a necessary background and a process oriented pattern of actions in which convergent and divergent forces interact and dominate variously in different periods of the technological development cycles. According to Rasmussen, “culture” is inherent in social, economic and technical ‘forces’ or ‘variables’. He stands in for a process-oriented viewpoint - understanding culture as interpretation and interaction. Rauner and Ruth (1996) explain this concept as a set of categories, highly interconnected and mutually influential dimensions and variables, which form an interpretative frame. Important dimensions would be social institutions, industrial organization, educational institutions, government policy and psychology.

The “Scientific Advisory Council for Industriekultur” in Saxony noticed in its recommendations for actions (Wissenschaftlicher Beirat 2010) a reinterpretation and re-evaluation of the ‘industrial’ age in the context of a general change in the society’s opinion concerning the historical development and the importance of industrial society. The view was broadened from the past to an examination of the present and also to the current developmental trends of the industrial society including the relevant political and cultural phenomena that are active in them. Thus, an occupation with the subject of “Industrial Culture” is not only connected with the “backward” view into the past, but also involves an examination of the present and future of the industrial society. As a multidimensional issue, the employment and discussion of Industrial Culture affects all the social groups and institutions of the industrial society.

Analysing Industrial Culture in a post-industrial world and drawing upon the work of Raymond Williams on culture, Byrne (2002) stressed that the sentiments which inform and construct ‘ways of life’ - indicated as ‘industrial structure of feeling’ - would remain a feature for many social groups beyond the period of industrialism. In this context he emphasized culture as potential to shape futures. Oevermann and Mieg (2015) also highlighted culture as a driving force for urban development highlighting that cultural institutions such as museums or events like the “European Capital of Culture” are used as tools for improving the image of towns and providing a lively urban

environment. Eaton (2016) analysed which role “Industrial Culture” plays for mobilization based on Swidler’s (1986) “cultural toolkit” framework. According to Swidler, shared experiences and practices provide this cultural toolkit or repertoire of cultural resources - culture both constrains and provides opportunities for action. “Culture influences action not by providing the ultimate values toward which action is oriented, but by shaping a repertoire or ‘toolkit’ of habits, skills, and styles from which people construct ‘strategies of action’” (Swidler: 273). Eaton underlines that Industrial Culture “refers to the reservoir of cultural meanings and practices actors construct around existing local resource” extraction respectively development (Eaton: 77). Community’s Industrial Culture “includes its repertoire of stories, ideas, meanings, orientations, practices and other cultural resources” that are (re)constructed around industrial development, its environmental legacy “in and around that locale”.

In that context the concept of tacit knowledge has to be considered regarding a broader understanding of the potential of Industrial Culture recurring on existing knowledge, competences, and habits. Tacit knowledge that is not codified can be defined as skills, experiences and ideas that people have in their minds and are difficult to access (Chugh 2015). In Polanyi’s well-known phrase “we can know more than we can tell” (Polanyi 1966: 4) the core of the distinction between tacit and explicit, codified knowledge is outlined. However, both types of knowledge are complementary. Tacit knowledge is controlled informally by collectives of workers and is linked to a place while codified knowledge is controlled by managers and companies and able to circulate. Gourlay (2002) describes tacit knowledge as highly personal and context specific and deeply rooted in individual experiences, ideas, values and emotions. Tacit knowledge could be transmitted only through social interactions, networking, and personal contact. At the background of outmigration from peripheral (old) industrial regions and in regard to existing local Industrial Culture, it is therefore important to maintain contact with local representatives of (former) industry to save knowledge, and, the at least once existing pioneering spirit.

Crevoisier and Jeannerat (2009) state that the central question in a globalized society is how to mobilize knowledge existing somewhere else and to combine it with local knowledge (anchoring capacity). They add that numerous innovations take place often rather via socio-cultural dynamics than techno-scientific ones and conclude that the growth of cultural industries requires above all socio-cultural knowledge. Innovative milieu approaches make it possible to understand that development could be initiated by local, small territorial entities. Thus, remarkable knowledge dynamic could be recreated “from the bottom-up” and therefore it is a chance for peripheral (old-) industrial regions to awake to resources for regional development.

Fløysand and Sjøholt (2007) explore the interconnection of rural development and the importance of human relations for industrial restructuring in rural areas. Recurring on Bathelt et al. (2004) they identify a co-existence of a “local buzz” or ethics facilitating localized knowledge spill-over. Additionally, they show that it is vital for firms to participate in social fields of different geographical scale and they accent that cultural content is to be developed in rural areas. Almås (1995) also explores a needed enterprise culture that is, at the same time, locally embedded, but oriented towards a wider market.

In summary, the concept and understanding of “Industrial Culture” has seen some waves and changes in interpretation and definition across different time periods and national contexts. The classic approach is focusing on the preservation and after-utilization of old industrial sites and landscapes. The current challenge is to combine this traditional concept with the linkage of cultural settings fostering regional development through re-interpretation, re-production of industrial heritage strengthening strategic regional potentials (Fig. 1).

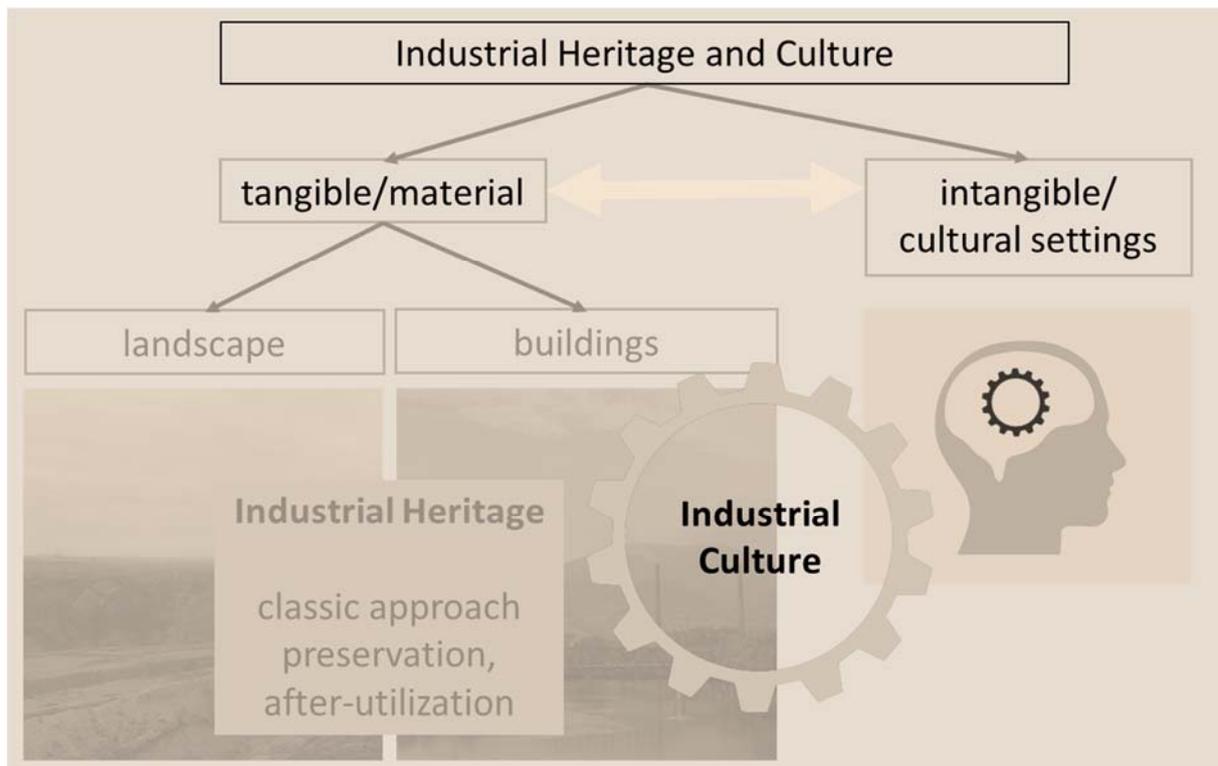


Fig. 1: Post-industrial resources Harfst, Pizzera, Simić (2016)

In our understanding a re-interpreted 'new' Industrial Culture has to be considered as a transdisciplinary holistic, societal concept building on tangible, material and intangible, non-material elements originating from the sphere of industrial production in past, present and future. Industrial Culture in a novel understanding is a dynamic phenomenon, based on social interaction, networking, while being place-bound and local embedded. Only by the interaction of the society and industry, it emerges as a concept to successfully cope with the spatial tensions and future challenges of the regions, i.e. shaping a regions identity and image, bringing back and binding labour force, transforming industry to nowadays needs.

2.2 Industrial Culture in the frame of economic transition processes

What role does "Industrial Culture" play in the context of a post-industrial society and knowledge-based economy? How skills and knowledge of traditional industry could be re-connected with the demands of a globalized market, built on creativity and innovation? How the specific milieu of old-industrialised regions might be activated to face new challenges?

Political attention to industrial production is increasing in the aftermath of the financial crisis 2007-2008. In a communication to the EU Parliament, the EU Commission "considers that a strong industrial base will be of key importance for Europe's economic recovery and competitiveness" (European Commission 2014). In a similar vein, national and regional governments set up strategies for reindustrialisation through the development of "Industry 4.0" or smart specialisation strategies, both aiming at a valorisation of industrial labour.

The transition towards Industry 4.0 is manifesting itself in the European economic landscape. This is visible in the (slow) disappearance of linear production processes, which have characterized the classic manufacturing industries for a long time. Certain principles coupled with linear production will disappear as well. The linear system couples economic growth with the use of finite (fossil)

resources. Products are fabricated in mass and destroyed when worn-out. Such a system produces waste and equalizes the term profit with selling as many products as possible.

The factory of the future is typified by digitalization, but goes beyond that as well. Next to the omnipresence of ICT and Internet, the factory of the future is part of a network where it interacts with other players in its search for consequent innovation and optimization of production processes. Each step of the process in the factory is strongly linked to sustainability, the employee is considered more as a person with certain wishes towards working conditions, and the most modern technologies are being applied (Vision 2050: 30-31).

Circular principles - which have grown out of social trends that are at the basis of new consumption and business models - are emerging in the Industry 4.0 context. The historic, economic and social context of a particular region determines what types of models are set up. The transition manifests itself in the growth and increasing application of innovative technologies/digitalization, energy-efficiency, circular economy, product-service systems (PSS) and sharing-economy.

An entirely new value chain is connected with it. This requires a new way of thinking and acting of both the producer and consumer. Circular industry implies in a way that people (partly) have to let go their quest for welfare, and have to put a higher priority on the functionality rather than the possession of a product. Industry 4.0 in other words brings about an entirely new philosophy, an entirely new perspective on Industrial Culture. However, despite the fact that the Industrial 'Renaissance' seems very drastic, the industrial pioneer culture present in many European regions still closely relates to it. The community feeling and solidarity that is present in the blue-collar milieu is a perfect condition for developing sharing economies.

2.3 Industrial Culture in the frame of political and social transition processes

Industrial Culture in its broader sense has gained an unprecedented popularity outside the economic sector in the recent decades. Not only several world heritage titles addressing the industrial past (i.e. Völklinger Hütte) and initiatives like the European Route for Industrial Heritage (ERIH), but also spectacular events like Cultural Capital in the Ruhr 2012 celebrate a (past) time of intensive industrial mass production. "All these features show a heightened interest in the industrial past and its remains, (ironically) after years of industrial decline in Europe and the Western countries in general, that stamped many of these places of structural change with a rustbelt image" (Harfst et al. 2016).

This is one aspect of Industrial Culture, focusing on the cultural and heritage value of the industrial past. Here this cultural heritage has been identified in numerous EU strategies as an important driver of change (European Parliament DG IP 2013). The Report of the Horizon 2020 Export Group on Cultural heritage report suggests that lessons should be learnt from places where cultural heritage has been a positive economic, social and environmental driver. Innovative financing, new forms of governance, unified landscape management, public private partnerships, crowd-sourced funding, philanthropy and many other innovative and creative approaches might be taken to releasing the locked-up potential of Europe's heritage. The potential as a change driver is mainly distinguished in relation to the tourism sector, but also in the context of creating a joint European identity (Soyez 2015). Various scientific articles proof this relation, having re-enforced a trend by towns and cities to 'rediscover' their industrial heritage (i.e. Fleiss and Strelow 2008), despite the often subdued value of industrial heritage as a tourism product (Hospers 2002).

In addition to this sometimes rather backward looking, nostalgic perspective on industrial production, we find on the other hand initiatives strengthening industrial knowledge and production as a whole. As a reaction to the financial crisis since 2008, there is a heightened interest by policy makers towards a re-industrialisation of Europe, for instance the EU's policies for the industrial sector laid out in the Competitiveness Report 2013 (European Commission 2014). In connection to these aims, the European Territorial Agenda 2020 demands a more focused approach towards place-

based (territorial) potentials (EU Ministers of Spatial Planning and Territorial Development 2011). Here the second, knowledge-based aspect of Industrial Culture becomes crucial: the existing competences, traditions and knowledge of old-industrialised regions and its people. Once old-industrialised regions were drivers of change, being entrepreneurial and innovative by developing specific mind-sets and skills in their field of production (Sadler and Thompson 2001). These intangible remains of the industrial age form an important, but so far neglected resource in any re-industrialisation effort.

2.4 Industrial Culture in national contexts

Before developing a forward-looking transnational understanding of Industrial Culture, it has to be considered that the current understanding of the concept differs in variegated societal, political, scientific, but also national contexts. Hence, bringing a new perspective on Industrial Culture - as proposed in this paper in a normative way - requires being sensitive to different starting points and national contexts.

Exemplarily, in the following there are some notes to current debates in different national contexts. As already mentioned, the German expression “Industriekultur” focuses mostly on the tangible attributes of industry more comparable with the concept of “industrial archaeology” and reutilization of “industrial heritage” in contrast to the broader Anglo-American understanding of the “Industrial Culture” including also intangible aspects of the industrial past and present. “Industriekultur” stands for the occupation with the entire cultural history of the industrial age. Facets of “Industriekultur” include the entrepreneurial and occupational housing, and the development of the geographical area (“industrial cultural landscape”) as well as the history of technology, industrial artefacts and their design, the social history of the work, and the architectural history of the production sites.

In Slovenia there are actors that understand Industrial Culture also as heritage affair which could be utilized for tourism or for a renewal of industrial knowledge, e.g. through heritage events. Others consider it not only as revitalization of buildings but also regarding the keeping and upgrading the content of production or they connect it with current culture including production and identity. In summary, Industrial Culture is mostly understood as something contemporary that should be part of people’s everyday lives.

In Croatia, the understanding of Industrial Culture is similar to the one in Slovenia. There are also authors who treat the understanding as a heritage category. The most contemporary example of a Croatian contribution on “Culture as a Core for Collapsed Industry” is referring to culture specifically (Jelinčić in Černelič, Košelj et al.. 2010). However, here ‘culture’ is treated as a commodification of cultural/artistic events for the sake of revitalization of old industrial towns through tourism and not as an attitude of a certain region.

In Poland, the term “kultura przemysłowa” is used in the understanding of Industrial Culture in the Anglo-American scientific context. However, there are for example German-Polish projects and initiatives, which use the term rather similar to the German expression “Industriekultur” (<http://www.turystyka-brandenburgia.pl/docs/Architektur/industrie.html>, <http://www.via-gustica.pl/warto-zobaczyc/zabytki/luzyccka-kultura-przemyslowa/>).

In Czech Republic there are still only few sources that are drawing upon Industrial Culture (“průmyslová kultura”) and creative industry in Czech language.

We can learn from these examples, that there are different debates and terms rooted in national contexts, policies and history, which are difficult to translate. We recommend taking these debates and particularities seriously and stick to the national terms when developing strategies to re-invent Industrial Culture as a forward-looking concept.

3. The role of Industrial Culture in regional development outside agglomeration areas

The main question in this context is now how to re-connect skills and knowledge of traditional industry with the demands of a globalised market, built on creativity and innovation - in other words how to activate the specific milieu of old-industrialised region to face new challenges. In agglomeration areas this task is certainly easier to tackle, with (world-) market access, creative classes, higher education institutions and industrial-base all to a certain degree in place (Camagni 1991). However, for Europe's old-industrialised regions that are situated outside agglomeration areas this question is especially difficult to answer. These regions often still possess highly competitive industrial units, albeit without the major employment effect for the region, they once had (Müller et al. 2005; Koutsky et al. 2011). Nevertheless, such places and industries face specific problems in the described market conditions situated outside agglomeration areas. It means a stronger demand of local workforce and knowledge to remain competitive - a challenging task for regions with high rates of outmigration, no higher education facilities and suffering from a bad image from the times of structural change (Wirth et al. 2012). According to these challenges, we can identify three areas of intervention for a more sustainable regional development by the utilization of the concept of Industrial Culture.

3.1 Industrial Culture - potential for strengthening regional identity and tourism

Regional development strives to improve the socio-economic and environmental situation within regions. It aims at balancing regional disparities in order to ensure equitable living conditions in all regions and a sustainable spatial development and requires the targeted coordination of regional planning and regional policy.

According to Paasi (1991) a territorial unit like a region achieves a specific identity during its institutionalisation. This process "includes the production and reproduction of regional consciousness in the inhabitants (and other people outside the region) and material and symbolic features of the region as part of the ongoing process of social reproduction" (Paasi: 244). After being institutionalised, a region is perpetually reproduced in various social practices. Hence, it has an explicit collective nature - the collective work of individuals for the region. Opening and sharing the common space would meet several social needs and provide social safety for the inhabitants. Therefore, strengthening regional identity could be a measure to affect the endogenous potential for regional development. For instance, there are regions, whose identity is strongly connected with mining and the population developed a special pride of the historically grown miners' traditions (see Wirth et al. 2012). Thus, the self-awareness of (old) industrial regions is interrelated with industrial traditions, with a specific kind of Industrial Culture. However, these regions are frequently being stereotyped from outside as 'rustbelts'- places of 'hardness', urban decay and pollution (Benneworth et al. 2009).

Generally, (old) industrial regions are not known for specific cultural offers and outstanding attractiveness. In the internal perception of the local population in many of such places, these images are often being re-affirmed through the negative (often traumatic) outcomes of structural change, which turned affluent places of production and wealth creation into communities often marred by high unemployment, loss of functions and social disintegration (regarding deindustrialization and identity see a. o. Strangleman 2001 or Strangleman et al. 2013). Production units and work places - which marked communities strongly and were important (positive) sources of regional identity - often had to be reduced that led to the loss of a major point of reference for the inhabitants (Kirk et al. 2016). Thereby structural change, especially in places with mono-structured industries, affects local identities often in a very negative way, creating a nostalgic

longing for a 'golden past' that seems to be lost forever and where a new future is unthinkable (Häyrynen et al. 2011).

Nevertheless, (old) industrial regions possess a variety of both tangible and intangible heritage and assets, such as mind-set, expertise, knowledge, as well as industrial production. This potential could be used for breaking the existing negative stereotypes. Instead of complacency, self-awareness and the open-mindedness of the new is required (Benneworth et al. 2009). Art and culture are particularly relevant in processes of social change and thus a new Industrial Culture could stimulate the desire to experiment and to deal with its own region-specific identity (Kirkwood 2001).

Referring to examples in the United States and Europe Agtmael and Bakker (2016) conclude that so-called rustbelt cities have the potential to become centres of innovation. They claim that rustbelts could be transformed to new 'brainbelts'. Developing the understanding of what was happening there, they deduce that "a brainbelt is far more than a region or a collection of physical facilities" (Agtmael and Bakker: 265). It would be rather a metaphor for a way of thinking and acting. The sharing of brainpower in collaborative teams would discourage excessive income inequality and winner-take-all mentality. Developing this notion further one can assume that the old paradigm of ageing manufacturing hubs, areas filled with out-dated machines and legacy costs that make them uncompetitive in the global market, is being replaced by a new future on focused investment in future-forward technology. Thus, a new industrial identity could be based upon a positively interpreted brainbelt image. However, still in many places, both urban and rural, rich cultural assets have not been recognized for the potential they hold to regenerate and renew.

On EU level the Horizon 2020 Expert Group on Cultural Heritage has published a report recommending research and innovation actions for cultural heritage to contribute towards smarter, more inclusive and more sustainable development. They underscore that cultural heritage is now widely appreciated as an essential part of Europe's underlying socioeconomic, cultural and natural capital. In comparison to the past, it would be a significant change in focus as cultural activities have traditionally been regarded as costs to society. The economic benefits of cultural heritage have most commonly been seen in terms of tourism, but it is now also seen as an innovative stimulant for growth and employment in a wide range of traditional and new industries.

Alberti and Giusti (2012) emphasize that cultural heritage, meaning both material and non-material attributes, may contribute to create competitive advantages and innovation in cities and regions and refer to knowledge, skills and practices which found the individual's and the community's identity and dignity. They continue that fostering cultural heritage would open up a space for rejuvenating historical industrial regions and low-tech sectors through new applications of science and research activities to old low-tech firms in historical systems. Cultural benefits would be crucial in attracting tourists to a specific destination. Alberti and Giusti underline that tourism plays a central role activating important synergies with cultural heritage. It would bring new and fresh resources to the cultural sector, spotting new entrepreneurial opportunities.

However, referring to the high expectations for industrial heritage tourism, Hospers (2002) criticized it as too optimistic, asking whether industrial monuments could play a significant role in revitalizing industrial regions. Local industrial heritage could rather complement and reinforce other regeneration initiatives, such as local innovation policy and business support. Soyez (2006) emphasizes the tourist destination potential of European industrial heritage, criticizing the mostly nationally embeddedness of concepts like industrial heritage trails or routes. He argues for a European, transnational approach to develop a European industrial tourism. Nowadays, the European Route of Industrial Heritage (ERIH) is an example for combining cultural resources of industry, cultural events and fostering tourism on European level.

Summing up, by developing an new understanding of "Industrial Culture" as being an unique regional feature, promoting the regions themselves and their industrial sector as an important, persistent economic base, this concept has potential for strengthening regional identity and tourism.

3.2 Industrial Culture - potential for securing labour force and binding companies

The ongoing global structural changes and transition processes, the requirements of a knowledge-based economy and a (post-) industrial society respectively, the current demographic trends and the prospective labour supply are big issues especially for (old-) industrial peripheral regions outside agglomeration areas. The regions often suffer from a negative image of dirtiness and pollution that leads to a lack of interest of young people seeking career in industry at all. Thus, many regions struggle with brain drain, lacking in-migration and demographic decline, even in cases, where jobs are available. In order to prevent skills shortage in the future, there is a necessity in recruiting young talents also for industrial jobs. Furthermore, the better the school-to-business nexus can be developed the better chances exist for recruiting young staff for the local industry in future - based on engaging and fascinating young people from early ages for industrial jobs and preventing their emigration.

Studying the rise of the rustbelt and especially the recovery of some old industrial regions in Western Europe and North America, Cooke (1995:245) identified a need for “cultural change in the mentalities of members of civil society, their elected representatives and managers of business enterprises”. According to Sadler and Thompson (2001), this prescription for cultural change involves a search for ways, how rustbelt regions might become reflexive, learning regions. However, they indicate the substantial limits this concept might have.

Sadler and Thompson argue that “regional industrial culture is fundamental to an understanding of patterns of uneven regional development” based on the assumption that the region is not static but a source of becoming, “a construct in and of a series of untraded interdependencies that include taken-for-granted conventions and routines” (2001:666). In contrast to Cooke, they focus less on how learning strategies and technical changes might drive or alter those practices. Instead, they accentuate the capacities and actions of the institutions of organised labour addressing the connections between economy and culture. They describe Industrial Culture as essentially dynamic, being both product and constituent of negotiated social activities.

Developing the concept of Industrial Culture there have to be considered the addressed existing conventions, routines and social practices that involve the traditions and capacities of labour as an actor in its own right, as well as the ongoing and needed cultural change in the society as a whole and especially in enterprises.

Knowledge-based economy leads to an increased demand in well-skilled work force. Thus, Powell and Snellman (2004) underscore that the key component of a knowledge economy is a greater reliance on intellectual capabilities than on physical inputs or natural resources. Promoting the innovative opportunities of “Industry 4.0” under the condition of a globalized, highly networked economy and strengthening the regional image could be successful approaches. It also has to be considered that the interregional competition for workforce has been increasing. Porter (1998) discussing the interconnection of clusters and the new economics of competition emphasizes that competition in today’s economy is far more dynamic than a generation ago. Companies could source capital, goods, information, and technology from around the world. However, he states that location remains fundamental to competition focussing the role of location in innovation.

While clustering is mainly a successful approach of agglomerations, peripheral regions, small and medium-sized towns must strengthen their endogenous potential, e.g. the locational ties of enterprises. Being situated outside of agglomeration areas often means a stronger reliance on local workforce and knowledge to remain competitive. Hence, the main problem for regional and individual business development in such regions is the future labour supply and to avoid skills

shortages. Likewise, ageing processes might result in a reduced capacity to innovate and adapt to new knowledge.

Industrial companies often have not yet discovered the chances of binding and attracting work force by taking on regional responsibility. Possible concepts to foster it are the “Corporate social responsibility” (CSR) and the “Corporate regional responsibility” (CRR). According to The World Business Council for Sustainable Development CSR is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce, their families up to the local community and society. Rahim (2013) underlines that CSR is increasingly being understood as a means by which companies may endeavour to achieve a balance between their efforts to generate profits and the societies that they influence in these efforts.

Thus, addressing social, cultural and environmental concerns and integrating it in company’s business operations and their interactions with stakeholders on a voluntary basis, CSR could be a valuable approach for promoting “Industrial Culture” to company’s work force and binding it to the enterprise - further advanced to business activities linked to Corporate Regional Responsibility (CRR). Even though debates about corporate urban (or regional) responsibility are only in their beginnings, benefits of CRR could already be noticed. Stakeholders like entrepreneurs interconnect jointly in networks for seeking solutions to raise the attractiveness of the region developing soft measures to create a positive image. In the context of corporate regional responsibility strategies, stakeholders develop close ties with each other in order to improve the local conditions for investments and production and to raise the general attractiveness of the region. This includes improved living, working and training conditions to avoid or overcome stigmatisation. Such cultural framed measures would in turn provide the ground for attracting people from outside the region and even returnees to seek a future in local industry.

3.3 Industrial Culture - potential for fostering creativity and innovation

Central Europe is home to a number of strongholds of producing industries, even in regions dominated by small and medium-sized towns. Latest shifts in industrial production modes (e.g. towards Industry 4.0) demand an increased availability of enhanced creative and innovative potentials for maintaining both economic and regional competitiveness.

Richard Florida, identifying a ‘creative class’ as key driving force for economic development of post-industrial cities (at least in the United States), argues that this group of creative people is socially relevant because of its members’ ability to spur regional economic growth through innovation (2002). Based amongst others on this Sasaki (2010: 1) states that in “the midst of the transition to a knowledge and information based economy, against the historical backdrop of the decline of Fordist cities based on manufacturing, the theory of creative cities has conceptualized ‘urban regeneration through culture and creativity’” related to creative industries, economies, and the creative class.

According to the British Department for Culture, Media and Sports creative industries are those “which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property” (British Council 2010: 16). The product or service contains a substantial element of artistic or creative endeavour and include activities such as architecture and advertising in creative industries. The EU - Committee of the Regions stated in 2014 that Europe’s creative and cultural sectors represent a significant potential to contribute to sustainable recovery of the economy and to create jobs. With a share of 3.3-4.5% of the EU’s GDP and 3-4% of its workforce, creative and cultural institutions would be a very dynamic part of EU economy and give a positive impact on other sectors and citizens’ well-being in general. However, these trends regarding the potential of creative industries would favour agglomeration regions, as peripheral regions are rather ill-equipped for it. These places often lack important requirements of the knowledge society, such as higher education units or the existence of a ‘creative class’.

However, peripheral regions often have likewise a range of assets and resources available that could foster creative industries and pioneering spirit (Scott 2010, Gibson 2014). These regions have a variety of both tangible and intangible heritage (buildings, traditions), contemporary assets, such as specific mind-sets and expertise, as well as - often highly competitive - contemporary industrial production units still being active and which often do foster highly creative thinking and innovation (Houston et al. 2008, Koutsky et al. 2011). Comunian, Chapain, and Clifton 2010 highlight that disadvantages of being located outside agglomerations are counterweighted by other factors (e.g. cheap rents, easier networking opportunities, access to authentic knowledge and know-how etc.).

In line with the Europe 2020 strategy for growth and jobs, the European Commission outlines priorities in the field of Cultural and Creative industries (CCIs): responding to changing skills needs by promoting innovation in education; supporting the mobility of artists; coordinating with Member States to reform regulatory environments; developing policies and initiatives to promote market access for and investment in CCIs (http://ec.europa.eu/culture/policy/cultural-creative-industries_en). These priorities might be complemented through a diversity of actions and initiatives.

An important role initiating such activities could be taken by companies themselves fostering innovation in their products and therefore sometimes pro-actively engaging e.g. in creative hubs in old industrial sites. Thereby engagement and leadership within the private sector and creative community seem to be a key element for some of these initiatives. Within the understanding of “Industrial Culture” these stakeholders could be involved by the initialization of regional networks promoting potential for fostering creativity and innovation.

4. Conclusion

Against the background of the challenges of current economic, political and social transition processes, the paper elaborated the potential of “Industrial Culture” for regional development. We showed that there are different approaches related to this topic. The concept and understanding of “Industrial Culture” has seen waves and changes in interpretation and definition across different time periods and national contexts. However, this concept could be a valuable means for inspiring regional resources focussing not only of the achievements and heritage of the industrial past but also by combining it with present qualities focussing future development. This is especially a need for regions outside agglomeration areas. Analysing the features of Industrial Culture the paper focussed and distinguished its potential concerning strengthening regional identity, securing labour force and binding companies, and fostering creativity and innovation.

(Old) industrial regions mostly possess a variety of material and non-material attributes and assets, such as mind-set, competences, knowledge, as well as industrial production. This potential could be used for breaking the existing negative stereotypes. Self-awareness and the open-mindedness of the new is required. Art and culture are particularly essential in processes of social change. Thus, a new understanding of Industrial Culture could stimulate the desire to experiment and to deal with its own region-specific identity.

As a reaction to the financial crisis since 2008, there is a heightened interest by policy makers towards a re-industrialisation of Europe. The European Territorial Agenda 2020 demands a more focused approach towards place-based (territorial) potentials. The pioneer culture present in many European regions still closely relates to industry. The community feeling and solidarity that is present in the blue-collar milieu in industrialized regions is a perfect condition for developing sharing economies. Current trends and challenges related to Industry 4.0 bring about a need of a new philosophy. Here the knowledge-based aspect of Industrial Culture becomes relevant: the skills, traditions, practices and knowledge of (old) industrial regions and its people.

By developing an understanding of Industrial Culture as being an important and unique regional feature, promoting the regions themselves and their industrial sector as a serious, persistent economic base, Industrial Culture has the potential for strengthening regional identity and tourism. A significant role initiating such activities could be taken by companies themselves fostering innovation in their products and therefore sometimes pro-actively engaging e.g. in creative hubs in old industrial sites.

Addressing social, cultural and environmental concerns and integrating it in company’s business operations and their interactions with stakeholders on a voluntary basis, Corporal Social Responsibility and Corporate Regional Responsibility could be a valuable approach for promoting Industrial Culture to company’s work force and binding it to the enterprise. Stakeholders like entrepreneurs interconnect jointly in networks for seeking solutions to raise the attractiveness of the region developing soft measures to create a positive image.

Peripheral regions often have likewise a range of special features and resources available that could foster creative industries and pioneering spirit. These places have a diversity of both tangible and intangible heritage (buildings, traditions), contemporary assets, as well as industrial production units still being active and which often do foster highly creative thinking and innovation. Within the understanding of “Industrial Culture” regional stakeholders related to creative industries, economies, and the creative class could be involved by the initialization of networks promoting potential for fostering creativity and innovation.

Thus, Industrial Culture has to be considered as a transdisciplinary, holistic societal concept building on tangible, material and intangible, non-material elements originating from the sphere of industrial production in past, present and future. Industrial Culture in a novel understanding is a dynamic phenomenon, based on social interaction, networking, while being place-bound and local embedded. Only by the interaction of the society and industry, it emerges as a concept to

successfully cope with the spatial tensions and future challenges of the regions, i.e. shaping a regions identity and image, bringing back and binding labour force, transforming industry to nowadays needs.

While the practical use-value of the approach for different aspects of regional development has been highlighted clearly in this document, a more unique, theory-based concept of what Industrial Culture is, remains somehow blurred. This is mainly due to the holistic approach and broad focus the term entails and that previous scientific approaches come from very different academic angles. Therefore a conceptualisation of Industrial Culture remains to be narrowed down further, a task to be conducted in the next steps of the InduCult2.0 project. In this document we nevertheless were able to highlight different theoretical approaches to the topic, depending on which specific aspect of Industrial Culture the focus is upon, drawing on different academic fields such as economy, sociology, architecture, etc.

5. Project Background

Within this context described above, the INTERREG project “InduCult2.0” brings together regions with a distinct industrial past and present, which are situated outside major agglomeration areas in Central Europe. In recent years, all of them have undergone deep transformation processes due to automation, adaptation to globalized production patterns and the opening of markets in the former state-led economies. The long economic predominance of industrial production has brought about a particular cultural setting in the project partners’ territories. It is made up of certain skills, attitudes, traditions as well as tangible monuments and artefacts. However, these regions are usually considered culturally less active and they are not utilizing the existing Industrial Culture to their full development potential (Osebik und Pizzera 2012).

The concept of Industrial Culture, fundamental to the project, as outlined above, is thereby central. Industrial Culture in the project’s context is not understood as a synonym for industrial heritage. Only recently, a re-interpretation as Industrial Culture has been discussed, which goes beyond heritage issues by including contemporary or upcoming cultural and creative resources, addressing directly the future development opportunities of regions. Whilst some aspects of this conceptual framework of Industrial Culture are already applied in some places, there is no comprehensive outline available yet. In the academic field so far no coherent concept can be found. The aim of scientific workshops organised throughout the project term of 3 years is to elaborate a discussion on the state-of-the-art regarding the conceptualisation of Industrial Culture. Central questions in this context are:

What different understandings of the concept of Industrial Culture do exist?

What role does Industrial Culture play in the context of a post-industrial society and a knowledge-based economy?

How is Industrial Culture linked to regional development and regional identity?

How can Industrial Culture be used to increase the attractiveness of industrial labour and as a location factor for companies?

InduCult2.0, wants to revive the cultural spirit of long-standing industrial regions in Central Europe. Together with local stakeholders, partners rediscover and develop the positive elements of industrial communities. Specifically, project partners intend to:

- Promote and establish the idea of Industrial Culture in Central Europe;
- Strengthen the distinct culture of industrial regions and utilise it as location factor;
- Empower industrial regions by re-activating their pioneer spirit.

The Institute of Geography and Regional Science at the University of Graz, Austria, and the Leibniz Institute for Regional Geography in Leipzig, Germany, are academic partners and will support and reflect these activities and conduct an academic research along the project. Further partners are municipalities, district administrations and private institutions from 8 Central European countries.

The InduCult2.0 project is implemented by the Central Europe INTERREG B programme and co-funded by ERDF. The project run-time is from summer 2016 to summer 2019. For more information and regular project updates and results, please visit

www.inducult.eu

www.facebook.com/InduCult20-Living-Industrial-Culture-987296494713990/

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