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THE TRANSFORMATIVE POWER OF INDUSTRIAL CULTURE – FROM CONCEPTS TO ACTIONS

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THE TRANSFORMATIVE POWER OF INDUSTRIAL CULTURE – FROM CONCEPTS TO ACTIONS

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VORWORT

Der vorliegende Band Nr. 49 der Grazer Schriften der Geographie und Raumforschung ist eine Gemeinschaftsproduktion des Leibniz-Instituts für Länderkunde (IfL) in Leipzig und des Instituts für Geographie und Raumforschung in Graz. Die Publikation ist als eine Ergebnisdokumentation der wissenschaftlichen Begleitforschung im Rahmen des Interreg Central Europe Projektes „Inducult2.0“ (www.inducult.eu) zu verstehen. Im Mittelpunkt des von 2016-2019 laufenden Projektes „Industrial heritage, cultural resources of current industries and creative pioneers – utilizing Industrial Culture in Central Europe“ steht die Nutzung der spezifischen „industriellen Kultur“ als Mittel zur Wiederbelebung alter Industriestandorte und zur Förderung des dortigen Pioniergeistes. Ziel des Projektes war es, den Begriff der industriellen Kultur im Bereich der Stadt- und Regionalentwicklung, insbesondere in kleinen und mittleren Städten Mitteleuropas, nutzbar zu machen und zukunftsgerichtet neu zu konzeptualisieren. Der wesentliche Beitrag dieses Ansatzes liegt zum einen in der Neuinterpretation des Begriffes der Industriekultur selbst als ein dynamisches, auf spezifischen lokalen Stärken basierendes Konzept, zum anderen auf den Möglichkeiten, die dabei zugrundeliegenden Denkweisen, Ansätze und institutionalisierten Verhaltensmuster für die lokale Entwicklung zu mobilisieren.

Der nun vorliegende Band der Grazer Schriften stellt die wichtigsten Ergebnisse der Projektaktivitäten und der begleitenden Forschung vor und setzt sich aus zwei wesentlichen Teilen zusammen: der erste Teil behandelt Definitionen und Diskussionen rund um den Begriff der industriellen Kultur und seine Einbettung in verschiedene wissenschaftliche Debatten und Diskurse. Der zweite Teil transferiert die Theorie zur praktischen Anwendung, etwa anhand praktischer Beispiele, die illustrieren wie industrielle Kultur für die Stadt- und Regionalentwicklung in Wert gesetzt werden kann.

Durch die aktuelle Publikation wird nicht nur dem Projektansinnen, den konzeptionellen Ansatz des Projektes InduCult 2.0 wissenschaftlich aufzuarbeiten, Rechnung getragen, sondern auch der Fachcommunity eine interessante Lektüre geboten. Für die engagierte Arbeit im Projekt und an dieser Publikation gilt daher Franziska Görmar, Jörn Harfst, Danko Simić und Andreas Wust unser besonderer Dank!

Thilo Lang & Wolfgang Fischer

ABOUT THIS BOOK

This book aims at exploring the notion of Industrial Culture in a Central European context, summarizing research results from the InduCult2.0 project (www.inducult.eu), which focused on Industrial Culture as a way of reviving (old) industrial regions and fostering the pioneer spirit. The academic institutions in the project, along with the eight regional project partners and their activities, framed the term of 'Industrial Culture' through various outputs and publications. The project's aim was to conceptualise the term in the field of urban and regional development, specifically in small and medium-sized towns in Central Europe.

Important reference papers from the project are three input papers on thematic utilisation of Industrial Culture, one framework paper on the term and background of Industrial Culture, the regional and transnational argumentation papers, and the regional strategies from each partner region and the transnational strategy. Based on these joint project results, the content of this publication was expanded and embedded in a broader scientific debate.

This publication presents the main results of the project activities and research results. The project was co-funded by the European Regional Development Fund via the INTERREG CENTRAL programme (2016-2019).

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CONTENT

1 INTRODUCTION

Manufacturing industries have once more undergone deep transformation processes in recent years due to automation, adaptation to globalised production patterns and the opening of markets in the former state-led economies. This indicates a deeper shift in the industrial societies of Europe, as highlighted in the literature (e.g. Bell 1976, Castells 1996). These trends have also had profound repercussions on many (old) industrial towns in Central Europe. They have increased the already existing trends of job losses in the manufacturing sector, triggering manifold social problems, such as outmigration and the loss of social functions – being well documented in the academic literature (e.g. Cooke 1995; Heim 1997; Hudson 2005).

However, political attention in Europe has been redrawn towards industrial production, in the aftermath of the financial crisis of 2007-2008. The European Union (EU) and national and regional governments have set up strategies for reindustrialisation through the development of 'Smart Specialisation', fostering the possibilities of 'Industry 4.0' and the valorisation of industrial labour (i.e. New Industrial Policy Strategy 2017).

While the impacts of these policies remain only sketchy on the ground so far, the development of traditional industrialised places in Central Europe is marked by high diversity, as trends of continuing de-industrialisation, functioning core industries and re-industrialisation (e.g. also 're-shoring', Pipan 2018) create a complex spatial pattern of manufacturing (e.g. Hardy 2014; Bukowski and Śniegocki 2017). Within this situation, the notion of 'Industrial Culture' demands further investigation, as it holds an endogenous potential for the future development of (old) industrial regions. In such places, the long economic predominance of industrial production has brought about a particular cultural setting which is made up of certain intangible assets, such as skills, attitudes, traditions, tangible monuments and artefacts (Harfst, Wust and Nadler 2018).

The main question in this book is how regions can use the cultural potentials of their industrial legacy to create new development opportunities. It touches questions about the concept of Industrial Culture itself, about the specifics of regional development in (old) industrial regions and the valorisation of Industrial Culture in these regions. In the subsequent chapters, we focus especially on the following aspects:

- The multidimensional concept of Industrial Culture cannot be understood without thinking about culture in general and its relation to industry and a (post-) industrial society. We are undertaking this task knowing that the notion of culture is too complex to be fully grasped by this publication. Based on that, we are offering a definition of Industrial Culture that tries to integrate the dynamism and complexity both of industry and culture and argue for a fruitful dialogue of both (Chapter 2).

- Industrial Culture is shaped by the specific development of (old) industrial regions, which may not always be a continuous process but includes breaks and path changes. It consists of different, partly overlapping but also converging trends, such as de- and reindustrialisation processes, which may affect a place's specific Industrial Culture and, hence, its identity. Therefore, we will look closer at these processes and the specific developments in Central Europe (Chapter 3).

- Europe as a whole can be seen as the cradle of industrialisation and Industrial Culture as a European phenomenon. It connects to current European and regional policies in various ways. Hence, we see a clear need to look closer at border crossing initiatives and projects and expand on the European dimension for the future valorisation of Industrial Culture (Chapter 4).

- Industrial Culture can be used as a tool for a holistic and sustainable regional development. We identify four fields of application of this dynamic concept: (1) Industrial Culture and Local Identity, (2) Industrial Culture, Place-branding and Tourism, (3) Industrial Culture, Innovation and Creativity and (4) Industrial Culture, Education and the Attraction of a Workforce (Chapter 5).

- In the last chapter of this book, we will summarize our findings and identify further research gaps in this dynamic and still underestimated field.

We argue specifically in this publication that Industrial Culture comprises the expertise, attitudes, values and traditions of different social groups, including entrepreneurs, workers and their respective family members. The activities in the InduCult2.0 project aim at reviving a particular set of attitudes and traditions, especially creativity, entrepreneurial spirit and the tacit knowledge of industrial workers and entrepreneurs alike. It is assumed that fostering these attitudes will lead to more innovative ways of thinking and can help to reposition (old) industrial regions within the knowledge society by creating new development paths.

Industrial Culture is simultaneously rooted in a place's tradition and its collective memory. Industrial production brings about specific cultural patterns that constitute a core element of regional identity and influence the people's perception of their region today. Industrial Culture and especially Industrial Heritage are also used as distinctive image and location factors, although industrial regions are generally rarely considered as culturally attractive. Nevertheless, Industrial Culture has the potential to reverse this image by telling the vibrant story of regional industrial production and showcasing the innovative side of industry. By doing that, it can create a positive picture of a region and its diversity to the outside and attract greater visibility on both a national and European scale.

Last but not least, Industrial Culture should play a major role in the future education and life-long learning opportunities through the cooperation with present industrial production sites, the preservation of historic relicts and traditions in professional education. We argue that this may raise the interest of the youth in industrial production and attract skilled work forces to (old) industrial regions. Thus, Industrial Culture holds manifold potentials for a holistic regional development, of which some examples will be explored in this publication.

2 INDUSTRIAL CULTURE – A MULTIDIMENSIONAL CONCEPT

The term Industrial Culture is a topic of various scientific debates and disciplines. However, or perhaps exactly for that reason, there has been no coherent definition of the term so far, especially when considering different national contexts. The wide range of meanings results in a blurred term, often left undefined in literature and used in manifold ways. Thus, there is a clear need to develop a conceptual understanding of Industrial Culture, and this necessity has been one of the pivotal project goals. Harfst, Wust and Nadler (2018) already provide a comprehensive overview of different approaches to the topic. This publication will go one step further to grasp and tighten up the term. It will do so in this chapter by firstly looking at the past definitions in the field of industry and culture, especially regarding the German term *Industriekultur*, followed by looking at the term culture itself and then the correlation between culture and industry. We conclude this chapter by putting forward our own definition of Industrial Culture, based on the reflections before.

2.1 ON THE TERM AND MEANINGS OF INDUSTRIAL CULTURE

Looking at the scientific debate, one can see that the English-speaking research community has a more precise and distinct terminology with a clear terminological divide between 'Industrial Heritage' and 'Industrial Culture', the latter being clearly interlinked with an understanding of 'working class' culture, defined as a set of social characteristics and lifestyles constituted by the link between the industrial labour and society (Byrne 2002). In the Central European context, the terminology is more complicated. Here, Industrial Culture is most widely understood as referring to the physical remains of former industrial sites and their preservation or reutilisation, often as places for cultural events, education or other purposes (Rautenberg 2012; Harfst et al. 2016). This understanding of Industrial Culture, as perhaps captured best in the German expression *Industriekultur,* addresses mostly the tangible remains of industry, i.e. buildings, infrastructures and landscapes. In this way, the term focuses on a narrower understanding: the specific culture of industry in its purely material shaping, thereby related closely to the terms 'Industrial Heritage' or 'Industrial Archaeology' (Pirke 2010). This focus is not only valid in the German language but can be also found in other Central European languages, for example, in Czech and Slovenian.

This prevailing material-based understanding is retained, despite early academic works that strived to open this rather narrow focus and aimed to integrate the social dimension of industrial production in this concept. Glaser et al. (1980), for example, defined Industrial Culture as the totality of living conditions among the pervading industrialisation, later widening their definition to a comprehensive (cultural) history of the "machine-age" (Glaser 1981). In a similar vein, Pirke (2010) opened the definition for an applied research on Industrial Culture by underlining the formation of an industrial society with its typical ways of living and its associated norms and values that have shaped the industrial cultural landscape up to today. This wider understanding has also been reflected lately in a few policy documents, such as the recommendations by the scientific Advisory Board for *Industriekultur in Sachsen* (Industrial Culture in Saxony). This document highlights the necessity of reinterpreting and re-evaluating the 'industrial' age by broadening perspectives, giving an insight into the current situation and outlooks for the future; thereby, not only focusing on the industrial past (Wissenschaftlicher Beirat 2010). According to Meadows (1951), industrialisation – and, by association, Industrial Culture – is a "permanent revolution […] reconstructing life" and bringing "transformation in the system of human relationships" and social beliefs. Therefore, a holistic approach cannot leave out the status quo and fu-

ture situation of industrial regions. As an interim conclusion, an examination of the term Industrial Culture involves the inclusion of the past, present and future spheres of industrial societies. Moreover, it is a multidimensional matter, touching upon all social groups and their institutionalised representation in industrial society.

2.2 GRASPING THE TERM CULTURE

When speaking about Industrial Culture, it seems beneficial to look at the two constituents of the term separately, i.e. 'Industrial' and 'Culture'. Industry evokes the perceptions of mass production, standardisation, uniformity, etc.; culture, however, has a different connotation.

'Culture' is one of the most complex words (Williams 1983 in Oakes and Price 2008: 16), as numerous – partly overlapping – understandings are used simultaneously. What is widely acknowledged among scholars today is the dynamic procedural character of culture (Battaglini 2015; Hall [1995] 2008). It is constituted by the notion of an ongoing transformation reinterpreting and reinventing itself. Industrial Culture, in turn, is related directly to the emergence and development of (post-) industrial societies, which, in itself, depicts a dynamic process that is still ongoing. Hence, in this paper, we are referring to a sociological view of culture similar to that outlined by Schmidt-Lux et al. (2016). The authors do not claim that there is one universally valid understanding of the term culture but differentiate between four perspectives, which differ according to the assumed relationship between culture and the social realm:

1. Culture as a counterpart to nature and equivalent to the social realm as such;
2. Culture as a process which gives particular meanings and senses to our natural environment and the social realm;
3. Culture as a means to define and differentiate social communities, their experiences and lifestyles, especially in comparison to other social groups; and
4. Culture as a particular field of social relations which is marked by interpretations and practices in a specific aesthetic form.

But what does this mean for our understanding of Industrial Culture? Following the first consideration (1), culture comprises all human-made actions, institutions and materialities that go beyond the reproduction of material life and the self-preservation of human beings. "It is what makes us human, in a vast variety of, sometimes still changing, ways. […] It is a contested domain, and for good or worse, it is our 'predicament' that we cannot yet do without. We live in it, there is no other choice" (Hutnyk 2006: 357).

This means that industry and industrialisation are themselves cultural (or societal) concepts which have arisen from human beings' minds and actions. As this is a very broad understanding that is focused on the constitution of human beings as cultural beings and the contrast to the biological and material constitution of the world, it will not be the object in the further discussion on the character of a specific Industrial Culture.

The second understanding (2) is based on the works of Max Weber, Alfred Schütz and Karl Mannheim and conceptualises culture as a "mode of a meaningful interpretation of the world that both constitutes and differentiates social life" (Lossau 2008: 320, translation by the author). Culture can be a product and condition for both social cohesion and social change at the same time. It comprises religion and economy as well as political institutions and ways of handling conflicts (Wehling 1989). In this sense, Industrial Culture is a cultural set consisting of specific "structures of feeling" (Byrne 2002; see also Williams 1977) or, in other words, of particular qualities of "social experience and relationship" (Williams 1977 in Oakes and Price 2008: 16) in (post-) industrial societies.

From a third (3), anthropological, viewpoint, culture is defined as a bounded concept, as the culture you belong to and which gives you an unambiguous identity being mostly fixed in a specific place (see Hutnyk 2006) and a specific time (Williams 1983 in Oakes and Price 2008).

Based on the specific belief systems and myths of a given society (Meadows 1951), it serves as a point of differentiation in comparison to other social communities, their experiences and lifestyles. Each individual culture defines itself in relation to other cultures through its traditions and collective memories. The narratives of a specific locality, which can be based (among others) on the industrial past of a region or the experiences of the local working class or entrepreneurial milieu, play a crucial role in this definition process. Culture, in this sense, is used as an instrument of social closure. Societies define themselves as something special and authentic, something which is worth continuing.

In this understanding, Industrial Culture has both a local or regional and, equally, global dimension. It affects the actual social structures and political governance of (post-) industrial societies as expressed, at least partly, in the political culture (i.e. corporatism), settlement structures and the collective identities of (old) industrial regions. By contrast, the rise of industrialisation also led to a "stronger tendency toward cultural universalization" (Meadows 1951: 11) and a process of "globalization". Industrialism and its belief in efficiency and technological development has spread across the world in a kind of constant revolution, changing the social organisation and structure of industrial societies which share numerous similarities worldwide today. This globalisation has gone hand in hand with a change in identity building. Individuals and social groups in industrial societies define themselves based on social and economic skills achieved rather than their "inherited ascribed status" (Meadows 1951). There are also more ambivalent perspectives on Industrial Culture as a characteristic of social groups: men can be proud to be members of the collective of hard working "honourable men" (Byrne 2002: 287) and, simultaneously, detest the damage caused by industrialism to their health and, later on, the environment.

The narrowest understanding of culture is expressed in the fourth perspective (4), which looks particularly at different fields of cultural production, consumption and the culture industries. Here, culture is understood as a very particular field of social relations, which is marked by interpretations and practices in a specific aesthetic and often materialised form. Industrial Culture, in this sense, comprises artefacts, architecture, performances and artworks with a focus on industrial production that serves to enhance life and give it a certain significance. It also comprises the experience of art, whether in a cultural institution such as a gallery or museum or "in the fabric of everyday life" (Scott et al. 2018: 174).

Given these multiple and overlapping conceptualisations of culture, it is not easy to depict the concept of Industrial Culture. Therefore, we will look closer at the relationship between Industry and Culture before outlining our definition.

2.3 INDUSTRY AND CULTURE – AN AMBIVALENT RELATIONSHIP

After World War II, culture and its relationship to industrialisation and industrial society was discussed by leading scholars such as Theodor Adorno, Max Horkheimer, Paul Meadows and, later on, Margaret Archer[1]. Adorno and Horkheimer were also the first who used the term "culture industry" in their seminal work *Dialectic of Enlightenment* ([1944] 2006). They referred there to the standardisation and homogenisation of culture products in contrast to the pure arts, which inherit the notion of a "protest against integration […] and the idea of standardisation" (Adorno 1960: 131). Hence, we can see a considerable tension between the two constituents of Industrial Culture, industry and culture. Culture is characterised by autonomy, spontaneity and critique, which can push for considerable changes within a society, while the basic idea of industry consists of the standardisation of products and production processes.

1 The term culture was used by these scholars with different meanings. Adorno and Horkheimer used it in a narrow sense of culture production and consumption, whereas Meadows and Archer used it in the anthropological sense as a system which is used for differentiation between different societies (see Meadows 1951, 9 and Archers 1990).

During the 1950s and 1960s, the idea of industrialisation was meant to expand into society, leading to homogenisation and rationalisation (Archer 1990: 99). Functionalism and efficiency have been the prevailing arguments for action and further development. These developments do not occur without any impact on culture. Therefore, a cultural industry with routinized processes emerged affecting both high and mass culture (Hutnyk 2006: 353), serving to satisfy the consumer needs of (post-) industrial societies. Culture was often instrumentalised to achieve other, political and economic, goals. Its intrinsic value "has been rejected in favour of social impacts that can be measured" (Scott et al. 2018, 175), i.e. in its use of culture-led regeneration or focusing on the economic impact of the Cultural and Creative Industries. Hutnyk (2006: 353) even argues with Adorno that "every last trace of creativity" has been co-opted "into commerce" and culture has become an uncritical resource with a quantifiable exchange value which can be used "for tourism, […] as an attraction, an attention grabber and as a vehicle for development contracting" (ibid.: 355). The open process of culture has been transformed into a compendium of product registers, following short-term project logics and a tendency towards uncritical celebration.

However, the relationship between industry and culture is much more complex than this may suggest. Culture, in a broader, anthropological understanding (see 2.2), is not only shaped by industry and industrialisation. Instead, assuming that culture always keeps its relative autonomy (Archer 1990: 99) in the interpretation of the world, it can influence and direct these processes itself in different ways. Industrial Culture, in our understanding, is a multidimensional concept combining cultural, economic and social aspects. In times of Industry 4.0 and rapid technological changes, it is a necessity to enter into a dialogue about values and norms. Or, following Archer (1990: 116), we have to think about "which techno-choices should be made to attain the forms of social development that different ethical communities would deem 'progressive'".

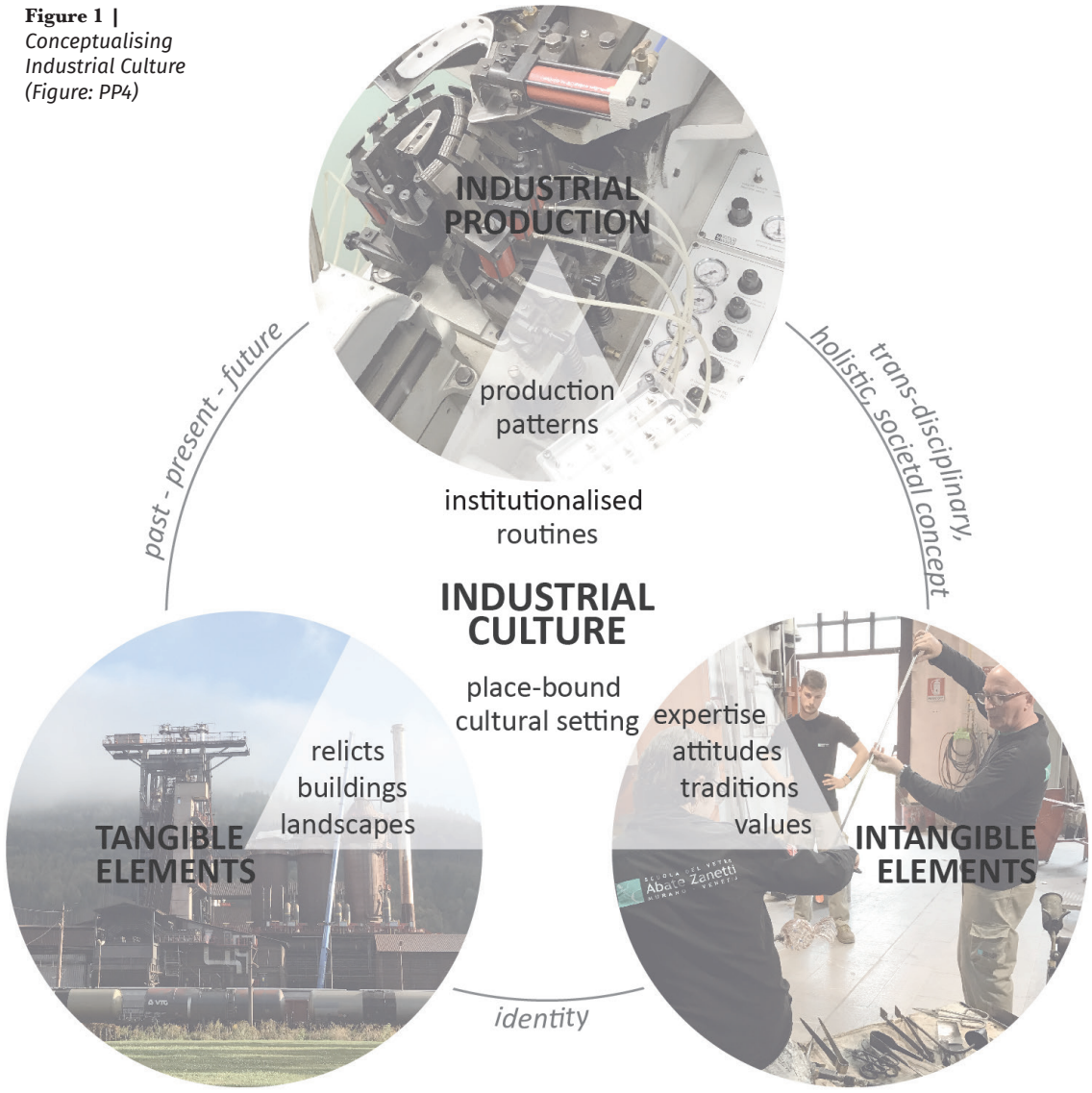
There have already been some attempts made to answer this complex question. Creative entrepreneurs, for example, in maker spaces, fablabs and other similar institutions withdraw from standardised mass production to small quantity production and individual, often more sustainable solutions, for example, through 3D printing. Many of them base their activities on particular moral values (i.e. avoiding waste through repairing, reusing and finding individual solutions) and motivate a lively discussion culture on future developments. In another more concrete example, a Belgian artist uses the premises of a former coal mine to develop his project on biological and cultural diversity which questions, critiques and discusses today's industrial production of animals as food resources[2]. These are just two examples showing that culture and, with it, Industrial Culture need to be rethought as part of a wider political system (Hutnyk 2006) offering a platform to debate on the ideals and values of a society, of what is the "Good Life" (Scott et al. 2018), without being trapped in the claim of one prevalent culture. Society is not homogeneous, as industrial society theorists claimed in the heyday of industrialism in the 20th century, there is even a great diversity of different cultures. Following this line, the partners of the InduCult2.0 project argue that "Industrial Culture is both a means to preserve a distinct cultural heritage, as well as a concept to strengthen the present and future cultural diversity in longstanding industrial cities and regions" (Görmar et al. 2018).

2.4 DEFINING INDUSTRIAL CULTURE

In summary, culture and, with it, Industrial Culture is a multifaceted and ambivalent concept which can be examined from different perspectives and is hard to define. Its understanding has undergone several changes in interpretation and definition across different time periods and spatial contexts. One classic and mostly aesthetic-oriented approach focuses on industrial herit-

2 We refer here to Koen van Mechelen and his project La Biomista. For more information, please look at https://www.koenvanmechelen.be/la-biomista

Figure 1 | *Conceptualising Industrial Culture (Figure: PP4)*



We conceptualise a 'new' Industrial Culture as a transdisciplinary, holistic societal concept that addresses a special, place-bound cultural setting, a concentration of specific expertise, attitudes, values and traditions. It is grounded in the specific institutionalised routines of industrial structures, their incorporated conventions, beliefs and production patterns, and the interlinked social factors beyond the factory itself. It builds on tangible, material and intangible, nonmaterial elements originating from the sphere of industrial production in the past, present and future (Figure 1).

age, including the preservation and reuse of old industrial sites and landscapes, for example, as museums or other touristic infrastructures.

However, Vecco (2010) highlights that it is not the materiality that makes a heritage site, but more the inscribed meaning and message as a bearer of values and atmospheres. In line with that, we can conclude from the research conducted within the InduCult2.0 project that the intangible, culture-based heritage and presence of industrial production in society are at least equally – maybe even more – important to (post-) industrialised places than the tangible artefacts. Tangible and intangible heritage are not

two isolated containers that have no connection. They are communicating spheres that result and condition each other (Vecco 2010). Industrial Culture binds together "influences, contacts and connections which, over time, have settled into each other, moulded each other, produced something new" (Massey 1995). Thus, it mobilises specific narratives of the past in order to frame the present and future of (old) industrial regions.

Industrial Culture connects both to the anthropological viewpoint, as the culture of distinctive social groups which relate themselves to industry and industrialisation, and to the aesthetic dimension, comprising industry-related products and practices of cultural production (see chapter 2.2).

Industry, culture and society can be seen as interrelated and coproducing each other. As we explained in chapter 2.3, this relationship is not without any tensions. It must be constantly challenged and debated. Connecting these three different spheres, the concept of Industrial Culture can serve as a nexus to discuss the economic, social and cultural effects of the ongoing transition towards post-industrial societies (Görmar et al. 2018). Thereby, it is highly necessary to look deeper into past and current issues of production, work and related processes and their interconnected context.

We can see that, on one hand, the industrial past influences the present and future of (old) industrial places and shapes development trajectories. Scholars in the field of economic geography argue increasingly that history matters for regional development (Isaksen et al. 2018). On the other hand, present cultural settings, experiences and ideas also influence our interpretation of a region's past. Its identity depends upon a specific reading of its history (Massey 1995: 188). Industrial Culture as a development tool emphasises particularly the agentic power underlying industrial development, serving as a model for today's regional actors.

In our understanding, Industrial Culture is a dynamic phenomenon, based on social interaction and networking, while being place-bound and locally embedded. It is a concept that emphasises transformation while connecting to a place's tradition (Massey 1995). As such, the concept has the possibility of serving as a frame for future strategies for (post-) industrial regions and especially for small and medium-sized towns, where – on average – the knowledge-intensive service sector is not as developed as in major cities (Harfst and Wirth 2014). For these regions, Industrial Culture is a unique opportunity to foster change and connect people to place.


IDEALISM

3 INDUSTRIAL CULTURE – A MIRROR FOR PATH DEVELOPMENT AND PATH CHANGES IN (OLD) INDUSTRIAL REGIONS

Today's Industrial Culture is a mirror of the past and present development of (old) industrial regions which, in many cases, has not been a continuous process but also included breaks and path changes. Development generally includes different, partly overlapping but also converging trends, such as de- and reindustrialisation processes, which may affect a place's specific Industrial Culture and, hence, its identity. Therefore, we will look more intently at these processes and the specific developments in the industrial sector, with a closer look at Central Europe. We will do so by firstly reflecting on the general dynamics in the past and present European industrial sector, looking at the specific relationship between place, industry, image and identity, and, finally, discussing the development in the manufacturing sector and its spatial implications for Central Europe.

3.1 INDUSTRIALISATION, DE-INDUSTRIALISATION AND REINDUSTRIALISATION – CONVERGING DYNAMICS IN (POST-) INDUSTRIAL EUROPE

Europe has become the cradle of industrialisation from the second half of the 18th century onwards. Starting from Great Britain, different waves of industrialisation spread across the continent, leading firstly to the development of today's (old) industrial regions based on coal mining, the textile and iron and steel industries, and later on to the emergence of the areas of the automotive and chemical industries. This led to today's high-tech regions, whose development started mainly after World War II, which are now the drivers of growth in Europe (Gebhardt 2013). During these first periods of industrialisation, the existence of specific production factors facilitated the development of industrial regions, for example, access to natural resources such as coal or iron ore, good infrastructural connections, and the accumulation of branch-specific knowledge or specialised educational institutions (Handke 2013b).

Since the second half of the 20th century, Western Europe and most developed countries have witnessed considerable de-industrialisation processes resulting in major long-term structural changes. According to Skuflic and Druzic (2016: 992), de-industrialisation can be "defined either as an absolute or relative (to total employment) decrease of employment in industry, or as a decrease of the share of industry in GDP/value added GDP" (see also Barta et al. 2008). Although both approaches, the employment- and the production-oriented, have some weaknesses (see more detailed discussions in Skuflic and Druzic 2016 and Barta et al. 2008), the actual outcomes have considerable influence both on the economic and social structure of a region.

The reasons for de-industrialisation are threefold: (1) at a certain point in time, developed economies experience a shift in individual consumption patterns leading to a higher demand for services in contrast to a shrinking demand for manufactured goods (see also Clark 1957 and Bell 1976) and hence kick-starting a process of tertiarisation; (2) the higher productivity rate in the industrial sector as well as the outsourcing and offshoring of industry-related services (Handke 2013a) leads to lower employment numbers in industry; (3) the shift in trade patterns between developed and developing countries resulted in an increasing specialisation within both countries and the manufacturing sector which is connected to an increasing decentralisation and relocation of manufacturing, resulting, in turn, in more globalised production chains. Labour-intensive industries in developed countries in Western Europe have been shrinking, while skill-intensive industries have been growing. However, the latter have less need for a large workforce than the former, leading to a

growing number of people in (old) industrial regions who need to find jobs in other employment sectors or remain unemployed.

De-industrialisation has been seen as a by-product of successful economic development for a long time. Its speed has varied between advanced developed countries, but these differences were related mostly to the level of employment protection within specific countries (Wink et al. 2016). Apart from that, interventions in the form of industrial policies or strategies to revitalise the industrial sector remained scarce before the financial and economic crisis in 2007/08, particularly in Western European countries. Instead, abandoned industrial sites, for example, in the Ruhrgebiet, have often been reused for new functions, such as living, learning, leisure and entertainment, symbolising the switch from an industrial- to a service- and knowledge-oriented or, in other words, post-industrial society. In such a post-industrial society, "the sources of innovation […] are derived increasingly from the codification of theoretical knowledge, […]" (Bell 1976: 46). Thus, knowledge has been increasingly seen as a strategic resource and economic success has proven to be dependent upon the progress of basic science and the application of its findings. Higher specialisation rates, shorter production cycles and a high pressure to innovate has still increased the importance of knowledge as a production factor but also influenced the organisation of labour significantly. Entrepreneurial actions are increasingly project-oriented, targeting specific, mainly short- and medium-term goals. They are often time-limited and characterised by joint learning processes of the project partners involved.

However, "the post-industrial society does not replace or displace an industrial society. Rather, the whole structure is a system of superimposed layers, like a palimpsest" (Bell 1976: 47). The industrial base still exists and has been rediscovered in the aftermath of the economic crisis when political attention was redrawn towards industrial performance. The link between manufacturing and overall economic growth has been stressed again, leading to a growing demand for a reindustrialisation of European regions (EC 2014), meaning that the "share of industrial activity [re]increases in regions (or countries) where it had been higher and declining before" (Wink et al. 2016: 464).

In 2014, the EU started its new common industrial policy with the "Communication on industrial policy" (EC 2014) highlighting the need for a "modernisation and reindustrialisation of the EU's industrial base, focusing on highly adaptive, technologically advanced and productive industries" (Skuflic and Druzic 2016: 992). Two years earlier, "the EU Commission set the target of raising the share of manufacturing industry in GDP from 16% to 20% in 2020 and reverting the trend of declining contributions of manufacturing industries in the EU" (Wink et al 2016: 463; see also EC 2012). The interdependence between industry and the service sector has become apparent as one position in industry relates to two positions within the service sector. Knowledge-intensive, enterprise-oriented services have become particularly important partners for industry and their success is mutually dependent.

According to Wink et al. (2016), the literature offers two strands of arguments for an intensified reindustrialisation in Europe. One of them emphasises that the production costs (energy, wages, environmental protection costs) in emerging countries such as China are rising which, however, may only be a temporary effect. The second one "refers to new technological opportunities […], which reduce the importance of economies of scale and labour-intensive manufacturing, while opening up new potentials for customisation and differentiation" (Wink et al. 2016: 465).

Hence, reindustrialisation does not necessarily mean a regrowth of formerly strong industrial fields (Barta et al. 2008) but the emergence of new ones. Traditional industries with low added value are still declining and have relocated to developing countries. Instead, new industrial sectors, such as the production of information and communications technology devices, high-tech goods and strategic components, have emerged, replacing the position of the former ones continuously. "In sum, re-industrialisation involves the appearance of new sectors, activities and products in new locations" (Barta et al. 2008: 8).

A specificity could be observed in Central and Eastern Europe. A certain reindustrialisation took place after the economic decline of the early transition period. Foreign Direct Investments played a crucial role here and contributed importantly to the role of industry in the increase of the GDP in the 1990s/2000s. However, they also contributed to the increasing concentration of economic and especially industrial activities in the metropolitan and a few other areas in these countries (see Barta et al. 2008 for Hungary). A new division of labour has occurred between these reindustrialised regions and other areas of the countries, leading to new patterns of economic and social polarisation.

To sum up, de- and reindustrialisation have not yet come to an end but are rather "complex process[es] involving new and innovative industrial development, on the one hand, and the sectoral and spatial restructuring of industry, on the other" (Barta et al. 2008: 25). They take place simultaneously and in parallel, "always complementing one another and sometimes with opposing effects" (ibid.). Thus, interaction and cooperation between all actors involved (e.g. customers and suppliers, economic and institutional actors, enterprises and scientific institutions) has become crucial for a region's development. Knowledge power and social capital, which are bound to specific situations and local contexts, have become important strategic resources and today's industries must be more flexible. They are embedded in specific local contexts with regional knowledge infrastructures and institutional frameworks, also referred to as regional innovation systems (Isaksen et al. 2018: 5). The latter may play a decisive role in the restructuring of (old) industrial regions and their eventual reindustrialisation. According to Isaksen et al., current industrial activity is influenced largely by a region's former industrial development. "Former development paths are thus reflected in, amongst others, current education and study programmes, in workers' skill, and in informal institutions in the meaning of 'taken-for-granted', culturally embedded understandings" (ibid.: 2). Past experiences may be exploited and industrial pathways formed based on historical processes and experiences (Wink et al. 2016), as is also recognisable in the concept of 'tacit knowledge'.

Tacit knowledge can be defined as non-codified skills, experiences and ideas that people have in their minds and which are difficult to access (Chugh et al. 2015). In Polanyi's well-known phrase "we can know more than we can tell" (Polanyi 1958: 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 can circulate. Gourlay (2002) describes tacit knowledge as highly personal, 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. In the light of outmigration from peripheral (post-) industrial regions and regarding existing local Industrial Culture, it is important, therefore, to maintain contact with local representatives of (former) industries to secure knowledge and revive the pioneering spirit.

3.2 PLACES AND THEIR INDUSTRIAL IDENTITY

While speaking about the importance of culture (and of Industrial Culture) for a place, we

should take into account the fact that culture is often conceived of as a fixed "system of shared meanings […], by which identities are constructed, sustained and transformed" (Hall [1995] 2008: 265). However, Hall argues that culture (and identity) is not linear but involves circular connections of different influences and is constantly reshaped by "a complex combination of continuities and breaks, similarities and differences" (Hall [1995] 2008: 274). This also applies to Industrial Culture, which refers not to a unidirectional development of a region but to shifting paths, converging dynamics and different societal groups (see above). The identity of a region emerges, according to Paasi (1991), through its specific institutionalisation process, which is never finished. Instead, a region (and its identity) is continuously reproduced in individual and institutional (everyday) practices. The process of institutionalisation "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 1991: 244). 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, while providing social safety for the inhabitants at the same time. Furthermore, Industrial Culture offers the potential to integrate place-specific regional features of identity into more place-spanning notions of identity, which are linked to different social groups, globalisation trends and migration flows, such as class identity, the identity of different professions and the identity of migrant workers.

The interrelation of place, space and identity is also discussed by Glorius and Manz (2018) in their work on the city of Chemnitz. They also highlight that the meaning and identity of a place are produced and reproduced on not only an individual but also collective basis and understand the development of local or regional identity as part of the human socialisation process. "Identity is seen as a social process that may change and depends on the context but, in addition, can be understood as a kind of (ideological) discourse that exists as part of the rhetoric of elites and also as part of popular discourses" (Glorius and Manz 2018: 30). Culture, and hence identity, can be "an active and lived force" (Willett and Lang 2017, 11) that creates spaces of potentiality and, whereby, shapes the present and future of a region. Culture mobilises its "own resonance machines of emotions, symbolisms, ideas and tropes, repeating, amplifying and sustaining specific knowledge through [its] capacity to affect [people]" (Willet and Lang 2017: 13).

In a similar vein, Byrne (2002) refers explicitly to Industrial Culture and stresses that the sentiments which inform and construct "ways of life" – indicated as an "industrial structure of feeling" – would remain a feature for many social groups beyond the period of industrialism, drawing upon Raymond Williams' works on culture (1980, 1981). Williams suggests that tradition, as an active source of action, could be selected and planned. "A new culture does not come out of the blue; (old) elements and layers are reorganised for new expectations in close contact with the other aspects of a society" (Williams 1981, 187). In this context, Byrne emphasised culture as a potential tool to shape futures.

However, "(old) industrial regions are not known for specific cultural offers and outstanding attractiveness" (Wust et al. 2017a: 10). Instead, they are frequently stereotyped from the outside as 'rust belt', places of 'hardness', urban decay and pollution (Benneworth et al. 2009), which is often reaffirmed by the local population through the negative or even traumatic outcomes of structural change. Prosperous places of production and wealth creation that were important sources of regional identity have turned into communities often marred by high unemployment, loss of function and social disintegration. This development led to the loss of a major point of reference for the inhabitants (Kirk et al. 2016). Therefore, local identities, particularly in places with monostructured industries, are influenced in a 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. 2012). However, "it would be absurd to predefine culture as either a progressive or regressive factor in forthcoming collective actions" (ibid: 9); industrial traditions could carry positive connotations such as special abilities, class solidarity and sense of pride in being part of the national industrial history. There are regions, for instance, 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). Similarly, "traditions can contain negative memories or reminders of the past, traces of difficult working conditions, authoritarianism, and destroyed areas" (ibid.: 9).

A certain negative image of industrial labour is common in many regions that have faced severe restructuring, especially among younger people (Strangleman 2001 or Strangleman et al. 2013). However, Agtmael and Bakker (2016) conclude, referring to examples in the United States and Europe, that so-called rust belt cities have the potential to become centres of innovation. They claim that rust belts could be transformed to new "brainbelts", which are "far more than a region or a collection of physical facilities" (Agtmael and Bakker 2016, 265). It would be more of a metaphor for a way of thinking and acting. Consequently, the common perspective on (old) industrial regions as ageing manufacturing hubs with high legacy costs that make them uncompetitive in the global market is being replaced by a new future on focused investment in future-forward technology.

(Old) industrial regions possess a variety of both tangible and intangible heritage and assets, such as a mindset, expertise, knowledge and 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 deal with its own region-specific identity (Kirkwood 2001). The development of a particular (industrial) culture and identity is a long-lasting and multilevel process, as Küster (2011) describes it for the Ruhr area. Being initially locally bound and based on the working environment of the people, this process was a product of modern location policies and a growing awareness of the historicity of life-worlds. Yet, the mental maps developed became an element of personal identity of the Ruhr area population with strong ties to the local communities.

To sum up, culture influences the emergence of particular identities of places and across space and time. Industrial Culture, as a time- and place-spanning concept (see also chapter 4), may shape these identities and open up new spaces of potentiality (Willet and Lang 2017). The self-awareness of (old) industrial regions is interrelated with industrial traditions and specific industrial "ways of life" (Byrne 2002). Hence, future prospects of a region may rely upon not only economic and political decisions but also the cultural repertoire of a region and a positively interpreted brainbelt image.

3.3 REGIONAL DEVELOPMENT IN (OLD) INDUSTRIAL REGIONS IN CENTRAL EUROPE

Central Europe is a highly diverse space, from both its landscapes and a social and economic perspective. The area combines the legacy of two political and economic systems existing until 1989, i.e. Western European post-war capitalism and state-led economies of Eastern Europe. These systems have shaped two very different development paths regarding world market integration and the spatial patterns of their manufacturing industries. The changes of 1989 have, thereby, triggered a wide range of transformations on all societal levels in Central European regions that also concern particularly and especially (post-) industrial regions. Additional changes were caused when some of the former Eastern bloc countries joined the EU from the 1990s onwards. On the one hand, these countries and their economies faced full (European) market integration, but, on the other hand, they

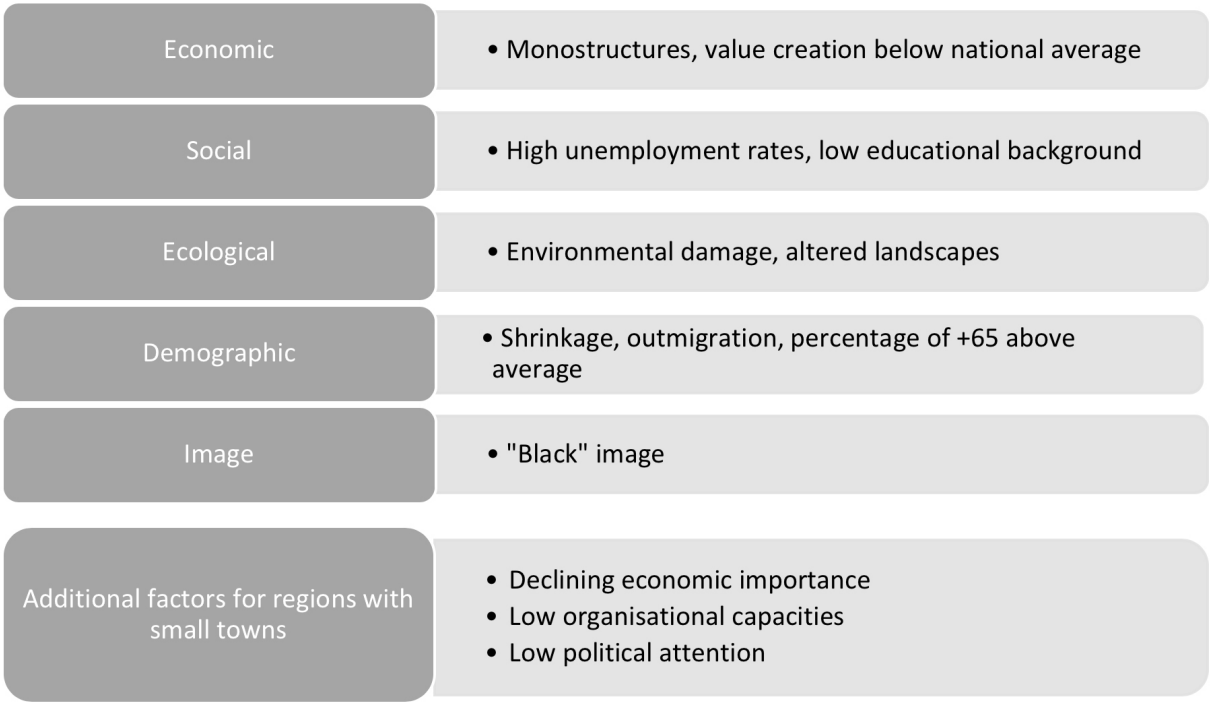


Figure 2 | *Different dimensions of challenges in (post-) industrial regions (Wirth et al. 2012)*

also benefitted from the joint cohesion and structural policies.

The Central European space is, therefore, especially concerning the integration into different economic systems until 1989, a diverse place that has changed much of its outlook over the past 30 years. The topic has been widely covered in the relevant academic literature (see e.g. Bachtler et al. 2000; Adams et al. 2011; Monastiriotis 2011; Lux and Horvath 2018). As Maier (2012) argues, the speed, the extent of changes and their impacts have not been the same in all countries. This observation can be underlined in the context of Central Europe's economic space, especially in the field of industry and manufacturing, which is now marked by diverse spatial patterns and trends, on the one hand, combining aspects of (severe) de-industrialisation but, on the other hand, also of reindustrialisation in certain regions. This mirrors the fact that while some industrial sectors were able to adapt successfully and integrate into world market conditions, i.e. car manufacturing (e.g. Pavlinek 2015), other sectors, such as the textile industry, have been almost completely wiped out (e.g. Bukowski and Śniegocki 2017). These changes have enforced very uneven growth patterns across the area (Müller et al. 2005; Hardy 2014) that manifest themselves in highly diverse growth trajectories on regional and even subregional levels. These developments have rendered traditional knowledge and skills, as well as production technics and materials, which have often been accumulated in these areas over centuries, obsolete, resulting in a loss of regional identities affiliated with this knowledge.

These trends are mirrored by the development patterns in the focus regions of the InduCult2.0 project, where all regions face – to a varying degree – deep economic and social transformation processes and, thus, structural changes, including depopulation, ageing and de-industrialisation. These transformations are additionally shaped by the fact that these places – like many other industrial towns in Central Europe – are small and medium-sized places, often outside agglomeration regions. Regarding their regional development, these places do not only face challenges regarding their ongoing industrial transformation, but also some

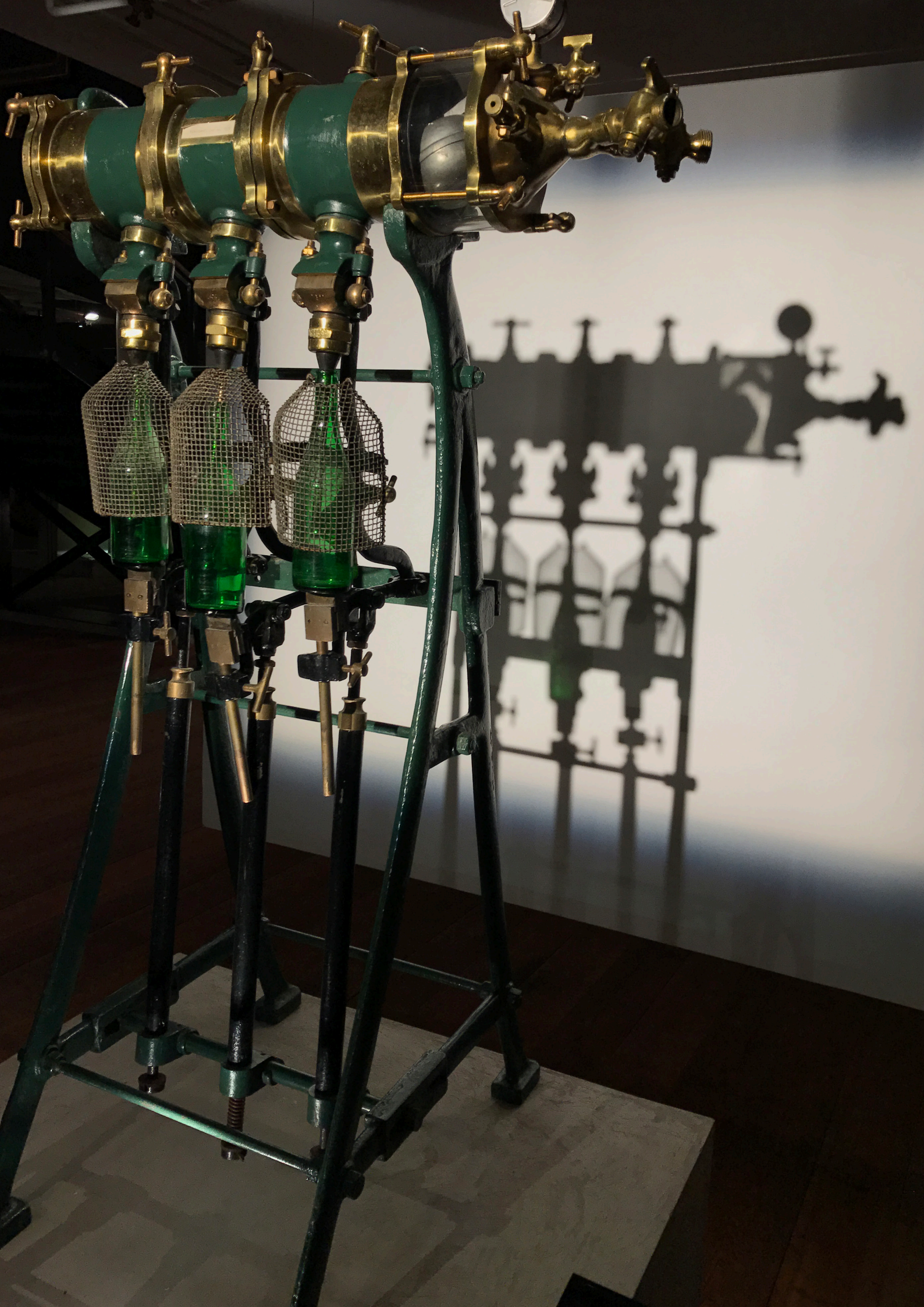
general problems concerning their status as being non-metropolitan (Harfst and Wirth 2014). These places have most probably to face the loss not only of industries but also of services and functions providing to the population, and these areas have a high number of the population commuting daily to the bigger regional centres or, in the case of smaller countries, to the national capitals for the purpose of employment and provision of services.

The main question for such specific places in an economic context is currently how to reconnect skills and knowledge of traditional industry with the demands of a globalised market, built on creativity and innovation, i.e. how to activate the specific milieu of (old) industrial regions to face new challenges. This task is certainly easier to tackle in agglomeration areas that offer a range of services with (world) market access, creative classes, higher education institutions and an industrial base all, to a certain degree, in place (Camagni 1991). However, this question is especially difficult to answer for Europe's (old) industrial regions situated outside agglomeration areas (Hoekestra et al. 2017). While such regions often still have an important industrial core, they are facing a variety of economic challenges (e.g. Cooke 1995; Simmie 2003; Erickcek and McKinney 2006). A weak external demand for products and services (Collits 2008), a general economic loss of meaning (e.g. Courtney and Errington 2000), a lack of economic innovation capacity, i.e. lack of strong clusters of small and medium-sized companies and research institutions, a lack of qualified personnel and a small number of start-ups are some of the problems which need to be handled (Andersson and Karlsson 2004). In addition to these economic weaknesses, the regions could also face other structural deficits, for example, poor accessibility, a lack of facilities with services of general interest and problems concerning their outside perception regarding investments (poor image) (Lintz and Wirth 2009: 78). Moreover, industrial towns often face various environmental problems, such as polluted soil, destroyed forests and other vegetation, and a larger amount of degraded areas and brownfields.

Regarding industrial units in such places, this usually means a stronger reliance on a local workforce and knowledge to remain competitive – a challenging task for regions with high rates of outmigration, no higher education facilities and a bad image from the industrial past and the times of structural change (Wirth et al. 2012). Such specific challenges also include the aforementioned negative image of industrial labour in many regions that have faced severe restructuring (Strangleman 2001 or Strangleman et al. 2013) and institutional problems such as 'lock-ins' and a general longing for a 'golden past' (Hudson 2005; Wirth et al. 2012; Radu 2018). Comparative analysis shows that spaces in which alternative development approaches are weak face processes of peripheralization and an increasing dependence on state funding (see Bernt and Liebmann 2013; Kühn 2015) [1].

As highlighted elsewhere (e.g. Wust et al. 2017a), the concept of Industrial Culture addresses a wide range of the dimensions named in (Figure 2), being of particular relevance for the economic, social and image dimension. Industrial Culture addresses the economic dimension by using the knowledge created in the past for a future added value, for example, by combining traditional skills with new economic sectors, such as creative industries or 'Industry 4.0'. Regarding the social dimension, it reconnects the population to the specific place-based identity, which can be valorised again, restoring civic pride and positive identity to such places. This is a first necessary step to slow outmigration and improve the outside image of such areas, making such places attractive to live and work in. Therefore, it might not be so astonishing that Industrial Culture, in its broader sense, has gained an unprecedented popularity outside the economic sector in recent decades.

1 Although some regions which do not have metropolitan centres and are sometimes even situated far away from them have been economically very successful in the last few decades (e.g. Wirth and Bose 2007).



4 INDUSTRIAL CULTURE – A BORDER CROSSING CONCEPT FOR EUROPE

Industry, industry-related identity and culture are truly European topics: Europe is the cradle of worldwide industrialisation, which started in the late 18th century in Britain and spread during the 19th century across the continent and, subsequently, the whole world. Even today, the economy of European countries is defined by their industries, which also have a strong influence on the communities within (old) industrial regions. Moreover, the political path towards today's unified Europe had its origin in industry, with the founding of the European Coal and Steel Community (ECSC) in 1951 – thus, the EU itself is part of a developing Industrial Culture.

This chapter will highlight the European dimension by firstly discussing the political cross-linkages to European policies and programmes, while highlighting, in a second step, the different initiatives in fields related to Industrial Culture. These reflections will be concluded by two transnational initiatives developed within InduCult2.0, both raising awareness of Industrial Culture on a European scale and taking the idea beyond the run time of the project.

4.1 THE POLITICAL RELEVANCE OF INDUSTRIAL CULTURE

Current policy-making still puts a strong focus on fostering industry, especially regarding technological and procedural innovation. Industrial Culture, on the other hand, has not yet been considered as a key factor for economic and societal progress. Nevertheless, Industrial Culture may have a unifying effect across Europe regardless of cultural, ethnical or religious differences. Jan Olbrycht, a member of the European Parliament and former rapporteur of the European Regional Development Fund, mentioned in his speech at the InduCult2.0 Policy seminar (March 2018) that "Industrial Culture is a way of thinking" which awards (old) industrial regions presumably better chances to be more innovative than others. However, the prevalent policy framework would need to support this "way of thinking" to create successful development paths in Europe.

Many sectoral European development strategies are focusing either on capitalising on the past by fostering cultural heritage as an important driver for change (e.g. European Parliament DG IP 2013) or on the present economic development by promoting a "reindustrialisation" and "renaissance of industry" in Europe (e.g. EC 2013, 2014). The European Committee of Regions is considering cultural heritage as an economic resource and a possible driving force for planning inclusive local and regional development and the development of creative industries (CoR 2015, 2018). The EU was also addressed to vigorously promote the innovative use of cultural heritage for economic growth and jobs, social cohesion and environmental sustainability in the Report of the Horizon 2020 Expert Group on Cultural Heritage (EC 2015).

Industrial Culture does not only link to the strategies mentioned above by combining all available cultural assets (from the industrial past, present and future) but also addresses and fills a cultural policy gap. The same is true for the recently unveiled 'Renewed EU Industrial Policy Strategy' (EC 2017), which addresses a wide range of important issues but has less to say about the cultural aspect of industrial production and manufacturing. However, the industrial transformation and the requirement of an industrial renewal to boost the competitiveness of the EU will have to lead to the introduction and wide diffusion of new production technologies and processes, such as the development of co-creation design, manufacturing and service platforms.

Recalling Europe's pioneering role in global industrialisation, the Parliamentary Assembly of the Council of Europe stressed the importance of European industrial heritage – including both its tangible and intangible components (PACE

– Resolution 1924 (2013)), however, focusing above all on its value for European identity and history but not on the present and future economic potential of interrelated Industrial Culture.

Industrial Culture, with its focus on place-based potentials, is in direct connection with the EU's territorial strategies, in unison with the European Territorial Agenda 2020 (EU Ministers of Spatial Planning and Territorial Development 2011), that considers the "distinctive identities of local and regional communities" as being of key relevance for regional development. Therefore, it can also connect to existing LEADER strategies in regions with a strong industrial base. Just as strongly, the active involvement of the local population through Industrial Culture resonates with the 'civil society' strand of the EU's 'Smart Specialisation Strategy' (e.g. the S3 platform [1]) according to the quadruple helix model.

Similarly, the place-bound focus of Industrial Culture is in accordance with the rising importance of local specifics and cultural identity in the background of the challenges of globalisation ('glocalisation'). Additionally, it also contributes to the objectives of the EU action plan for the Circular Economy (EC 2015), highlighting the potential of creating local jobs at all skill levels and opportunities for social integration and cohesion while increasing the efficient use of resources in production processes.

Addressing the importance of social and cultural factors for the development of (old) industrial regions regarding attracting a labour force and keeping the youth from leaving, Industrial Culture correlates with the priorities of the Cohesion Policy for the period 2014-2020, for example, investing in education, training and lifelong learning, and to the Rethinking Education initiative (EC 2012). It also fits the objectives of the Education and training (ET) 2020 framework, especially regarding enhancing creativity and innovation, including entrepreneurship, at all levels of education and training. ET 2020 also emphasises the importance of developing skills, competences and qualifications that is in accordance with the Industrial Culture focus on intangible attributes of industrial production.

4.2 EUROPEAN AND INTERNATIONAL INITIATIVES

In addition to these policy initiatives and societal macro-trends, there are a lot of 'bottom-up' initiatives and activities, which are already dealing with various aspects relevant to our understanding of Industrial Culture. Perhaps the best known is the European Route of Industrial Heritage (ERIH) with approximately 250 members all over Europe. It is a network of the most important industrial heritage sites in Europe linking disused production plants to industrial landscape parks and interactive technology museums. Other initiatives are the network Trans Europe Halles (THE) that connects cultural centres reusing industrial buildings for arts, culture and activism; the International Committee for the Conservation of the Industrial Heritage (TICCIH), the world organisation for industrial heritage; the European Federation of Associations of Industrial and Technical Heritage (E-Faith), a platform promoting contacts and co-operation between volunteers and non-profit volunteer associations in Europe; and initiatives of specific industries such as the European Textile Network (ETN). Additionally, a number of European projects (mainly within the Interreg and Horizon 2020 programmes) have been realised during the last few years dealing with (old) industrial towns and regions, their culture and the reuse of industrial buildings. Examples are:

1 http://s3platform.jrc.ec.europa.eu/

Figure 3 | *Forged leaves of the Caravan Tour and promotional material (Photo: PP2)*

Figure 4 | *Blacksmith at work (Photo: PP10)*

Caravan Tour - #FORGING INDUSTRIAL CULTURE

The so-called Caravan Tour was meant to tell the transnational story of Industrial Culture in general and of the InduCult2.0 project in particular. People in all participating regions should exchange information on the topic and capture the idea of a Living Industrial Culture by using the industrial method of forging. Using this method, the Caravan Tour especially linked up to the mining and steel-producing industries which were of particular importance in many of the partner regions.

The idea was realised by a collaboration of a blacksmith, symbolising the labour force, pioneer spirit and resources of industrial development, and a designer, who demonstrated the creative and innovative power of Industrial Culture and its potential to connect the past, present and future by designing the raw form of steel leaves. People in all partner regions could individualise these leaves of steel by forging them on the spot together with the blacksmith (Figure 3, Figure 4). These actions were carried out in the frame of special events related to Industrial Culture. The leaves from every region, about 300 in total, were collected and, at the end, combined into a European tree of Industrial Culture that will be presented at the final conference of the InduCult2.0 project in the district of Zwickau (Germany).

The tree and its different parts are again representations of the past, present and future of (old) industrialised regions: the roots and the trunk stand for the past with the pioneer spirit and the strength of European industries. They are the basis for the whole tree, giving it a stable fundament. The leaves represent the present, the people and their stories about the regions and their industries that they related to the InduCult2.0 team while forging the leaves (Figure 5). Every autumn the leaves fall before the new growth in the spring. Similarly, people of a region are also changing and fluctuating over the years.

Finally, the branches of the tree grow every year until they reach to the future. They symbolise innovation and the newly growing ideas for regional development which emerged from the project.

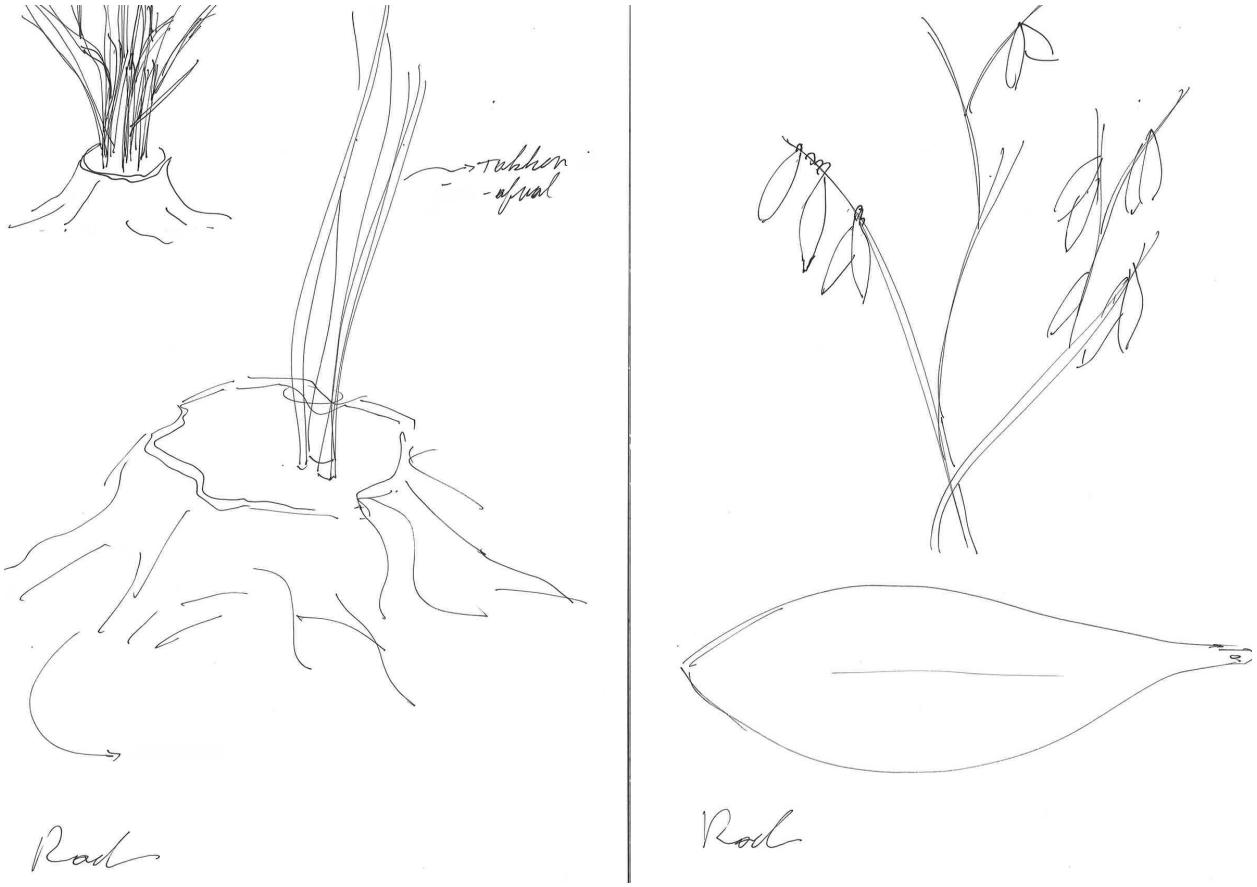


Figure 5 | *Sketches by Roel Vandebeek for the European tree of Industrial Culture (Photo: PP10)*

- Employing cultural heritage as a promoter in the economic and social transition of (old) industrial regions – Shift-X (Interreg Central Europe, 2012-2014)
  http://www.shiftx.eu/
- Rural revitalisation for cultural heritage – REFREsh (Interreg Central Europe, 2017-2020)
  https://www.interreg-central.eu/Content.Node/REFREsh.html#
- Creative Lenses (Creative Europe, 2015-2019)
  https://creativelenses.eu/
- Bright future for black towns: reinventing European industrial towns and challenging dominant post-industrial discourses – Bright Future (JPI Urban Europe, 2017-2020)
  https://jpi-urbaneurope.eu/project/bright-future/
- Forget Heritage (Interreg Central Europe, 2016-2019)
  https://www.interreg-central.eu/Content.Node/Forget-heritage.html
- Open Heritage (Horizon 2020, 2018-2022)
  http://eutropian.org/open-heritage/

These initiatives share mainly three characteristics (see Soyez 2006):

1. They are organised in a bottom-up approach by partners in different countries but are financed top-down (at least in the initiating phase) by funds of the EU.
2. They are used as instruments of a European culture and identity policy which focuses on the European heritage.
3. The persons and institutions involved are acting as agents of a wider Europeanisation process.

In 2006, Soyez argued that all these projects consist only of organisational networks of already nationally well-known objects and not of objects of a real "European Industrial Culture". There has been a lack of working systematically on the European dimension of objects and localities, of visualising common structures and pro-

cesses with transnational effects, such as connections and conflicts. This may still be true in some cases. However, the interest in a joint Industrial Culture and Identity seem to be growing, especially in the fields of tourism and cultural development. Common strategies have been developed and networks built up across projects, for example, between the Bright Future project and InduCult2.0 with joint scientific workshops or with the InduCult2.0 partnership which is partly based on the project Shift-X. Thus, the concept of Industrial Culture proves to have the potential to create alternative paths for industrial tourism and regional development across Europe.

4.3 INDUCULT2.0 – A JOINT INITIATIVE IN EUROPE

InduCult2.0 is one of the first coherent initiatives on a European level focusing on not only the industrial heritage and abandoned industrial buildings but also the present and future potential of Industrial Culture.

A pictorial illustration of the European dimension of the InduCult2.0 project is the Caravan Tour organised by the Belgian project partners (PP10).

The European dimension of Industrial Culture and its strategic potential outlined above are addressed by the strategic documents jointly developed by all partners within the project. These

Transnational network of Industrial Culture coordinators

A transnational network of Industrial Culture coordinators has been established in the frame of the InduCult2.0 project. The network is composed of the regional coordinators of Industrial Culture, while EU-wide networks and projects are invited as observers.

The network's main task is to strengthen the process of knowledge creation and implementation of actions in the field of Industrial Culture beyond the project context of InduCult2.0. The network has defined several strategic aims, such as (see Görmar et al. 2019):

- to increase the visibility and knowledge of the potentials of Industrial Culture in Europe;
- to explore and test the application of Industrial Culture beyond the InduCult2.0 experiences;
- to discuss new thematic connections within local and regional development programmes;
- to cooperate with academic institutions on a better conceptualisation of the term and its understanding;
- to connect to current policy discourses and streamline the results into policy agendas on a national and European level;
- to serve as a platform for an exchange of ideas, knowledge and experiences between regions and institutions across Europe;
- to establish the network as a first-hand knowledge provider to interested parties from outside the network; and
- to lobby and cooperate for funding at a national and European level, for example, transnational LEADER cooperation.

This network will, on the one hand, ensure the continuous collaboration of all regional partners involved via regular face-to-face and digital meetings. On the other hand, it will be open for future enlargement to promote Industrial Culture as an integrated concept for regional development, especially in Central Europe. The coordinators will serve as nodes for the regional networks on Industrial Culture which were developed during the lifetime of the project and continued afterwards.

The Transnational Strategy serves simultaneously as the founding statute of the network. In addition, recommendations on how to strengthen the different dimensions (cultural, social, economic and environmental) of Industrial Culture within their regions are given to the partners and others interested in using the concept for regional development.

are the Framework Paper (Wust et al. 2017a), Argumentation Paper and brochure (Görmar et al. 2018), as well as the Transnational Strategy, whose purpose reaches beyond the lifetime of the project (Görmar et al. 2019).

Five interrelated arguments were developed during the project that illustrate "The Transformative Power of Industrial Culture" (Görmar et al. 2018) for regions with a strong industrial past and present and which are situated outside major agglomeration areas in (Central) Europe.

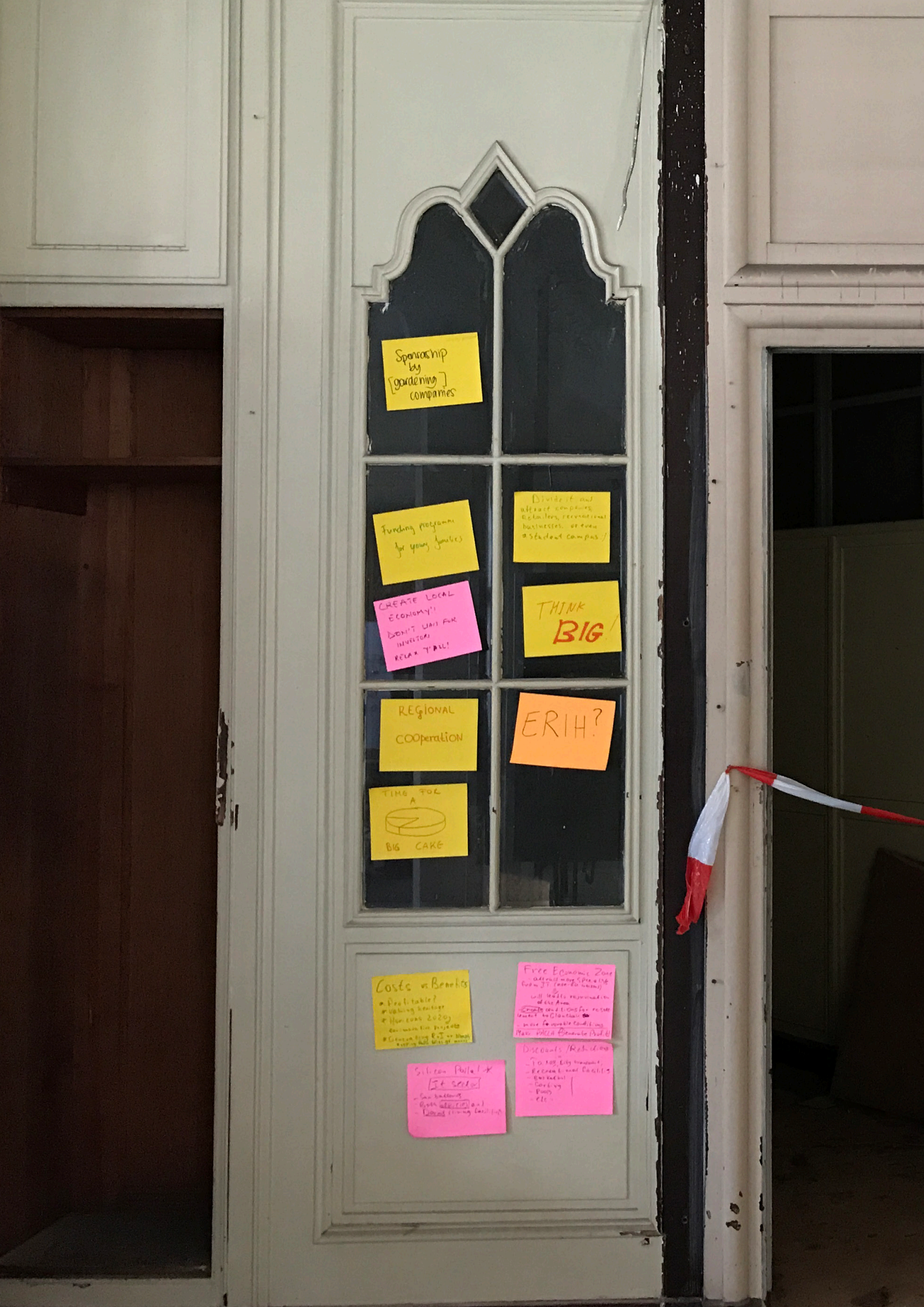
- Industrial Culture is a unique regional feature and an endogenous nucleus of identity.
- Industrial Culture is a tool for reviving pioneering spirit, attracting a labour force and keeping the youth in the area.
- Industrial Culture is an image and location factor as well as a marketing tool.
- Industrial Culture is an instrument to shape the economic transition.
- Industrial Culture is a means to combine traditional production and innovativeness/creativity.

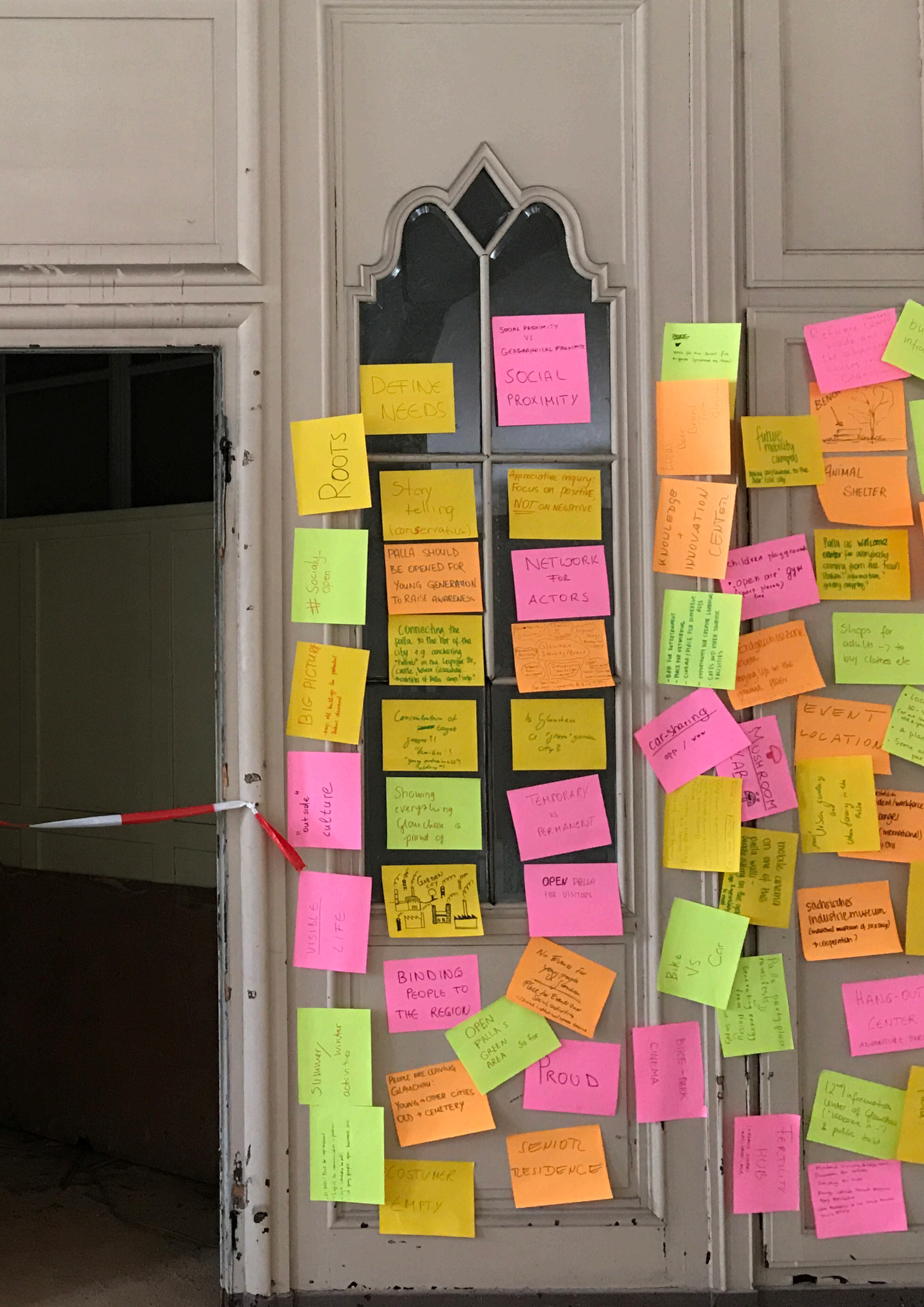
These arguments are the guiding principle for the realisation of appropriate measures promoting a vivid Industrial Culture in Central Europe and to ensure the compatibility of the concept with existing political and cultural initiatives.

Accordingly, the participating InduCult2.0 regions have developed and adopted strategic documents on their own which translate these arguments into regional contexts, developing concrete actions for a future valorisation of Industrial Culture on a regional level. Thus, the partners involved have developed regional strategies on Industrial Culture aiming beyond the time of the project and embedding them in regional and national policy frameworks.

These strategies are again integrated into the transnational strategy on Industrial Culture and the transnational network of Industrial Culture coordinators to sustain the topic of the project beyond the funding period.

With its integrated approach of interconnected regional and transnational networks, InduCult2.0 has laid a strong basis to further develop the concept of Industrial Culture on regional and European levels.


Sponsorship by [gardening] companies
Funding programs for young families
Divide it out
CREATE LOCAL ECONOMY!
DON'T WAIT FOR INVESTORS
RELAX Y'ALL!
THINK BIG!
REGIONAL COOperation
ERIH?
TIME FOR A
BIG CAKE
Costs vs Benefits
Free Economic Zone
Discounts / Restrictions



DEFINE NEEDS
SOCIAL PROXIMITY VS GEOGRAPHICAL PROXIMITY
SOCIAL PROXIMITY
ROOTS
Story telling (conservation)
Appreciative inquiry: Focus on positive, NOT ON NEGATIVE
Socially open
PALLA SHOULD BE OPENED FOR YOUNG GENERATION TO RAISE AWARENESS
NETWORK FOR ACTORS
BIG PICTURE
KNOWLEDGE + INNOVATION CENTER
ANIMAL SHELTER
Shops for adults -> to buy clothes etc
"outside" culture
Showing everything Glauchau is proud of
TEMPORARY VS PERMANENT
car-sharing app
MUSHROOM
EVENT LOCATION
VISIBLE LIFE
OPEN PALLA FOR VISITORS
Sächsisches Industriemuseum
Bike vs Car
BINDING PEOPLE TO THE REGION
OPEN PALLA'S GREEN AREA
HANG-OUT CENTER
Summer/winter activities
PEOPLE ARE LEAVING GLAUCHAU: YOUNG -> OTHER CITIES OLD -> CEMETERY
PROUD
CINEMA
SENIOR RESIDENCE
COSTUMER EMPTY

5 INDUSTRIAL CULTURE AS A TOOL FOR REGIONAL DEVELOPMENT OUTSIDE AGGLOMERATION AREAS

As argued in this publication, Industrial Culture is a tool for regional development especially for regions outside agglomeration areas that are challenged by similar transformations as those described above. In this chapter, we want to present some of the actions implemented within this project due to their innovative or demonstrative character and possible areas of intervention. These examples are not to be understood as evaluated best practice examples but should help to illustrate possible implementations of this dynamic concept. They also illustrate the various fields of application of Industrial Culture as a tool for regional development.

Industrial Culture has generally gained an unprecedented popularity outside the economic sector in recent decades. Not only several world heritage titles addressing the industrial past (e.g. Völklinger Hütte in Germany, Dolní Vítkovice in the Czech Republic) and initiatives such as the ERIH, but also spectacular events such as the Cultural Capital in the Ruhr 2010 or the music festival Colours of Ostrava celebrate a period 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 rust belt image" (Harfst et al. 2016: 49).

One aspect of Industrial Culture is focusing on the cultural and heritage value of the industrial past. Here, cultural heritage has been identified as an important driver of change in numerous EU strategies (e.g. European Parliament DG IP 2013). The report of the Horizon 2020 Expert Group on Cultural Heritage suggests that lessons should be learned from places where cultural heritage has been a source of positive economic, social and environmental developments. New forms of governance, public-private partnerships, unified landscape management, innovative financing, crowd-sourced funding, philanthropy and many other innovative and creative approaches seem essential to release the locked-up potential of heritage across Europe. The role of cultural heritage – and herewith industrial heritage – as a driver of change is connected mainly to the tourism sector but is also understood in the context of creating a joint European and regional identity (Soyez 2015). Various scientific articles prove this relationship and a re-enforced trend of towns and cities to rediscover their industrial heritage (i.e. Fleis and Strelow 2008), despite the often subdued value of industrial heritage as a tourism product (Hospers 2002).

In addition to the retrospective look at the past, our forward-looking concept points out the importance of the industrial present and future. However, the question remains: how can we activate the specific milieu of (old) industrial regions and reconnect local skills and knowledge of traditional industries with the demands of a globalised market, building on creativity and innovation to face new challenges? In other words: How can we revive a pioneering spirit? Compared to agglomeration areas that can overcome these challenges more easily (Camagni 1991), this question is especially difficult to answer for Europe's (old) industrial regions that are situated outside agglomeration areas. These regions often still possess highly competitive industrial units, albeit without the major employment effect they once had (Müller et al. 2005; Koutský et al. 2011). Nevertheless, such places and industries face specific problems in the market conditions described situated outside agglomeration areas (Jigoria-Oprea, Popa 2017). Due to a lack of higher education facilities and a bad image as areas of outmigration, a stronger demand to remain competitive occurs for the local workforce and knowledge (Wirth et al. 2012). Additionally, and as has already been emphasised in chapter 3, industrial labour is suffering from a negative image, especially among younger people (Strangleman 2001 or Strangleman et al. 2013). Institutional problems that lead to 'lock-in' effects and backward-looking views can block the way

to future development paths (Hudson 2005; Wirth et al. 2012; cf. Radu 2018).

Building on these considerations and challenges, four main areas of intervention were defined: (1) Industrial Culture and Local Identity, (2) Industrial Culture, Place-branding and Tourism, (3) Industrial Culture, Innovation and Creativity, and (4) Industrial Culture, Education and the Attraction of a Workforce.

5.1 INDUSTRIAL CULTURE AND LOCAL IDENTITY

As has already been mentioned before, (old) industrial regions are generally not known for specific cultural offers and outstanding attractiveness. They are often understood as rust belts, places of 'hardness', urban decay and pollution. The outside perspectives of such places are often reaffirmed by the residents because of the negative connotations of the time of structural change that turned prosperous places of production and wealth creation into communities often marred by high unemployment, loss of functions and social disintegration (Harfst et al. 2016). Production units and work places influenced these communities strongly and were important (positive) sources of regional identity and a major point of reference for the inhabitants. As they disappear, the linkages between industry and the local population also fade. Thereby, structural change, especially in places with monostructured industries, often affects local identities in a very negative way, creating a nostalgic longing for a 'golden past' that seems to be lost forever and a lack of positive future scenarios.

Nevertheless, such regions hold a variety of both tangible and intangible assets that can be utilised to strengthen both internal and external perception and, thereby, break negative stereotypes and nostalgic retrogressive understandings of such places. In this way, we understand Industrial Culture as a reliable and authentic source of identity and a reference point for (post-) industrial communities that motivates a reconnection to the industrial sphere and, thereby, enables positive future developments. The aim is to find, understand and acknowledge Industrial Culture as an important and unique regional feature, promoting the regions and their industrial sector as an important, persistent creator of a local identity and economic base. Creating a positive internal and external perception represents a soft location factor for attracting people and businesses (including tourism) to (old) industrial regions.

One of the pilot actions in several partner regions was the organisation and implementation of festivals promoting Industrial Culture. Despite regional differences and special features, the industrial festivals aimed to find and tell industrial narratives and, thereby, use creative approaches for a reinterpretation of the local industrial identity. In other words, they should raise the awareness of the project's topic in the project regions and generate local momentum.

Festivals are complex cultural phenomena that are "one of the most important examples of cultural consumption in recent years" and a "characteristic example of immaterial cultural heritage" (McKercher et al. 2006). They emerge all over the world and are not only a vibrant sector in the tourism and leisure industries but have "significant economic socio-cultural, and political impacts on a destination or host community" (Acordia and Whitford 2008). According to Pavlukovic et al. (2017), there is a consent among scholars that festivals have both positive and/or negative impacts on their host communities. Festivals generally lead to a more effective use of endogenous potentials as they enable organisers and participants to explore local resources that otherwise often remain undiscovered, not accessible or that are "lost within the" or lost within the everyday, complex social web of community structures (Acordia and Whitford 2008).

One major positive socio-cultural impact is that festivals encourage citizen and visitor participation and, thereby, foster the engagement in the creation of the inward and outside perception of places (Schuster 1995). A certain cohesiveness occurs during festivals (Falassi 1987) that can lead to the emergence and formation of groups and networks that thematise the central topic beyond the period in which the festival takes place

Figure 6 | *Acting for Industrial Culture at the Styrical (Photo: PP3)*

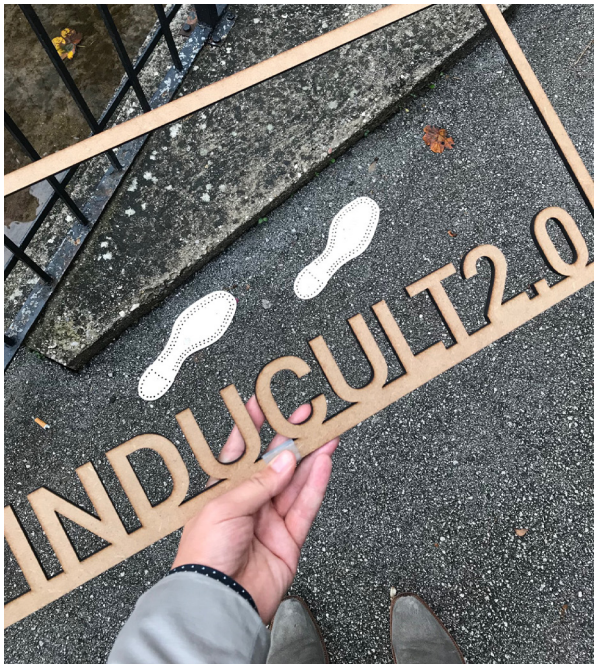


Figure 7 | *InduCult2.0 leaving traces (Photo: PP4)*

(McKercher et al. 2006). It, thereby, activates community resources and enhances social capital (Acordia and Whitford 2008). The material and immaterial transformation in space and its atmosphere during festivals can help persons involved to imagine and explore other perspectives for their built-up and social surroundings (Harcup 2000). Consequently, festivals are to be understood as a continuum of people involved, processes and resources (Wilson et al. 2017) that strengthen local culture and identity. As the sensitization for certain topics takes place in the realm of experience, absorbed information and experiences are processed on the factual and emotional level. Thereby, the level of consciousness is enhanced which, consequently, influences future actions (Simic and Fischer 2017). Negative impacts and concerns during festivals are connected mainly to environmental issues, especially the generation and disposal of waste, occurring conflicts connected, for example, to disturbances of the peace or excluded marginalised groups – just to mention a few. Such conflicts can be avoided from the beginning with the right set-up.

The city of Leoben (PP3) organised and hosted a regional industry-related festival in the autumn of 2018. In this example, the organisers embedded the recent festival into the Styrian Iron Route, an (old) industrial region – organised by an association – that discovered the developmental potential of its industrial and mining heritage and has utilised it over the past 20 years (Harfst et al. 2019). By linking the dynamic concept of Industrial Culture to such a region, synergies emerged that sustain the festival's aims. Personal stories of citizens of all ages played a pivotal role in the set-up of the event and stories about everyday life in the region were used. The main act of the cultural festival was a musical performance with approximately 30 local citizens as actors (Figure 6). Thereby, a special awareness of the region and its Industrial Culture was raised among both the participants and visitors. The organisers underline the positive outcome of involving residents actively in the programme. The amateur actors especially became important multipliers and ambassadors of the project's topic. The city of Leoben is planning a follow-up festival that will focus on a supraregional scale.

Figure 8 | *Mini-Swimming Pool Regatta during the Industry and Shipping Days (Photo: PP9)*

Figure 9 | *Virtual reality experience in Zwickau (Photo: PP1)*

The Slovene project partners (PP7) understand festivals and cultural happenings as a possibility – especially for small towns – to become 'more recognisable'. Therefore, a 'Two Town Industrial Festival' was organised in the Gorenjska region in Škofja Loka and Tržič. In the example above, the partners embedded their activity in an already existing institutional, administrative body, i.e. a region and association. In the Slovene example, the festival promoting Industrial Culture was linked to the 'Cobblers Sunday', an event that developed from former fairs that is deeply rooted in the regions self-understanding. Moreover, there is a vivid shoemaker tradition in Tržič and, therefore, stories were told that should 'leave traces' (Figure 7). As the organisers enrolled in the organisation of a festival related to Industrial Culture for the first time, they highlighted the importance of international cooperation and an exchange of experiences during the preparation of such events, as they could learn a lot from best practice examples throughout Europe. In future festivals, it is planned to especially include the youth from the beginning to boost the sustainability of the festival.

The 'Industry and Shipping Days' were organised in Gogolin and Krapkowice, Poland (PP9), in the summer of 2018. As (old) industrial places are characteristically located close to natural or artificial water flows, the river Odra played a significant narrative role in this festival as the linking element between several relevant topics, such as industry and shipping. Children – for example – had the chance to construct and try their own ships not in the Odra but in a 'Mini-Swimming Pool Regatta' as a showcase of the whole festival (Figure 8). The traditional industries in this area are connected mainly to limestone – the white gold of the area – and shoe production. Residents and especially children were invited to get to know local industries during the 'Open Days in Companies' by visiting the factories and learning not only about the current production but also about the history of the places and the innovations for the future. The aim was to enable participants to experience the potentials and possibilities of working in the industrial sector that are not available on a daily base. The pilot action has been inspiring to regional stakeholders and the festival should grow to a regional level in 2019.

Figure 10 | *Regional map on new industrial tourism, example from Slovenia (Photo: PP7)*

The partners in Zwickau (PP1) organised the 'Days of Industrial Culture in the District of Zwickau' with 'morning and night shifts' referring to industrial modi operandi. Such a platform has been organised in the area since 2010, growing gradually until in 2018, the whole district hosted the Days of Industrial Culture. In this example, the project action was embedded in a happening that was already extant. One special feature of this event was an interactive installation 'Industry Goes Public' that also travelled to the new tourism area of Chemnitz-Zwickau independently of this event. The exhibition displayed industrial companies, their products, innovation, the industrial past of the area and joined it with art. Thereby, different actors of the region could be linked and future cooperation fostered. As it is an innovative travelling outdoor exhibition, a special focus was put on virtual exhibitions (Figure 9). The organisers highlighted the potential of virtual reality models for such purposes, as they convey concrete content but, at the same time, allow an arty even playful approach. The individuum can be simultaneously integrated into a relevant location – such as a factory or museum – but also the premises themselves can be transported outside of the region using virtual reality. Chiao et al. (2018) argue that technology innovation – like virtual reality and online virtual tour-guiding – can have significantly positive effects on the visitor's experience.

A set of cultural events was organised in the Sokolov region (PP5) during the 'Industrial September'. The main innovative aspect was a unified promotion for the whole region over one month and not only specific single events. Thereby, residents could get an awareness for the rich Industrial Culture of their home region and understand it as an interlinked system and not only as an agglomeration of independent sites. A higher number of visitors could be achieved by a mutual promotion and merging the financial resources of different municipalities.

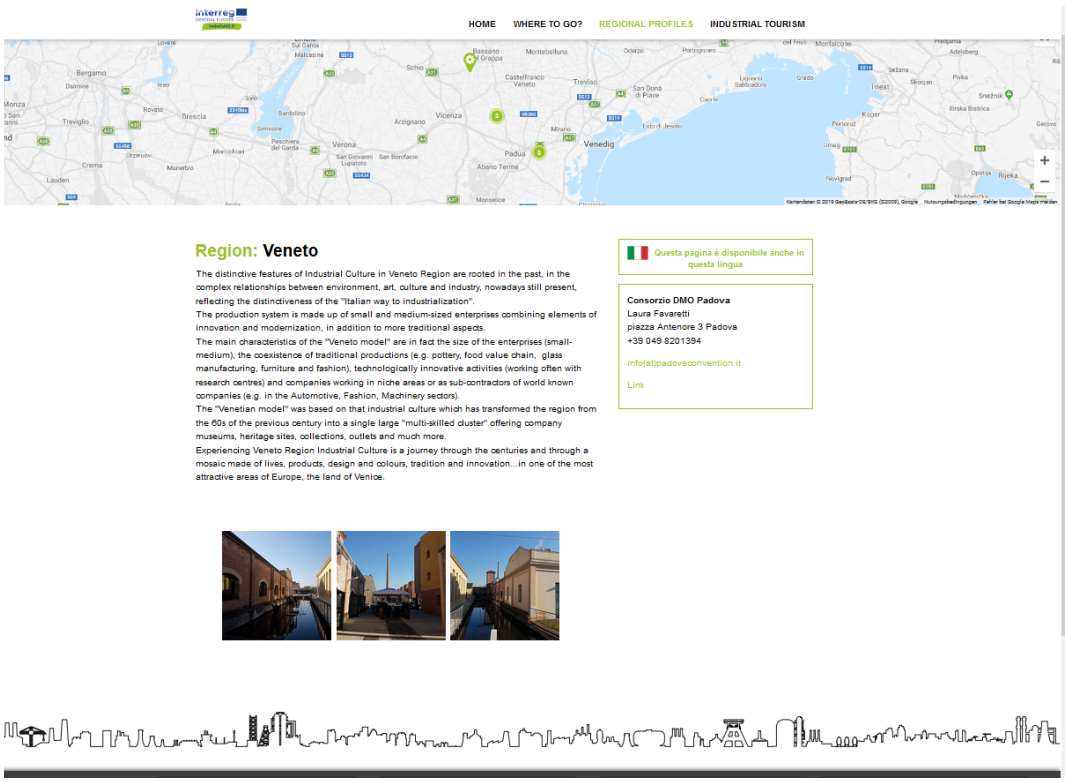


Figure 11 | *Regional online profile of the Veneto region (Photo: PP2)*

In partial conclusion, the project partners evaluate festivals as a successful tool to raise awareness among residents and visitors for local Industrial Culture. Residents especially can be motivated to engage as multipliers and ambassadors for relevant topics. All examples show that it is useful to embed or link such events in or to already existing infrastructure, for example, other happenings, associations or thematic routes and regions. New technologies – such as virtual reality – play a significant role in the innovative and inclusive inward and outward presentations of regions. The festivals organised within the InduCult2.0 project join the ranks of other similar festivals already renowned across Europe, for example, the 'Rostfest' (Austria), a festival of social innovation in post-industrial and mining areas, the Days of Industrial Culture (Germany), 'Industriada' (Poland) or the 'ibug' festival (Germany). Such festivals do not only have the chance to transform the inside perception of an area but can also positively contribute to a (re-)branding of (old) industrial areas and the tourism sector. These topics will be discussed in the following subchapter.

5.2 INDUSTRIAL CULTURE, PLACE-BRANDING AND TOURISM

Industrial tourism is gaining importance on the tourism market due to the growing interest in unique and authentic experiences (Otgaar 2012), however, it remains a market niche or a good way to diversify tourism offers (Pinter et al. 2017). As Otgaar (2012) discusses in more detail, there is no coherent definition of the term itself. The main definitional divide is the temporal perspective between industrial heritage tourism in (old) industrial regions, on the one hand, focusing mainly on the past, and visits to living industries that showcase today's production industries, their products and role in the local community, on the other hand. Our understanding of the term – comparable to Soyez' broader definition (1986) – includes both recent and former industrial sights and visits from not only tourists and visitors but also residents. A community's culture in cultural tourism and, therewith, in industrial tourism is generally a complex social construct which transforms into a consumable material and/or immaterial good to satisfy tourist expec-

Figure 12 | *Ideas for the design of industrial camping (Photo: PP7)*

Figure 13 | *Living lab as a meeting point for industry and creatives (Photo: PP10)*

tations (George 2010). Thereby, consumer demands shift from basic materials, products and services mainly to experiences (Bujdoso et al. 2015). Therefore, experiences and events are increasingly important for successful tourism offers. Industrial tourism (re-)connects industries and society, is an important marketing and public relations tool and, thereby, co-brands regions (Otgaar 2012).

The project actions aim at enhancing the experience of visitors via new experimental and unique tourism offers, and an improved presentation of already existing offers. The existing touristic offer should generally be more interlinked with the industrial past and present and, thereby, draw attention to the region's Industrial Culture. These actions should contribute positively to the (re-) branding of project regions.

Regional maps on new industrial tourism are one tool used to promote Industrial Culture in the tourism sector. As for the mapping of industrial tourism offers, there is by now a wide and well-established range of different routes and tours on various levels; for example, see the ERIH map for the European level, the website of 'Route Industriekultur' for the regional level and 'Visit Bydgoszcz' for the city scale. Most of these examples address industrial heritage sites and museums connected to the industrial past. On the other end of the spectrum, there are mappings of visitor's offers on existing industries or crafts mainly for promotion purposes ('Made in Padova' or 'Erlebniswelt Wirtschaft'). Offers that combine and promote the regional industrial past, present and future to visitors are rarely to be found. Therefore, the InduCult2.0 maps include (old) industrial sites, living industries and related events and, thereby, encourage tourists to experience alternative attractions outside the touristic mainstream offers. Moreover, the maps should also encourage stakeholders of the region to upgrade their offers by including and focusing more on Industrial Culture. The maps follow the same goals but have different implementations when it comes to their design, content, etc. Some of the maps are online, others are printed (Figure 10).

Figure 14 | *Former Jute Factory in Piazzola sul Brenta (Photo: PP4)*

A transnational mapping tool was developed during the project (Figure 11) which focuses on touristic offers regarding industrial tourism in Central Europe. The website includes an overview of offers related to this topic using an integrated database of sites and events. The latter can be selected by categories, interests and/or project regions. Furthermore, the mapping tool provides profiles of the partner regions involved and information concerning the concept of Industrial Culture. The tool is available in all regional languages to facilitate access by the local communities. Up to now, the tool has been managed by one of the scientific partners (PP2) but will be transferred to another partner to ensure its further usage after the lifetime of the project.

Therefore, another pilot action regarding industrial tourism is focusing on experimental accommodation facilities. Two project partners utilise the ragged charm of disused industrial buildings for creative accommodation of tourists. The Slovene partners (PP7) organised a low-cost, simply and flexibly designed 'industrial camping' on one floor of an abandoned cotton spinning and weaving mill during the 'Cobblers Sunday' mentioned above. A permanent revitalisation plan was prepared for the whole complex as the industrial facilities are mostly well preserved and can contribute to the industrial experience (Figure 12). The project partners see a big potential in industrial camping, especially due to its modular and flexible character. However, a financing mode must be found for the revitalisation of the whole complex. In the Styrian example (PP3), abandoned miners' housing quarters are opened to tourists and used for 'industrial camping' during the Rostfest. The designer used design thinking to methodologically elaborate a fitting interior for two experimental apartments. One of the restraints were electricity and water supply, however, this challenge was solved by utilising a temporary sanitary infrastructure. Tourists summarized their stay as follows:

Staying overnight in the industrial camping apartment was a little adventure, a quasi-nostalgic experience with charm, tent romance and a little comfort. Entering the apartment was a journey of discovery. Which rooms are hidden behind the closed doors? Which views do the windows reveal? Are there any traces of former permanent residents? [...] Traces of former inhabitants are not necessarily undesirable here. They invite you to daydream.

In addition to touristic offers, accommodation plays a significant role in the tourism sector. Accommodation can be rare especially in small and medium-sized towns with an industrial background and generally does not convey a feeling or experience of the industrial past and present of the places. Nevertheless, industrial architecture is highly regarded culturally, so it is not surprising to find 'industrial hotels' as a high-end niche on the hotel market – for example, 'Furillen' in Sweden. While most of these offers are located in agglomerations, examples can also be found in medium-sized towns, for example, Pixelhotel in Austria. Such accommodation – hotels with character as Jonsen-Verbeke (1999) calls them – produce a certain atmosphere and contribute to the experience of Industrial Culture.

Both examples illustrate that industrial tourism accommodation is an innovative way to utilise abandoned industrial buildings and revive them, at least for a short time. Additionally, they contribute to the experience of visitors positively. New perspectives are created by bringing people into the buildings. Returning these spaces back into the lifecycle is the main advantage besides relatively open scope for design and utilisation. The challenges are connected mainly with the overall state of the premises, ownership and access to electricity and water.

5.3 INDUSTRIAL CULTURE, INNOVATION AND CREATIVITY

Central Europe is home to several strongholds of production industry, even in regions dominated by small and medium-sized towns. However, the latest shifts in industrial production modes demand an increased availability of enhanced creative and innovative potentials for maintaining both economic and regional competitiveness. These trends favour agglomeration regions, as peripheral regions are rather ill-equipped for these new trends. The latter places often lack important requirements of the knowledge society, such as higher education units or the existence of a 'creative class' (Florida 2003). On the one hand, creatives often lack support by and appreciation from locals in (old) industrial regions, on the other hand, industries have difficulties finding and attracting creatives to jointly elaborate innovative solutions for current challenges. Overall, creatives and production companies are not meeting on an everyday basis, therefore, an exchange of ideas and innovation is needed.

These trends create new challenges to (old) industrial regions across Europe, marking a new phase in the long ongoing processes of structural change already experienced by these regions. While these regions were once drivers of change and had a highly innovative milieu, they are now seldom perceived as being attractive locations for creatives and innovation. On the contrary, such regions often still struggle with a rustbelt image of unemployment, environmental degradation and narrow-mindedness ('lock-in'). The disadvantages of being located outside agglomerations are counterweighted by other factors (e.g. cheap rents, better networking opportunities due to smaller stakeholder groups and access to authentic knowledge and skills).

These internal perceptions and external images prevail even though (old) industrial regions often have a range of assets and resources available that could foster creative industries and pioneering spirit. Against this background, these InduCult2.0 pilot actions strive to foster creative economies and innovative spirit in such challenging – (old) industrial, non-metropolitan – environments. It aims at reconnecting the current needs of industries with the historic pioneering culture for which these regions once were known. The focus is on utilising the often attractive assets of (old) industrial sites for establishing creative and cultural centres as well as measures fostering innovation, entrepreneurship and local value chains in an industry-based setting. According to Grodach (2008), big flagship cultural projects can have both positive and negative impacts on the development of local creatives. Therefore, regions should rather focus on the available workspace that fosters potential networking and collaboration, innovative financial incentives and other regulations that consider

The Belgian partners (PP10) set up a 'Living lab' that should boost entrepreneurial initiatives based on the regional industrial DNA and foster cooperation between industry and creatives. During the programme, participants underwent a trajectory of inspiration by local artists, learning within a special trainee programme and showcasing during a meet and greet between creative entrepreneurs, production companies and other local stakeholders (Figure 13). The living lab was linked to different existing initiatives, such as 'The Box', a plug-and-play pop-up store across Belgium, fashion incubators that provided modern technologies and knowledge and the trainee programme 'Starterslabo' for unemployed people with a valuable business idea. The outcome was the establishment of cooperation of different kinds between local creatives and companies. Both creative entrepreneurs and industries showed interest in a follow-up to strengthen ties between those two sectors.

An 'Innovation Lab' was installed by the Italian partners (PP6) in the former jute factory in Piazzola sul Brenta (Figure 14). It is a centre for creative and social innovation. Thereby, small and medium sized enterprises, start-ups and local companies especially interested in innovation should be supported and new models of cooperation between the industrial sector and creatives boosted. The durability of this action is assured by an agreement signed with the municipality which is also the owner of the factory. The staff of the lab is trained in entrepreneurship, product and process innovation, and technology transfer. Hence, the Innovation lab has developed an incubator for innovation, cross-fertilization, and technology and knowledge transfer.

the local context and enable the development of cooperation.

The actions in this field aim at enhancing cultural and creative environments to raise regional and industrial competitiveness, levering employment and providing new grounds for entrepreneurship and innovation. Creative hubs are put in place, utilising the affinity of the creative scene to (old) industrial sites. Additionally, local value chains are reinforced by bringing together creative workers and industry. Thus, InduCult2.0 supports the regions in rediscovering their innovative power, pioneer culture and entrepreneurial spirit for which they were known in early industrialisation by fostering interaction, reviving spaces and exploring innovative spirit through time. Consequently, several partners have developed labs that should bring together creatives and industrial companies.

5.4 INDUSTRIAL CULTURE, EDUCATION AND THE ATTRACTION OF WORKFORCE

Against the background of global structural changes and transition processes, the requirements of a knowledge-based economy in a (post-) industrial society including education and lifelong learning, the current demographic trends and the prospective labour supply are big issues especially for (old) industrial regions outside agglomerations. There is the challenge of reconnecting skills and knowledge of the traditional industry with the demands of a globalised market, built on creativity and innovation (see chapter 3). Europe's peripheral (old) industrial regions have lost their former importance in the respective economies. Hence, they must meet a stronger demand for knowledge and a workforce to remain competitive.

Information and knowledge are the basis of economic growth and development in a knowledge-based economy. Thus, the ability to produce and use information effectively is a vital source for skills of many individuals (OECD 2000). This kind of economy relies primarily on the use of ideas rather than physical abilities.

Figure 15 | *Educational courses at Applied Ceramics in Sisak (Photo: PP8)*

Similarly, it is more related to the application of technology than to the transformation of raw materials or the exploitation of cheap labour. "Knowledge is being developed and applied in new ways. Product cycles are shorter and the need for innovation greater. Trade is increasing worldwide, increasing competitive demands on producers" (World Bank 2002: ix). Firms need workers who are willing and able to update their skills throughout their lifetimes. "To keep up with developments in a knowledge-intensive economy (knowledge) workers need to adapt continuously to new developments: they are in a process of Lifelong Learning" (Baporikar 2015: 274). Against this backdrop, there is an increasing necessity to establish lifelong learning opportunities for people, especially in peripheral (old) industrial regions. It can open up the minds of current and future workers and employees and support their creativity, ability to judge and personal development.

The knowledge-based economy generally leads to an increased demand for a well-skilled workforce. 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 globalised, highly networked economy and strengthening the regional image could be successful approaches. The fact that the interregional competition for a workforce has been increasing should also be considered. Michael Porter (1998) discussed the interconnection of clusters and the new economics of competition emphasising that competition in today's economy is far more dynamic than a generation ago. Companies can source capital, goods, information and technology from around the world. However, he states that location remains fundamental to competition focusing the role of location in innovation. Thus, many regions outside agglomerations suffer from a brain drain, lacking in-migration and facing demographic decline, even in those cases, where jobs are available.

While clustering is a successful approach mainly of agglomerations, peripheral regions, and small and medium-sized towns must strengthen their endogenous potential, for example, the locational ties of enterprises. Peripheral areas need a strong reliance on a local workforce and knowledge combined with new external knowledge gained through fairs and collaboration networks (Graffenberger 2019) to remain competitive. It follows that the main problem for regional and individual business development in such regions is the future labour supply. Similarly, ageing processes might result in a reduced capacity to innovate and adapt to new knowl-

Figure 16 | *Elevator pitch at the Transnational Summer School (Photo: PP4)*

edge. In this context, recruiting young talents and highly qualified labour for industrial jobs has become increasingly difficult. The youth is more interested in jobs in other economic sectors because of the industry's image of dirtiness and pollution (see Putre 2015; Glowiak 2016). It is a necessity to also recruit young talents for the industrial sector and promote the innovative opportunities of Industry 4.0 under the condition of a globalised, highly networked economy to prevent skills shortage in the future. The better the school-to-business nexus can be developed, the better the chances exist for recruiting young staff for local industry in the future with the aim of engaging and fascinating young people in industrial jobs and preventing their outmigration from an early age (Wust et al. 2017a: 12).

Industrial companies have often not yet discovered the chances of binding and attracting a workforce by taking on regional responsibility. Possible concepts to foster this are corporate social responsibility and corporate regional responsibility (ibid.: 13; Vonnahme et al. 2019). According to "The World Business Council for Sustainable Development", corporate social responsibility is the continuing commitment of businesses to behave ethically and contribute to economic development while improving the quality of life of their staff, their families up to the local community and society (World Business Council, 1998). Corporate social responsibility 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 with these efforts (Rahim 2013).

Studying the rise of the rust belt and especially the recovery of some (old) industrial regions in Western Europe and North America, Philip 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 David Sadler and John Thompson (2001), this prescription for cultural change involves a search for ways in which rust belt regions might become reflexive, learning regions. However, they indicate the substantial limits this concept might have. Nevertheless, education and community still play a crucial role in the culture and self-perception of (post-) industrial societies as people now tend to define their status through the social and economic skills they achieve (Meadows 1951: 14). A strong potential can be seen in the proactive utilisation of Industrial Culture as an asset for future development. However, Industrial Culture must be reinvented and reinterpreted – getting rid of negative images often prevailing in (old) industrial regions. Cleantech, innovative and intelligent systems based on revolutionary

communication technologies, has provided the ground for such a reinterpretation.

It is claimed that culture and arts should be available for everybody in today's democratic societies, that society should even promote the development of creativity in every human (Wehling 1989). "Arts and culture have a direct bearing on our capacity to face today's complex issues" (Andel 2015). The Council of Europe distinguishes on its website that promoting culture as the "soul of democracy" means advocating strong cultural policies and governance – aimed at transparency; access; participation and creativity; respect for identity and diversity; intercultural dialogue and cultural rights – as the basis for respectful and tolerant living together in an ever-more complex world. (Council of Europe 2019)

Historically, the notion of culture in Europe was a narrow and hierarchical one. It was first perceived as high culture for the social elites and only subsequently was it acknowledged that there is also a broader notion of culture or even mass culture for the working class (Hutnyk 2006). Industrial Culture has the potential to integrate these two strands, as it is based on both the culture of the wage-dependent working class and that of entrepreneurs and the industrial middle-class seen from a contemporary perspective of industrial society. On the one hand, it comprises the skills and the knowledge of the workers, their associations, traditions and values, the built monuments of their daily routines and the artefacts with which they work. Industrial Culture could serve as a reference point for workers. On the other hand, there exists the pioneering spirit and creativity of the entrepreneurs, their 'palaces' and the witnesses of their social (ir-)responsibility. In addition, the topic of Industrial Culture bears the potential to discuss even the more problematic aspects of (post-) industrial development in the past, present and future, such as forced labour, environmental and health damages, or labour migration (Soyez 2006; Tenfelde, Seidel 2005), which are often overlooked in romanticising the industrial era and its rich heritage. Industrial Culture should, therefore, be a necessary cross-cutting theme in the curricula of (vocational) schools and every vocational training.

Schools, universities and other institutions of education are in charge regarding their engagement in promoting chances and prospects of industrial jobs particularly to young people. Teachers often do not have sufficient knowledge and access to industrial companies. Practical skills of the youth must be promoted to a higher degree in the current situation; curricula could be enlarged by such regional specifics, particularly by means of practical learning modules (such as technological or business competitions and exercises). Furthermore, there is a need to inform educational institutions about the whole range of current industrial employment and career opportunities in the context of the digitalisation and developing of cyber-physical systems, Industry 4.0 and processes that are leading to smart factories. Therefore, the University of Graz (PP4) will organise and host a workshop with partner universities, representatives from industry and other relevant actors for the integration of Industrial Culture into curricula of teaching and research.

The industrial companies are responsible for increasing their engagement in the recruitment of (young) talents and well-educated skilled workers. Given the high level of youth unemployment in numerous European states, even though mostly well-educated, there is a need for providing internships and apprenticeships as a means to facilitate young people's transition from education to work, for example, by framing it with appropriate social-art workshops as a means of motivation. Thus, companies could attract new and diverse talents while simultaneously equipping youth with relevant labour market skills. Therefore, there must be more intensified contacts with schools and vocational facilities in order to promote new kinds of career pathways to industry in the region and to elevate the importance of the primary sector to schools. Mechanisms are needed to enable effective school-business partnerships that could be supported by culture-based events. The professional organisations must support com-

panies which are seeking a qualified workforce by offering consulting services for occupational orientation. The cooperation of companies and employment agencies is necessary to secure an appropriate recruitment of a skilled labour force. Joint cultural initiatives could increase the success of such efforts.

There is a need to establish a network of employers willing to take on student trainees, offering internships, supporting graduates of industry-relevant subjects, mentoring young people in training, as well as willing to participate in school projects and career events to keep them in or bound to their study region. Special image campaigns for innovative work options in industry and programmes to get in touch with local employers in industrial sectors (e.g. guided tours, open days, mentoring networks) could be developed. The cooperation of companies and successful start-ups in a sector-wide networking with schools, vocational facilities and universities to promote best employment practices could help to minimise the existing barriers to career pathways in industry and to motivate students to study academic disciplines in science, technology, engineering and mathematics (STEM) (Wust et al. 2017b: 7-8).

On the one hand, there is a need to think about the possibilities of using cultural resources to interest youth, such as pupils at school and vocational colleges, students at university, in a career in industry. On the other hand, efforts should be undertaken to bind and (re-)attract a workforce in a better way, for example, through culture-related measures in new corporate regional responsibility strategies which should be

The project partners have developed several examples of cooperation pilots between schools and enterprises within the framework of the project activities. Thus, networks of cooperation between schools and enterprises have been established in Austria (PP3) and Croatia (PP8) (Figure 15). This cooperation resulted in jointly developed and conducted educational courses. The municipal administrations were also involved in these activities. During the courses, pupils got information regarding the region's economy and the ways of political decision-making. They improved their own skills in presentation and group work and learned about future employment opportunities. The local effect was the initiation of cooperation, on the one hand, between schools and companies and, on the other hand, between schools and town councils. The courses highlighted different topics, for example, mining as a traditional industry of the region concerned. The outcome of the cooperation between schools and companies within the project in Slovenia (PP7) was the "Carousel of Professions", a one-day event combining a job fair, workshops of secondary schools in professions relevant for the region and an exhibition about Industrial Heritage.

Another highlight was the Transnational Summer School, organised by the German and Austrian scientific partners (PP2, PP4). During the Summer School, an international debate on the topic was encouraged in the district of Zwickau. Many inhabitants, decision makers, activists, artists and the participants of the Summer school (students from several countries worldwide) were involved in the activities (Figure 16). The main impact of the Summer School was raising awareness of the industrial past as a source for future developments, finding creative solutions of preserving and reusing (old) industrial buildings and creating a locally, regionally and transnationally interlinked platform of Industrial Culture. The Summer School was a useful event with transnational effects bringing in different views and perspectives and strengthening a debate on how to overcome existing "lock-in" attitudes of (old) industrial regions. It was necessary to get a deep understanding of the region, the tasks and challenges. A suitable methodology and cooperation with local actors are pivotal. External views can bring new ideas and foster the creativity process. However, it is most important that regions should get it started, step by step, and be open for new developments.

based upon strong networks of economic, civil society and public actors.

This chapter illustrated broadly the various fields of interaction and pilot actions of Industrial Culture implemented within the InduCult2.0 project. Most of the examples highlight the importance of including residents in actions at a very early stage, linking actions to already existing events or bodies of organisation, and international knowledge and experience exchange.


DREAMS

6 CONCLUSION AND FURTHER RESEARCH AGENDA

This publication deals with the term Industrial Culture and its role in regional development of (old) industrial regions in Central Europe. As a result, it underlines the different use values the utilisation of this specific, place-bound resource can have. This reflection considers the deep transformations that Europe's manufacturing industries have faced due to automation, adaptation to globalised production patterns and the opening of markets in the former state-led economies. These trends have had profound social and economic repercussions on many (old) industrial towns and regions in Central Europe.

Regarding the term itself, the publication argues that Industrial Culture is a multidimensional concept still being shaped by various strands of research. The discussions in chapter 2 clarify that the term cannot be understood without thinking about culture in general and its relationship to industry and a (post-) industrial society. In accordance with that, we conceptualise the term as a transdisciplinary, holistic societal concept that addresses a special, place-bound cultural setting, a concentration of specific expertise, attitudes, values and traditions. It is grounded in the specific institutionalised routines of industrial structures, their incorporated conventions, beliefs and production patterns, as well as the interlinked social factors beyond the factory itself. It builds on tangible, material and intangible, nonmaterial elements originating from the sphere of industrial production in the past, present and future. This publication exposes a gap in dealing with the topic, as there is rarely a joint effort to cross the academic divide and shape the term more coherently. Based on this brief reflection, we are offering a definition of Industrial Culture that tries to integrate the dynamism and complexity both of industry and culture and argue for a fruitful dialogue of both.

To conceptualise Industrial Culture in combination with regional development – the main interest of the publication – is also a novelty, rarely undertaken in academic literature. The development processes of (old) industrial regions are marked by transformations and path changes, especially in Central Europe. Here, we find different, partly overlapping but also converging trends, such as de- and reindustrialisation processes creating diverse patterns of development across the macro-region. It is interesting looking at these changes – as done in chapter 3 – that the persistent, place-bound potential of Industrial Culture has been widely absent from academic discussion on regional change in (old) industrial regions. Only recently, in times of financial crisis, has the interest in manufacturing as an important economic factor re-emerged, although without tailor-made, space-sensitive policy programmes. However, we argue that (old) industrial regions need to be more aware of their own potentials that might benefit them in this transformation process. Additionally, they should also raise awareness on all levels regarding these soft potentials in fostering growth and sustainable development. This is especially important as such places often lack alternative development opportunities: utilising Industrial Culture holds the potential to unlock new development options and strengthen the connection of the people to places.

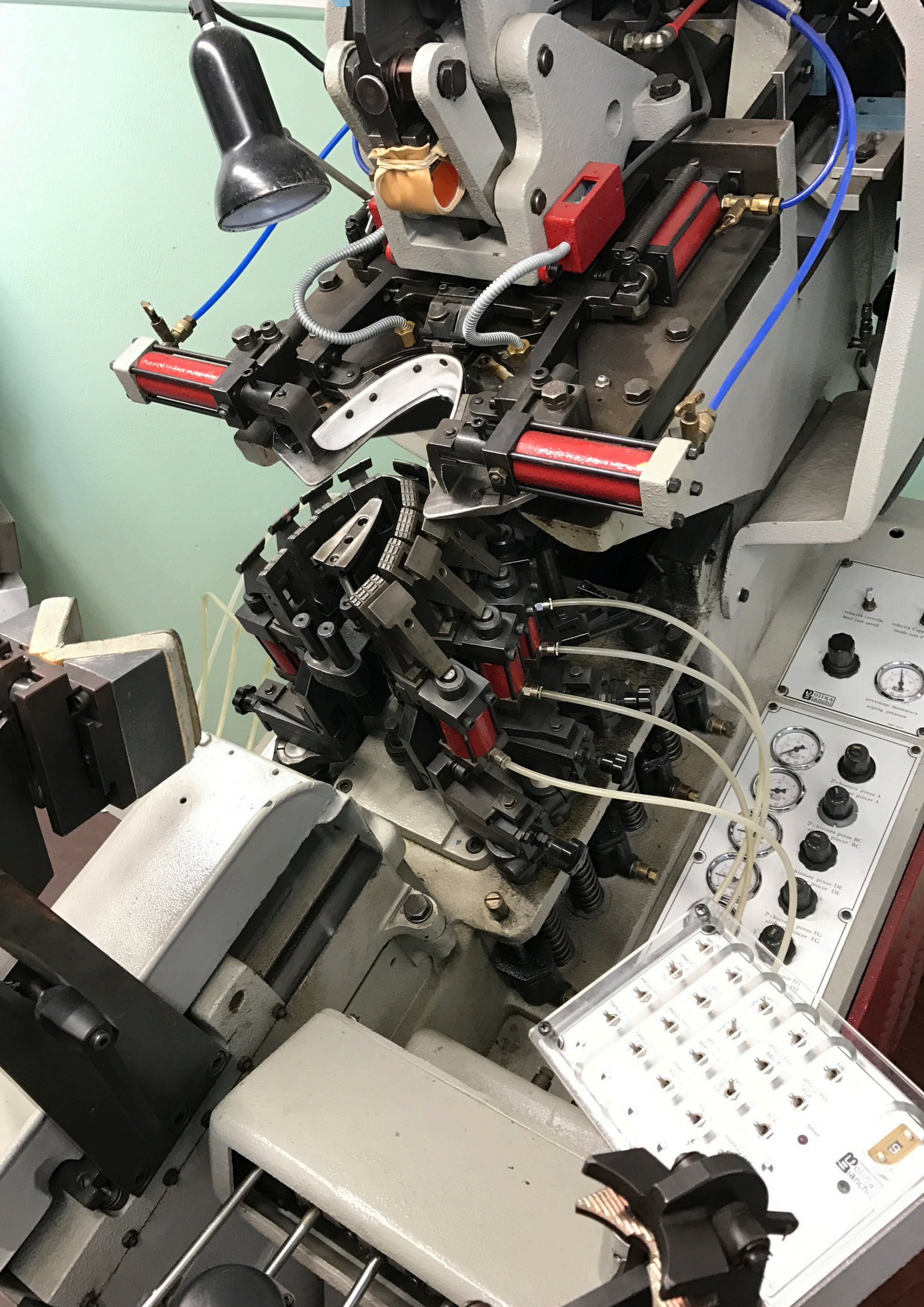
This publication does not only outline the regional benefits of Industrial Culture, but also stresses – especially in chapter 4 – its European dimension. As Europe as a whole can be seen as the cradle of industrialisation, Industrial Culture is a real European phenomenon, linking people across the whole European continent and across time. This aspect has been partly realised by different European and regional policies, for example, stressing the role and value of cultural heritage or outlining new industrial policies. Nevertheless, there is a lack of coherent strategies targeting Industrial Culture in a forward-looking not only heritage-related way. Which role (old) industrial towns can play in the wider transformations of European societies, especially regarding their manufacturing sector,

has also not yet been defined clearly. To answer this issue, we argue for a bigger cooperation between non-governmental institutions dedicated to industrial heritage and other related fields in order to create innovative synergies between different organisations and fields to influence policy-making and provide good practices. Industrial Culture could be a platform to achieve this aim.

In addition to the theoretical and conceptual elements of Industrial Culture, this publication highlights possible ways of valorisation by mapping four areas of intervention, backed-up by a rich selection of examples from the InduCult2.0 project. All examples in chapter 5 underline the argument made throughout the book that the valorisation of Industrial Culture can be developed as a tool for a holistic and sustainable regional development. Four fields of intervention are described, corresponding with earlier project findings: (1) Industrial Culture and Local Identity, (2) Industrial Culture, Place-branding and Tourism, (3) Industrial Culture, Innovation and Creativity and (4) Industrial Culture, Education and the Attraction of a Workforce. The activities named show the diverse character of valorisation activities and the different development needs that must be addressed.

It is important to highlight that a place-sensitive approach needs to be chosen, as not all fields of action address actual development needs in all regions. It is important to rely on a broad stakeholder involvement within the regions, bringing together various experiences, capacities and ideas and combining them for a coherent strategy. The InduCult2.0 approach of focus groups is one way to implement this co-creation of new ideas on how to valorise Industrial Culture in (old) industrial regions.

However, there are still some points upon which we did not touch within the project. Industrial Culture offers room for more critical discussions about past and present contradictions in urban and regional development, such as social and territorial inequalities, demographic decline or the exclusive character of certain lieux de mémoire (Lackner 2010). An exclusive perspective on Industrial Culture could also block the view of other regional features relevant for building a complex regional identity. Prevailing discourses often bear the danger of obscuring other, less dominant narratives in a region. Additionally, there is a certain tendency only to speak about good and 'clean' examples of Industrial Culture while neglecting its connections to environmental damage through industry or forced work during times of war. Industrial Culture can also lead to a reinforcement of cognitive lockins in a region (Hassink 2010; Grabher 1993), hindering the search for new opportunities and innovation on a psychological level (Heinemann 2003). There is also a need to develop the field further from a feminist perspective; up to now, industry and, hence, Industrial Culture is associated primarily with masculine work experiences in heavy industry or male entrepreneurs (Lackner 2010). These more critical views of Industrial Culture still have to be developed further raising questions about historic failures from which we can learn for the future. These critiques also show that Industrial Culture remains a blurred concept which attempts to combine the social and cultural realms of a (post-) industrial society to better understand the past and present and think of the future of (old) industrial regions (Wirtz 1999). Therefore, we call for more empirically based studies and research which will help to refine the concept and can give hands-on expertise to policymakers and experts in regional development.



7 CONTEXT INDUCULT2.0

Within the frame of major societal and economic changes, Europe's industrial societies have transformed into networked information societies that are increasingly based on knowledge-intensive services and creative industries. However, these developments are affecting territories in very different and uneven ways. Small and medium-sized towns in rural environments often continue to have a small industrial base, but do not succeed in attracting the knowledge economy in the same way as large cities.

At the same time, political attention to industrial production is increasing in the aftermath of the financial crisis. In a recent 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". In a similar vein, national and regional governments set up strategies for reindustrialisation through the development of "Industry 4.0" and the valorisation of industrial labour.

Against this background, the INTERREG project "InduCult2.0" (CE31) brings together regions with a distinct industrial past and present, situated outside major agglomeration areas in Central Europe. All of them have undergone deep transformation processes in recent years due to automation, adaptation to globalised 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 and traditions, as well as tangible monuments and artefacts. However, these regions are usually considered culturally less attractive and are not utilising the existing Industrial Culture to their full development potential.

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 a location factor; and
- empower industrial regions by reactivating their pioneering spirit.

The Department 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 support and reflect these activities and conduct academic research in the project. Other partners are the municipalities, district administrations and private institutions from eight Central European countries.

The InduCult2.0 project is implemented by the Central Europe INTERREG B programme and co-funded by the European Regional Development Fund. The run time of the project is from summer 2016 to summer 2019. For more information please visit our Website: www.inducult.eu
Facebook page: www.facebook.com/InduCult20-Living-Industrial-Culture-987296494713990/
ResearchGate page: www.researchgate.net/project/InduCult20-Industrial-Heritage-Cultural-Resources-of-Current-Industries-and-Creative-Pioneers

THE INDUCULT2.0 PARTNERSHIP

The **district of Zwickau** in Germany has a long tradition of mining, machine construction, and the textile and automotive industry. The region of Chemnitz and Zwickau became one of the leading industrial centres of Germany more than 200 years ago. The industrial development formed the economy, society and architecture of the region. Industry continues to define the heartbeat of the region today, which, consequently, markets itself as the "engine of Saxon economy". Traditional skills and knowledge that have grown over several decades and the existing engineering spirit constitute the specific image. Beyond the industrial heritage, new cultural offers add to the scenery, for example, Days of Industrial Culture or the renowned annual graffiti festival in industrial ruins. (PP1 – District of Zwickau)

The **city of Leoben** in Austria is the intellectual, cultural, economic and research centre of the region of "Upper Styria". The hegemony of industrial production and mining has created a specific cultural climate over the centuries. The industrial heritage can be experienced along the "Styrian Iron Route". Global industrial players have their headquarters in Leoben. The cultural department and museum centre of Leoben are highly engaged in the valorisation of Industrial Culture, with a strong focus on the youth and creative sector (e.g. establishing the post-industrial festival "Rostfest"). (PP3 – Municipality of Leoben)

The **Karlovy Vary region** in the Czech Republic is known as an industrial and spa region. Industry (e.g. glass, mining and musical instruments) has played a significant role since the 19th century. However, traditional industries lost their market position or disappeared completely in the 1990s. Building on the historic legacies, many museums are focused on industry today. Schools, enterprises and museums are currently building a network for cooperation in the field of Industrial Culture to promote regional industries, technical skills and creativity. (PP5 – County association of the local action groups (LAGs) of the Karlovy Vary Region)

Industrial communities in the **Veneto region of Italy** have grown around the industrial clusters for decades. They are, thus, shaping the identity of many generations up to today. The distinctive character of Industrial Culture is rooted in the complex relationships between the environment, art, culture and industry, which are still present and changing, reflecting the unique "Italian way" of industrialization (e.g. the roots of the unique glass district in Murano – Venice; Industrial Festivals). (PP6 – Padova Chamber of Commerce, Industry, Craft and Agriculture)

The **Gorenjska region** in Slovenia used to be one of the most industrially advanced regions, its major industries being steel, machinery, textile, wood, construction and energy, where more than a third of the population was employed. The independence of Slovenia and the loss of the Yugoslav market caused serious trouble to many companies. Regional stakeholders want to foster Industrial Culture, tapping synergies of cooperation between heritage and cultural institutions and current industry, and upgrading the cooperation between schools and companies for future employment opportunities. (PP7 – BSC, Business Support Centre Ltd., Kranj)

The area of **Sisak-Moslavina** County in Croatia has a rich industrial tradition from crafts and large plants to new technologies and value-added products. The town of Sisak was an important industrial centre in the 20th century. Its rich industrial heritage has influenced the development of the town and its visual identity. Industrial Culture is an important and necessary component of cultural activities and the development of the region. (PP8 – Sisak-Moslavina County)

The main economic fields of the **Opolskie region** in Poland have been in the construction, automotive, machine, metal, chemical, fertilizer and furniture industry. The region's economy has been undergoing substantial transformation since the 1990s. New companies have developed

using the knowledge, skills and sites available, often based on the tangible and intangible remains of the multi-ethnic industrial past. Industrial Culture is an integrated part of the regional Smart Specialisation Strategy enriching educational, cultural and touristic offers and fostering the use of endogenous resources. (PP9 – Opolskie Centre for Economy Development)

The industrialization of the **Province of Limburg** in Belgium, a peripheral industrial area with small and medium-sized cities, was initiated by the discovery of coal in 1902. During the last 50 years, after the closure of the mines, the region has firmly diversified in industrial sectors (automotive, logistics, steel, production and construction). As an ex-traditional industrial region transforming into a creative area, Limburg has a remarkable richness of relevant examples of Industrial Culture (e.g. C-Mine Cultural Centre). (PP10 – Stebo Competence Centre Community Development)

Two scientific partners support the regional partners: the **Leibniz-Institute for Regional Geography** (Germany) and the **Department of Geography and Regional Science of the University of Graz** (Austria). They are responsible for the overall strategic framework of the InduCult2.0 project and the organisation and sustainability of the transnational knowledge transfer in the project's learning network.

Both scientific partners support the regional partners by giving thematic input and structural and methodological guidance for the development of the pilot actions. Furthermore, they are monitoring and evaluating the implementation and documentation of the pilots.

The Leibniz Institute for Regional Geography (IfL) is the only research institute for Geography in Germany which is not attached to a university. Under the heading "Geographies of the Regional", the researchers analyse socio-economic and spatial structures and ongoing processes, particularly in Central and Eastern Europe. Further research areas focus on the theoretical and historical foundations of Regional Geography and innovative ways of visualising geographical knowledge and the related principles of operation. (PP2 – Leibniz Institute for Regional Geography)

The University of Graz was founded in 1585 and is one of the largest universities in Austria. The Department of Geography and Regional Science in the Faculty of Environmental and Regional Sciences and Education covers research fields such as Human Geography and Geographical Education, Tourism and Regional Development, Climate Change and Alpine Landscape Dynamics, and Geospatial Technologies. The Department has a long-standing interest in the research on industrial regions, covering aspects such as brownfield reclamation, innovation policy and regional development strategies. (PP4 – University of Graz)

NATIONAL LANGUAGE SUMMARIES

EXTENDED SUMMARY (ENG)

This book aims at exploring the notion of Industrial Culture in a Central European context, summarizing research results from the InduCult2.0 project (www.inducult.eu). The project focused on Industrial Culture as a way of reviving (old) industrial regions and fostering the pioneering spirit. The academic institutions in the project, along with eight regional project partners and their activities, framed the term of Industrial Culture through various outputs and publications. The project's goal was to conceptualise the term in the field of urban and regional development, specifically in small and medium-sized towns in Central Europe. This publication presents the main results of the project activities and research results.

Manufacturing industries in Europe have once more undergone deep transformation processes in recent years due to automation, adaptation to globalised production patterns and the opening of markets in the former state-led economies. This indicates a deeper shift in the industrial societies of Europe, as highlighted in the literature. These trends have also had profound social and economic repercussions on many (old) industrial towns in Central Europe.

However, political attention in Europe has been redrawn towards industrial production in the aftermath of the financial crisis of 2007-2008. The EU and national and regional governments set up strategies for reindustrialisation through the development of 'Smart Specialisation', fostering the possibilities of 'Industry 4.0' and the valorisation of industrial labour (i.e. New Industrial Policy Strategy 2017).

While the impacts of these policies remain only sketchy so far, the development of industrialised places in Central Europe is marked by high diversity. Divergent trends of continuing de-industrialisation, functioning core industries and reindustrialisation create a complex spatial pattern of manufacturing. Within this situation, the notion of Industrial Culture demands further investigation, as it hold an endogenous potential for the future development of (old) industrial regions. In such places, the long economic predominance of industrial production has brought about a specific cultural setting which is made up of certain intangible assets, such as skills, attitudes and traditions, as well as tangible monuments and artefacts. The main question in this book is how regions can use the cultural potentials of their industrial legacy to create new development opportunities.

The term Industrial Culture has no coherent definition, being discussed from different academic perspectives in the last few years. These discussions highlight the notion that culture and, with it, Industrial Culture are multifaceted and ambivalent concepts which can be examined from different perspectives. The understanding of Industrial Culture has undergone several changes in interpretation and definition across different time periods and spatial contexts. One classic approach is the focus on industrial heritage and the aesthetics of industrial architecture, including the preservation and reuse of old industrial sites and landscapes. Nevertheless, it is argued within this book that the intangible heritage and the industrial present are at least as important to (old) industrialised places. This is because such places often lack alternative development opportunities which hold the potential to unlock new development options and to strengthen the connection of the people to these places.

Based on these considerations, this publication conceptualises Industrial Culture as a transdisciplinary, holistic societal concept that addresses a special, place-bound cultural setting, a concentration of specific expertise, attitudes, values and traditions. It is grounded in the specific institutionalised routines of industrial structures, their incorporated conventions, beliefs and production patterns, and the interlinked social factors beyond the factory itself. It builds on tangible

material and intangible nonmaterial elements originating from the sphere of industrial production in the past, present and future.

Regarding the role of Industrial Culture in regional development, the publication identifies four different thematic fields, which are relevant in the target regions. Along with a wide range of examples derived from practical project activities from across the project partnership, the thematic fields discussed are: 'Industrial Culture, Innovation and Creativity', 'Industrial Culture and Local Identity', 'Industrial Culture, Place-branding and Tourism' and 'Industrial Culture, Education and the Attraction of a Workforce'. Furthermore, the publication highlights the European dimension of the concept and its potential to connect (old) industrial regions across boundaries.

Overall, this document provides a deeper theoretical 'grounding' of the term 'Industrial Culture', framing it as a dynamic phenomenon, based on social interaction and networking, while being place-bound and locally embedded. The text offers a wider discussion on its potentials and shortcomings, outlining further fields for academic research. Furthermore, the text discusses different understandings and relevance of Industrial Culture, along with various examples, focusing on non-metropolitan industrial regions in the context of regional development. It highlights practical actions that have been pursued by the InduCult2.0 partnership. Based on this, the publication proves that Industrial Culture can serve as a concept to tackle developmental challenges in the target areas mentioned. It can be used to frame future development strategies for (old) industrial regions, where various processes concerning industrial transformations need to be addressed.

ERWEITERTE ZUSAMMENFASSUNG (GER)

Dieses Buch zielt darauf ab, den Begriff der „industriellen Kultur“ im mitteleuropäischen Kontext konzeptionell und empirisch zu erfassen. Dabei stützt es sich auf die Forschungsergebnisse des Projekts InduCult2.0 (www.inducult.eu). Im Mittelpunkt des Projekts stand die Nutzung der spezifischen „industriellen Kultur“ als Mittel zur Wiederbelebung alter Industriestandorte und zur Förderung des dortigen Pioniergeistes. Zusammen mit acht regionalen Projektpartnern und deren Aktivitäten haben die wissenschaftlichen Institutionen des Projekts den Begriff der industriellen Kultur durch Forschung und Publikationen untersucht. Ziel des Projekts war es, den Begriff im Bereich der Stadt- und Regionalentwicklung, insbesondere in kleinen und mittleren Städten Mitteleuropas, nutzbar zu machen. Diese Publikation stellt die wichtigsten Ergebnisse der Projektaktivitäten und der begleitenden Forschung vor.

In den letzten Jahrzehnten hat die verarbeitende Industrie in Europa durch Automatisierung, Anpassung an globalisierte Produktionsmuster und Marktöffnung in den ehemals staatlich geführten Volkswirtschaften, tief greifende Transformationsprozesse durchlaufen. Dieser tiefgreifende Wandel in den europäischen Industriegesellschaften wird in der wissenschaftlichen Literatur immer wieder hervorgehoben. Diese Prozesse haben auch bedeutende soziale und wirtschaftliche Auswirkungen auf viele alte Industriestädte Mitteleuropas.

Auf der anderen Seite wurde nach der Finanzkrise 2007-2008 wieder vermehrt die politische Aufmerksamkeit auf die europäische Industrieproduktion gelenkt. Die Europäische Union, die nationalen und regionalen Regierungen haben dabei Strategien für eine Reindustrialisierung festgelegt (u.a. durch Ansätze wie “Smart Specialisation”), welche die Chancen von “Industry 4.0” nutzen und allgemein zur Stärkung des industriellen Sektors beitragen sollen (z.B. New Industrial Policy Strategy 2017).

Während die Auswirkungen dieser Politik bisher nur skizzenhaft zu erahnen sind, ist die Entwicklung der industrialisierten Standorte in Mitteleuropa von hoher Diversität geprägt. Unterschiedliche Trends von fortschreitender Deindustrialisierung, funktionierenden Kernindustrien und Reindustrialisierung schaffen ein komplexes räumliches Muster des Fertigungssektors. In dieser Situation bedarf der Begriff der “industriellen Kultur” weiterer Untersuchungen, da er ein endogenes Potenzial für die zukünftige Entwicklung alter Industrieregionen birgt. Denn gerade an solchen Orten hat die lange wirtschaftliche Vorherrschaft der Industrieproduktion zu einem spezifischen kulturellen Umfeld geführt, das sich aus bestimmten immateriellen Gütern wie Fähigkeiten, Einstellungen, Traditionen sowie materiellen Denkmälern und Artefakten zusammensetzt. Die Hauptfrage in diesem Buch ist, wie Regionen die kulturellen Potenziale ihres industriellen Erbes nutzen können, um neue Entwicklungsmöglichkeiten zu schaffen.

Der Begriff industrielle Kultur hat keine kohärente Definition und wurde in den letzten Jahren aus verschiedenen akademischen Perspektiven diskutiert. Diese Diskussionen unterstreichen die Vorstellung, dass Kultur - und damit Industriekultur - ein facettenreiches und ambivalentes Konzept ist, das aus verschiedenen Perspektiven betrachtet werden kann. Der Begriff und sein Verständnis hat mehrere Veränderungen in der Interpretation und der Definition über verschiedene Zeiträume und räumliche Zusammenhänge hinweg erfahren. Ein klassischer Ansatz ist der Fokus auf das Industrieerbe und die Ästhetik der Industriearchitektur, einschließlich der Erhaltung und Wiederverwendung alter Industrieanlagen und Landschaften. Dennoch wird in diesem Buch argumentiert, dass das immaterielle, kulturbasierte Erbe und die Gegenwart der industriellen Produktion in der Gesellschaft für alte Industriestandorte mindestens ebenso wichtig ist. Denn solchen Orten fehlen oft alternative Entwicklungspfade, die das Potenzial haben, neue Optionen zu erschließen und die Bindung der Menschen an diese Orte zu stärken.

Basierend auf diesen Überlegungen konzeptioniert diese Publikation die industrielle Kultur als ein transdisziplinäres, ganzheitliches Gesellschaftskonzept, das sich an ein besonderes, ortsgebundenes Kulturumfeld, also eine Konzentration von spezifischem Fachwissen, Einstellungen, Werten und Traditionen richtet. Sie gründet sich auf die spezifischen institutionalisierten Routinen industrieller Strukturen, ihre eingegliederten Konventionen, Überzeugungen und Produktionsmuster, sowie die miteinander verknüpften sozialen Faktoren außerhalb der Fabrik selbst. Sie baut auf materiellen und immateriellen Elementen auf, die aus dem Bereich der industriellen Produktion in Vergangenheit, Gegenwart und Zukunft stammen.

Im Hinblick auf die Rolle der industriellen Kultur bei der regionalen Entwicklung werden in dieser Publikation vier verschiedene Themenbereiche identifiziert, die in den Zielregionen relevant sind. Anhand einer Vielzahl von Beispielen, die sich aus praktischen Projektaktivitäten ableiten, werden die folgenden Themenfelder diskutiert: “Industriekultur, Innovation und Kreativität”, “Industriekultur und lokale Identität”, “Industriekultur, Place-Branding und Tourismus” und “Industriekultur, Bildung und Arbeitskräftegewinnung”. Darüber hinaus hebt die Veröffentlichung die europäische Dimension des Konzepts hervor und betont sein Potenzial alte Industrieregionen über Grenzen hinweg zu verbinden.

Insgesamt bietet dieses Dokument eine tiefere theoretische Fundierung des Begriffs industrielle Kultur, welche ihn als dynamisches Phänomen auf der Grundlage sozialer Interaktion und Vernetzung umreißt, wobei es aber gleichzeitig ortsgebunden und lokal verankert ist. Der Text bietet eine breitere Diskussion über seine Potenziale und Mängel und skizziert weitere Bereiche für die akademische Folge-Forschung. Darüber hinaus werden im Text unterschiedliche Verständnisse und die allgemeine Relevanz der industriellen Kultur anhand verschiedener Beispiele diskutiert, wobei der Schwerpunkt auf Industrieregionen außerhalb von Metropolregionen liegt. Es werden praktische Maßnahmen hervorgehoben, die im Rahmen der Partnerschaft InduCult2.0 durchgeführt wurden. Darauf aufbauend belegt die Publikation, dass die Industriekultur als Konzept zur Bewältigung entwicklungspolitischer Herausforderungen in den genannten Zielgebieten dienen kann. Es kann verwendet werden, um zukünftige Entwicklungsstrategien für Industrieregionen zu entwerfen, in denen verschiedene Prozesse der industriellen Transformation angegangen werden müssen.

ROZŠÍŘENÉ SHRNUTÍ (CZ)

Tato kniha má za cíl vysvětlit pojem průmyslová kultura v kontextu střední Evropy a shrnout výsledky vědecké činnosti v rámci projektu InduCult2.0 (www.inducult.eu). Projekt je zaměřený právě na průmyslovou kulturu, která se pro nás stala cestou k oživení průmyslových měst a šíření průkopnického ducha. Vedle osmi projektových partnerů a jejich aktivit se na projektu podílely akademické instituce, které měly za cíl v rámci různých výstupů a publikací vymezit pojem průmyslové kultury. Cílem projektu byla konceptualizace pojmu s ohledem na rozvoj měst a regionů. Jednalo se o malá a středně velká města, která se nachází ve střední Evropě. Tato publikace představuje dopad projektových aktivit a výsledky akademické činnosti.

V posledních několika letech prošlo výrobní odvětví v Evropě hlubokými změnami, které byly zapříčiněny automatizací, globalizací a otevřením trhu v důsledku ústupu od státem řízené ekonomiky. Jak je uvedeno v literatuře, změny zapříčinily posun v myšlení a jednání evropské společnosti a měly hluboké sociální a ekonomické dopady.

Po ukončení ekonomické krize v roce 2007-2008 byla politická pozornost přesměrována právě na průmyslovou produkci. Evropská unie, národní a místní orgány správy začaly vytvářet strategie pro reindustrializaci skrze rozvoj tzv. "Smart Specialisation (specializace na chytrá řešení)", průmyslu 4.0 a podpory trhu práce v oblasti průmyslu (např. vznikla Strategie pro novou průmyslovou politiku 2017).

Vliv těchto politik je prozatím pouze povrchní. Rozvoj průmyslových území ve střední Evropě se vyznačuje velkou rozmanitostí. V některých oblastech přetrvává deindustrializace (ústup průmyslu), někde je průmysl dlouhodobě stabilní a existuje mnoho území, kde dochází k obnově průmyslu tzv. reindustrializaci. V současnosti je zapotřebí zkoumat možnosti využití průmyslové kultury, protože pro nás představuje vnitřní potencionál pro budoucí rozvoj tradičních průmyslových oblastí. V takových místech dlouhá hospodářská převaha průmyslové výroby přinesla specifické kulturní prostředí, které je tvořeno určitými nehmotnými aktivy, jako jsou dovednosti, postoje, tradice ale i hmatatelnými památkami a artefakty. Hlavní otázka, nad kterou se kniha zamýšlí je, jak mohou regiony využít kulturní potenciál průmyslového dědictví k vytvoření nových rozvojových příležitostí.

Podle diskuze osob s různými akademickými perspektivami, termín "průmyslová kultura" nemá koherentní definici. Společné diskuze stanovily, že kultura včetně průmyslové kultury je mnohostranný a ambivalentní koncept, který lze zkoumat z různých hledisek. Chápání definice prošlo několika změnami v různých časových obdobích a místních kontextech. Jeden z klasických pohledů představuje průmyslovou kulturu jako průmyslové dědictví, architekturu a ochranu a znovuvyužití starých průmyslových oblastí. Nicméně v této knize se argumentuje, že nehmotné kulturní dědictví a současnost průmyslové produkce ve společnosti jsou pro staré průmyslové oblasti přinejmenším stejně důležité. Je tomu tak proto, že na takových místech často chybí alternativní možnosti vývoje, které mají potenciál udržovat celkový rozvoj a posílit propojení lidí s regionem.

Na základě těchto zjištění publikace konceptualizovala „průmyslovou kulturu" jako mezidisciplinární, holistický a společenský koncept, který se zabývá místem vázaným na kulturu a koncentrací specifických znalostí, postojů, hodnot a tradic. Je založen na specifických institucionalizovaných činnostech průmyslových struktur, jejich zakotvených konvencích, přesvědčeních a výrobních vzorcích, jakožto i na vzájemně propojených společenských faktorech existujících mimo továrnu. Vychází z hmotných (materiálních) a nehmotných prvků pocházejících z oblasti průmyslové výroby v minulosti, současnosti a budoucnosti.

Pokud se jedná o úlohu průmyslové kultury v regionálním rozvoji, publikace uvádí čtyři různé tematické oblasti, které jsou relevantní v průmyslových regionech. Na základě široké škály příkla-

dů, vycházejících z praktických projektových aktivit napříč celým partnerstvím, jsou diskutovány tyto tematické oblasti: "Průmyslová kultura, inovace a kreativita", "Průmyslová kultura a místní identita", "Průmyslová kultura jako nástroj pro cestovní ruch", "Průmyslová kultura, vzdělání a oslovení budoucí pracovní síly". Publikace dále zdůrazňuje evropskou dimenzi koncepce a její potenciál spojit (staré) průmyslové oblasti.

Tento dokument poskytuje hlubší teoretickou „základnu" pojmu „průmyslová kultura", jež představuje jako dynamický fenomén, založený na společenské interakci a vytváření sítí, které jsou vázané na jedno místo. Text nabízí širší diskuzi o jejích potenciálech a nedostatcích, které představují další oblasti akademického výzkumu. Dále se text na základě příkladů spojených s místním rozvojem zabývá různými perspektivami pro porozumění pojmu průmyslová kultura. Zdůrazňuje hlavně praktická opatření, která byla testována v rámci partnerství v projektu InduCult2.0. Na základě toho publikace dokládá, že průmyslová kultura může sloužit jako řešení výzev v oblasti rozvoje ve výše jmenovaných tematických oblastech. Může být použita pro rámcování budoucích strategií rozvoje (starých) průmyslových oblastí, kde je třeba řešit různé procesy týkající se průmyslových transformací.

SINTESI (ITA)

Questa pubblicazione si propone di sviluppare il concetto di Cultura Industriale in un contesto mitteleuropeo, riassumendo i risultati della ricerca condotta nell'ambito del progetto InduCult2.0 (http://www.inducult.eu). Il progetto si è concentrato sulla Cultura Industriale come strumento per rilanciare le (vecchie) città industriali e promuovere lo spirito pionieristico. Insieme ad otto partner di progetto in rappresentanza di altrettante regioni, che hanno sviluppato le loro attività progettuali, le istituzioni accademiche coinvolte nel progetto hanno inquadrato il concetto di "Cultura Industriale" attraverso vari output e pubblicazioni. Obiettivo del progetto è mettere a fuoco la Cultura Industriale nell'ambito dello sviluppo urbano e regionale, in particolare nelle città di piccolo e medie dimensioni dell'Europa centrale. Questa pubblicazione presenta i principali risultati delle attività progettuali e del lavoro di ricerca.

Negli ultimi anni, le industrie manifatturiere in Europa hanno vissuto profonde trasformazioni legate all'automazione, all'adattamento a modelli di produzione globalizzati e all'apertura al mercato nelle ex economie collettiviste. Ciò ha causato modifiche di rilievo anche nella struttura sociale delle regioni industriali d'Europa, come evidenziato da numerosi studi scientifici. I trend indicate hanno infatti comportato profonde ripercussioni sociali ed economiche in numerose (vecchie) città industriali dell'Europa centrale.

L'attenzione del mondo politico in Europa è stato ricondotto verso la produzione industriale a seguito della crisi finanziaria del 2007-2008. L'Unione Europea, i governi nazionali e regionali hanno messo a punto strategie di reindustrializzazione attraverso lo sviluppo delle cosiddette "Smart Specializations", promuovendo le possibilità offerte da "Industria 4.0" e la valorizzazione del lavoro nel settore industriale (cfr. Nuova strategia di politica industriale 2017).

Mentre l'impatto di queste politiche rimane per il momento solo abbozzato, i modelli di sviluppo nelle regioni industrializzate dell'Europa Centrale sono connotati da forti diversità. Trend divergenti, che mostrano la prosecuzione della deindustrializzazione, industrie chiave che continuano ad essere operative, e l'avvio di processi di reindustrializzazione ,creano un tessuto spaziale complesso nel mondo del manifatturiero. In questa situazione il concetto di Cultura Industriale richiede ulteriori indagini, dal momento che conserva un potenziale endogeno per lo sviluppo futuro, in particolare nelle regioni di vecchia industrializzazione. In questi luoghi il lungo predominio economico della produzione industriale ha causato la nascita e lo sviluppo di un ambiente culturale peculiare, composto da asset intangibili come capacità, attitudini, tradizioni come pure di un patrimonio tangibile composto di monumenti e manufatti.

La questione principale di cui tratta questa pubblicazione è come le regioni possano utilizzare il potenziale culturale della loro eredità industriale al fine di creare nuove opportunità di sviluppo. Il termine "Cultura Industriale" non ha una definizione univoca, essendo tuttora in corso la discussione in merito nel mondo accademico, con riferimento alle diverse prospettive. Gli studi svolti evidenziano che la Cultura, e con essa la Cultura Industriale, è un concetto multiforme e ambivalente che può essere esaminato da diversi punti di vista. La sua comprensione ha subito numerosi cambiamenti nell'interpretazione e nella definizione, a seconda delle epoche e dei contesti territoriali. Un approccio classico è il focus sul patrimonio industriale e la qualità estetica dell'architettura industriale, che comprende la conservazione e il riutilizzo dei vecchi siti e aree industriali. In questa pubblicazione, tuttavia, viene considerato l'assunto che il patrimonio intangibile basato sulla cultura specifica e presente della produzione industriale nella società sia almeno altrettanto importante per le aree di (vecchia) industrializzazione. il motivo è che queste aree spesso mancano di opportunità di sviluppo alternative, tali da poter conservare il patrimonio promuovendo nuove opzioni per il territorio e nel contempo cementando il legame degli abitanti con il luogo dove vivono.

Sulla base di queste considerazioni questa pubblicazione sviluppa il concetto della Cultura Industriale come una tematica sociale olistica, la cui valenza travalica le diverse discipline, riguardando un ambiente culturale particolare, legato ai luoghi, una concentrazione di competenze specifiche, di attitudini, di valori e tradizioni. Le sue radici sono nelle abitudini istituzionalizzate delle strutture industriali che incorporano convenzioni valori modalità produttive come pure i fattori sociali interconnessi che vanno "oltre la fabbrica". La Cultura Industriale comprende elementi materiali, tangibili e altri immateriali, intangibili originati comunque nella sfera della produzione industriale nel passato, presente e futuro.

Con riferimento al ruolo della Cultura Industriale nello sviluppo regionale la pubblicazione identifica quattro differenti campi tematici, che sono rilevanti nelle regioni considerate. Attraverso un ampio spettro di esempi derivati dalle attività progettuali messe in pratica dal partenariato, le aree tematiche discusse sono:

- Cultura Industriale innovazione e creatività;
- Cultura Industriale e identità locale;
- Cultura Industriale, brand territoriali e turismo;
- Cultura Industriale e mondo della scuola e attrazione di capitale umano;

Viene inoltre sottolineata la dimensione europea del concetto e la sua potenzialità di mettere in contatto le regioni industriali superando le frontiere.

Nel complesso questo documento fornisce una base teorica approfondita riguardo al concetto di Cultura Industriale, che emerge come un fenomeno dinamico basato sull'integrazione sociale e sulle reti, pur restando legato alle condizioni locali e fortemente integrato al territorio. Il testo offre una discussione ampia sul suo potenziale e i suoi limiti, delineando ulteriori campi per la ricerca accademica. La pubblicazione tratta inoltre le diverse visioni relativamente alla rilevanza della Cultura Industriale, con numerosi esempi, focalizzandosi sulle regioni industriali non metropolitane nel contesto dello sviluppo regionale. Vengono evidenziate le azioni concrete che sono state realizzate dalla partnership del progetto europeo Inducult2.0. Sulla base dei dati raccolti, la pubblicazione dimostra come la Cultura Industriale possa essere utilizzata come un concetto per raccogliere la sfida dello sviluppo nelle aree target coinvolte, un tema che possa essere utilizzato per delineare future strategie di sviluppo per le (vecchie) regioni industriali, dove i vari processi che riguardano le trasformazioni dell'Industria dovranno essere considerati.

RAZŠIRJENI POVZETEK (SLO)

Knjiga, ki temelji na rezultatih raziskovanja opravljenega v evropskem transnacionalnem projektu Inducult2.0 (www.inducult.eu), je namenjena osvetlitvi koncepta industrijske kulture v Srednji Evropi. Projekt je usmerjen v to, kako stara industrijska mesta oživljajo to kulturo in s tem ponovno prebujajo industrijski pionirski duh. Prva naloga akademskih institucij je bila, i in njihovimi aktivnostmi, da skupaj z osmimi regionalnimi projektnimi partnerji na podlagi različnih virov in aktivnosti opredelijo izraz 'industrijska kultura'. Cilj projekta je bil konceptualizirati termin na področju mestnega in regionalnega razvoja, še posebej v manjših in srednje velikih mestih Srednje Evrope. Publikacija tako predstavlja glavne projektne aktivnosti in raziskovalne rezultate.

V zadnjih letih je šel evropski sekundarni gospodarski sektor, ki združuje bazično industrijo in gradbeni sektor, še enkrat znova skozi obsežen proces preobrazbe, ki so jo povzročili avtomatizacija, prilagoditev na globalne vzorce proizvodnje in odpiranje trgov v nekdanjih socialističnih, centralno vodenih državah. Izpostavljene spremembe industrijskih družb v Evropi imajo, kot je poudarjeno tudi v literaturi, obsežne družbene in gospodarske posledice na večino starih industrijskih mest v Srednji Evropi in se kažejo kot takoimenovana deindustrializacija.

Kljub tem spremembam pa se je v času gospodarske krize v letih 2007 in 2008 pozornost Evrope ponovno preusmerila v industrijsko proizvodnjo. Evropska unija, nacionalne in regionalne vlade so pripravile različne strategije za reindustrializacijo, kot je na primer politika 'pametne specializacije', spodbujanje možnosti za razvoj Industrije 4.0 in ovrednotenje dela v industriji, na primer v dokumentu Strategija EU za industrijsko politiko (2017).

Medtem ko učinkov teh politik še ne moremo ustrezno oceniti, lahko za razvoj srednjeevropskih industrijskih predelov rečemo, da so si med seboj različni glede obsega problemov in potencialov, ki so v njih prisotni. Nadaljujoči se trend deindustrializacije, delovanje glavnih industrijskih panog in reindustrializacija ustvarjajo zapleten prostorski vzorec proizvodnje. Zato je potrebno koncept še naprej raziskovati industrijsko kulturo kot pomemben endogen potencial za prihodnji razvoj starih industrijskih regij. Ta endogeni potencial predstavljajo posebne kulturne danosti, kot so znanje, identiteta, tradicije kot tudi materialni dokazi iz preteklosti, kot spomeniki in tehnična dediščina. Glavno vprašanje knjige je tako, kako lahko regije uporabijo te kulturne potenciale in svojo industrijsko preteklost za pripravo novih razvojnih možnosti.

Izraz 'industrijska kultura' zaenkrat še ni univerzalno opredeljen, zato so mu bile v zadnjem obdobju posvečene različne akademske razprave in dogodki. Te razprave se osredinjajo na dejstvo, da predstavlja kultura znotraj industrijske kulture večdimenzionalen in diametralen koncept, na katerega lahko gledamo z različnih vidikov. Razumevanje koncepta se tako vseskozi spreminja, pojavljajo se različne interpretacije in opredelitve, odvisne tudi od geografskega prostora. Eden izmed glavnih poudarkov opredelitev sta industrijska dediščina in estetika industrijske arhitekture, ki se nanašata na ohranjanje in ponovno rabo starih industrijskih območij in kulturnih krajin. V tej publikaciji kot pomemben del industrijske kulture izpostavljamo tudi nematerialno kulturno dediščino in prisotnost industrijske proizvodnje kot pomembna razvojna dejavnika teh območjih, čeprav na teh območjih primanjkuje razvojnih možnosti za razvoj tega potenciala in potencialno krepitev povezovanja deležnikov.

Upoštevajoč ta dejstva, ta publikacija opredeli industrijsko kulturo kot transdisciplinaren, holističen družbeni koncept, ki naslavlja posebno, na lokacijo vezano kulturno okolje, v katerem so prisotni visoka specializacija, specifična kulturna identiteta, vrednote in tradicije. Institucionalizirane industrijske strukture vključujejo prepričanja, navade in produkcijske vzorce, ki se navezujejo na družbeno ozadje industrijske proizvodnje. Vse skupaj - materialna in nematerialna dediščina, ki izhajata iz sfere industrijske

proizvodnje – tvorita industrijsko kulturo v preteklosti, sedanjosti in prihodnosti.

V povezavi z vlogo industrijske kulture v regionalne razvoju v publikaciji izpostavljamo štiri različna tematska področja, pomembna za ciljne regije. Skupaj s širokim naborom primerov, ki izhajajo iz projektnih aktivnosti regionalnih partnerjev, so obravnavana tematska področja: 'industrijska kultura, inovacije in ustvarjalnost', 'industrijska kultura in lokalna identiteta', 'industrijska kultura, znamčenje mest in turizem' ter 'industrijska kultura, izobraževanje in privlačnost za delovno silo'. Nadalje v publikaciji poudarjamo evropsko dimenzijo koncepta in njegovega potenciala za prekomejno povezovanje starih industrijskih območij.

Skupno tako dokument ponuja premišljeno teoretično opredelitev industrijske kulture, ki je razumljena kot dinamičen pojav, temelječ na družbeni interakciji in mreženju v okviru enega območja, iz katerega tudi izhaja in je vanj vpeto. Tekst ponuja razpravo o potencialih in slabostih ter izpostavlja vprašanja, ki jih je v zvezi s tem potrebno še nasloviti. Prav tako je osvetljena relevantnost koncepta in njegovega razumevanja, vključujoč primere, ki se osredotočajo na industrijske regije izven metropolitanskih območij, v kontekstu regionalnega razvoja. Izpostavlja tudi aktivnosti regionalnih partnerjev, izvedene v okviru partnerstva. Tako lahko zaključimo, da industrijska kultura služi kot koncept, s katerim naslovimo razvojne izzive in pripravimo razvojne strategije starih industrijskih regij, ki potrebujejo celostni pristop k industrijski preobrazbi.

PROŠIRENI SAŽETAK (CRO)

Cilj ove knjige je istražiti pojam industrijske kulture u srednjoeuropskom kontekstu, sažimajući rezultate istraživanja projekta InduCult2.0 (www.inducult.eu). Projekt je bio usmjeren na industrijsku kulturu kao način oživljavanja (starih) industrijskih gradova i poticanja pionirskog duha. Zajedno s osam regionalnih projektnih partnera i njihovim aktivnostima, akademske institucije u projektu uobličile su izraz „Industrijska kultura" kroz različite rezultate i publikacije. Cilj projekta bio je konceptualizacija pojma u području urbanog i regionalnog razvoja, posebno u malim i srednjim gradovima Srednje Europe. Ova publikacija predstavlja glavne rezultate projektnih aktivnosti i rezultata istraživanja.

Posljednjih godina proizvodne industrije u Europi ponovno su prošle kroz duboke transformacijske procese zahvaljujući automatizaciji, prilagodbi na globalizirane obrasce proizvodnje i otvaranju tržišta u bivšim gospodarstvima pod vodstvom države. To upućuje na dublji pomak u europskim industrijskim društvima, kao što je istaknuto u literaturi. Ovi trendovi također su imali duboke društvene i ekonomske posljedice na mnoge (stare) industrijske gradove u Srednjoj Europi.

Međutim, politička pažnja u Europi preusmjerena je na industrijsku proizvodnju, nakon financijske krize 2007.-2008. Europska unija, nacionalne i regionalne vlade uspostavljaju strategije za re-industrijalizaciju kroz razvoj „pametne specijalizacije", potičući mogućnosti „industrije 4.0" i valorizacije industrijskog rada (tj. Nova strategija industrijske politike 2017.).

Dok su učinci tih politika do sada ostali samo nedorečeni, razvoj industrijaliziranih mjesta u Srednjoj Europi obilježen je velikom raznolikošću. Divergentni trendovi nastavka deindustrijalizacije, funkcioniranja temeljnih industrija i re-industrijalizacije stvaraju složeni prostorni obrazac proizvodnje. Unutar ove situacije, pojam „industrijske kulture" zahtijeva daljnju istragu, budući da ima endogeni potencijal za budući razvoj starih industrijskih regija. U takvim mjestima dugotrajna gospodarska dominacija industrijske proizvodnje dovela je do specifičnog kulturnog okruženja koje se sastoji od određenih nematerijalnih dobara kao što su vještine, stavovi, tradicije, kao i opipljivi spomenici i predmeti. Glavno pitanje u ovoj knjizi je kako regije mogu iskoristiti kulturne potencijale svoje industrijske baštine kako bi stvorile nove razvojne mogućnosti.

Pojam „industrijska kultura" nema koherentnu definiciju, o kojoj se raspravljalo iz različitih akademskih perspektiva posljednjih godina. Ove rasprave naglašavaju ideju da je industrijska kultura višestruki i ambivalentni koncept koji se može ispitati iz različitih perspektiva. Njegovo razumijevanje doživjelo je nekoliko promjena u tumačenju i definiranju u različitim vremenskim razdobljima i prostornim kontekstima. Jedan klasičan pristup je usredotočenost na industrijsku baštinu i estetiku industrijske arhitekture, uključujući očuvanje i ponovno korištenje starih industrijskih područja i krajobraza. Ipak, u ovoj knjizi se tvrdi da je nematerijalna baština temeljena na kulturi i sadašnjost industrijske proizvodnje u društvu je jednako važna za (stara) industrijalizirana mjesta. To je zbog toga što takvim mjestima često nedostaju alternativne mogućnosti razvoja, koje imaju potencijal za otvaranje novih razvojnih mogućnosti i jačanje povezanosti ljudi s tim mjestima.

Na temelju ovih razmatranja, ova publikacija konceptualizira industrijsku kulturu kao transdisciplinarni, holistički društveni koncept koji se bavi posebnim, kulturnim okruženjem vezanim za određena mjesta, koncentracijom specifičnih stručnosti, stavova, vrijednosti i tradicija. Temelji se na specifičnim institucionaliziranim rutinama industrijskih struktura, njihovim ugrađenim konvencijama, uvjerenjima i obrascima proizvodnje, kao i na međusobno povezanim društvenim čimbenicima izvan same tvornice. Gradi se na opipljivim, materijalnim i nematerijalnim elementima koji potječu iz sfere industrijske proizvodnje u prošlosti, sadašnjosti i budućnosti.

Što se tiče uloge industrijske kulture u regionalnom razvoju, publikacija identificira četiri

različita tematska područja koja su relevantna u ciljanim regijama. Uz širok spektar primjera, izvedenih iz praktičnih projektnih aktivnosti iz cijelog projektnog partnerstva, tematska područja o kojima se raspravljalo su: „Industrijska kultura, inovacije i kreativnost“, „Industrijska kultura i lokalni identitet“, „Industrijska kultura, brendiranje mjesta i turizam“, i ''Industrijska kultura, obrazovanje i privlačenje radnika''. Nadalje, publikacija naglašava europsku dimenziju koncepta i njegov potencijal povezivanja (starih) industrijskih regija preko granica.

Sve u svemu, ovaj dokument pruža dublje teorijsko utemeljenje pojma“ industrijska kultura”, uokvirujući ga kao dinamičan fenomen, utemeljen na društvenoj interakciji i umrežavanju, dok je ona vezana za mjesto i lokalno ugrađena. Tekst nudi širu raspravu o njezinim potencijalima i nedostacima, navodeći daljnja područja za akademska istraživanja. Nadalje, u tekstu se razmatraju različita shvaćanja i važnost industrijske kulture, uz različite primjere, s naglaskom na negradske industrijske regije u kontekstu regionalnog razvoja. U njemu su istaknute praktične radnje koje je provodilo partnerstvo InduCult2.0. Na temelju toga, publikacija dokazuje da industrijska kultura može poslužiti kao koncept za rješavanje razvojnih izazova u spomenutim ciljanim područjima. Može se koristiti za izradu budućih razvojnih strategija za (stare) industrijske regije, gdje će se morati pozabaviti različitim procesima vezanim uz industrijske transformacije.

ROZSZERZONE PODSUMOWANIE (POL)

Celem niniejszej publikacji jest zbadanie i przybliżenia pojęcia Kultury Przemysłowej w kontekście Europy Środkowej, podsumowującej wyniki badań z projektu InduCult2.0 (www.inducult.eu). Projekt skupił się na Kulturze Przemysłowej jako sposobu ożywiania miast o tradycjach przemysłowych i rozwoju ducha innowacyjności. Partnerzy naukowi projektu wraz z ośmioma regionalnymi partnerami projektu i ich działaniami projektowymi zdefiniowali pojęcie "Kultury Przemysłowej" poprzez dorobek i publikacje projektowe. Celem projektu była konceptualizacja tego pojęcia w obszarze tematyki rozwoju miast i rozwoju regionalnego, szczególnie w odniesieniu do małych i średnich miasta w Europy Środkowej. Niniejsza publikacja przedstawia główne rezultaty działań i wyniki badań w ramach projektu.

W ostatnich latach przemysł wytwórczy w Europie ponownie przechodzi głębokie procesy transformacji z powodu automatyzacji, adaptacji do zglobalizowanych wzorców produkcji i otwarcia rynków w dawnych gospodarkach kierowanych przez państwo. Wskazuje to na głęboką przemianę w przemysłowych społeczeństwach Europy, co podkreślono w literaturze. Trendy te miały również głębokie reperkusje społeczne i gospodarcze w wielu (dawnych) przemysłowych miastach w Europie Środkowej.

Niemniej jednak następstwie kryzysu finansowego w latach 2007-2008 w Europie polityczna uwaga ponownie skierowana jest na produkcje przemysłową. Unia Europejska, rządy krajowe i samorządy regionalne wdrażają strategie reindustrializacji dla rozwoju "Inteligentnych Specjalizacji", sprzyjają możliwościom "Przemysłu 4.0" i na nowo doceniają wartość pracy w sektorze przemysłu (tj. Nowa strategia polityki przemysłowej na 2017 r.).

Podczas gdy efekty tej polityki są jak dotąd odległe to rozwój miejsc uprzemysłowionych w Europie Środkowej odznacza sie dużą różnorodnością. Rozbieżne tendencje utrzymującej się dezindustrializacji, funkcjonowania głównych gałęzi przemysłu oraz reindustrializacji tworzą złożony przestrzenny wzorzec produkcji. W tej sytuacji pojęcie "Kultury Przemysłowej" wymaga dalszych poszukiwań naukowych, ponieważ zawiera się w nim endogenny potencjał dla przyszłego rozwoju starych regionów przemysłowych. W miejscach uprzemysłowionych długa ekonomiczna przewaga produkcji przemysłowej stworzyła określone otoczenie kulturowe, które składa się z pewnych wartości niematerialnych, takich jak umiejętności, postawy, tradycje, a także namacalne pomniki i artefakty. Głównym pytaniem w tej książce jest to, w jaki sposób regiony mogą wykorzystać potencjał kulturowy ich dziedzictwa przemysłowego, aby stworzyć nowe możliwości rozwoju.

Termin "Kultura Przemysłowa" nie ma spójnej definicji i podlega dyskusji z różnych perspektyw akademickich w ostatnich latach. Dyskusje te podkreślają, że kultura, a wraz z nią Kultura Przemysłowa, jest wieloaspektową i ambiwalentną koncepcją, którą można badać z różnych perspektyw. Jej zrozumienie podległo kilkakrotnie zmianom jeśli chodzi o interpretację i samą definicję w różnych okresach czasowych i kontekstach przestrzennych. Jednym z klasycznych podejść jest skupienie się na dziedzictwie przemysłowym i estetyce architektury przemysłowej, w tym na zachowaniu i ponownym wykorzystaniu starych obiektów przemysłowych i krajobrazów. Niemniej jednak w tej książce dowodzi się, że niematerialne, kulturowe dziedzictwo i teraźniejszość produkcji przemysłowej w społeczeństwie jest co najmniej tak samo ważne dla miejsc (dawno) uprzemysłowionych. Dzieje się tak, ponieważ w takich miejscach często brakuje alternatywnych możliwości rozwoju, które mogą potencjalnie odblokować nowe opcje rozwoju i wzmocnić więź ludzi z tymi miejscami.

W oparciu o te rozważania niniejsza publikacja określa Kulturę Przemysłową jako interdyscyplinarną, całościową koncepcję społeczną, która odnosi się do szczególnego, związanego z miejscem otoczenia kulturowego, koncentracji określonej wiedzy, postaw, wartości i tradycji. Opiera się na określonych zinstytucjonalizowanych zwyczajach struktur przemysłowych, ich przyjętych konwencjach, przekonaniach i wzor-

cach produkcyjnych, a także na powiązaniu ze sobą czynników społecznych poza obszarem fabryki. Opiera się na materialnych i niematerialnych elementach pochodzących ze sfery produkcji przemysłowej z przeszłości, teraźniejszości i przyszłości.

W odniesieniu do roli Kultury Przemysłowej w rozwoju regionalnym, publikacja określa cztery różne dziedziny tematyczne, które są istotne w regionach docelowych. Oprócz szerokiej gamy przykładów, wywodzących się z praktycznych działań projektowych w ramach partnerstwa projektowego, omawiano następujące obszary tematyczne: "Kultura przemysłowa, innowacyjność i kreatywność", "Kultura przemysłowa i tożsamość lokalna", "Kultura przemysłowa, marketing miejsca i turystyka" i "Kultura przemysłowa i edukacja i przyciągnięcie siły roboczej". Ponadto publikacja podkreśla europejski wymiar tej koncepcji i jej potencjał łączenia się regionów (dawno) przemysłowych ponad granicami.

Ogólnie rzecz biorąc, dokument ten zapewnia głębsze teoretyczne "uzasadnienie" terminu "Kultura Przemysłowa", określając go jako dynamiczne zjawisko, oparte na interakcjach społecznych i tworzeniu sieci, będąc jednocześnie miejscem związanym i lokalnie osadzonym. Tekst zawiera szerszą dyskusję na temat jej potencjału i mankamentów z nią związanych, nakreślając dalsze pola dla badań akademickich. Ponadto w tekście omówiono różne pojmowanie i znaczenie Kultury Przemysłowej na różnych przykładach, koncentrując się na regionach przemysłowych innych niż metropolie w kontekście rozwoju regionalnego. Podkreśla praktyczne działania, które były realizowane przez partnerstwo InduCult2.0. Na tej podstawie publikacja udowadnia, że Kultura Przemysłowa może służyć jako koncepcja radzenia sobie z wyzwaniami rozwojowymi we wspomnianych obszarach docelowych. Można tą publikację wykorzystać do kształtowania przyszłych strategii rozwoju na rzecz (starych) regionów przemysłowych, które będą musiały odnieść się do rozmaitych procesów dotyczących przeobrażeń przemysłu.

SAMENVATTING (NDL)

Deze publicatie heeft als doel het concept Industrie Cultuur in zijn Centraal-Europese context te verduidelijken, en vat daarmee de wetenschappelijke resultaten van het InduCult2.0 project samen (www.inducult.eu). Het project ziet Industrie Cultuur als een manier om (voormalige) industrie regio's te dynamiseren en de aanwezige pioneer spirit aan te wakkeren. Samen met acht regionale project partners en de door hen uitgevoerde acties, kaderden de academische instellingen de term Industrie Cultuur in verscheidene outputs en publicaties. Het project doelde op het conceptualiseren van de term met betrekking tot stedelijke en regionale ontwikkeling, voornamelijk in kleine en middelgrote gemeenten in Centraal-Europa. Deze publicatie bundelt de belangrijkste resultaten van de project activiteiten en onderzoeksresultaten.

De afgelopen jaren onderging de maakindustrie in Europa opnieuw heel wat veranderingen ten gevolge van automatisering, aanpassingen aan de globale productie patronen en het openen van nieuwe markt in voormalige staatseconomieën. Dit brengt een nieuwe shift mee in de industriële maatschappij, zoals aangegeven in de literatuur. Deze trends hebben met andere woorden ook een diepgaande sociale en economische repercussie op talrijke (voormalige) industrie centra in Centraal-Europa.

Echter, binnen de Europese politiek is er vernieuwde aandacht voor industriële productie, en vooral ten gevolge van de financiële crisis van 2007-2008. De Europese Unie, alsook nationale en regionale beleidsmakers formuleren strategieën voor re-industrialisatie, met name door het ontwikkelen van 'Smart Specialisation', het ondersteunen van mogelijkheden betreffende 'Industry4.0' en het valoriseren van industrieel werk en mankrachten (bv. 'New Industrial Policy Strategy 2017').

Terwijl de impact van deze beleidsstrategieën eerder oppervlakkig te beoordelen valt, ontwikkelen industrie locaties in Centraal-Europa op zeer verscheiden manieren. Uiteenlopende trends op vlak van de-industrialisatie, nog functionerende kern industrieën en re-industrialisatie monden uit in een complex ruimtelijk patroon. Binnen deze context vraagt het concept 'Industrie Cultuur' om verder onderzoek, gezien het een belangrijk potentieel in zich draagt voor de toekomstige ontwikkeling van voormalige industrie regio's. In deze locaties heeft de jarenlange dominantie van de maakindustrie op de economie ook een specifieke culturele setting doen ontstaan, bestaande uit immateriële assets zoals competenties, arbeidsattitudes en tradities en uit tastbare monumenten en artefacten. De hoofdvraag van deze publicatie is hoe regio's dit cultureel potentieel kunnen gebruiken en verzilveren in nieuwe ontwikkelingsmogelijkheden.

Er bestaat geen coherent definitie voor de term 'Industrie Cultuur', zoals we merken uit de talrijke academische werken die de laatste jaren werden geformuleerd. Deze discussies tonen aan dat cultuur, en bij uitbreiding Industrie Cultuur, een ambivalente term is met vele facetten en met verschillende betekenissen afhankelijk van het perspectief waarmee het benaderd wordt. De betekenis en interpretatie van het concept onderging ook al verscheidene veranderingen afhankelijk van het tijdskader en de ruimtelijke context. Een van de klassieke benadering focust op industrieel erfgoed en industrieel architecturale esthetiek, met inbegrip van het behouden en ontwikkelen van oude industrie sites en landschappen. In deze publicatie wordt er echter geargumenteerd dat het immateriële en op cultuur gefundeerde erfgoed, alsook de huidige industriële productie en maatschappij minstens even belangrijk zijn wanneer het voormalige industrie regio's betreft. Dit omdat het deze locaties vaak ontbreekt aan alternatieve ontwikkelingsmogelijkheden, die mogelijks hun potentieel zouden blootleggen en de connectie van mens en plaats zouden kunnen versterken.

Op basis van deze ideeën, conceptualiseert deze publicatie Industrie Cultuur als een transdisciplinair, holistisch sociaal concept dat verwijst naar een speciale, plaatsgebonden culturele setting, en naar een cluster van specifieke

expertise, waarden en tradities. Het vindt zijn oorsprong in de specifieke geïnstitutionaliseerde routines van industriële structuren, de daarin geïntegreerde conventies, overtuigingen en productiepatronen, en de daarmee gelinkte sociale factoren aanwezig buiten het fabrieksgebeuren. Het bouwt voort op tastbare, materiële en immateriële elementen die elk hun oorsprong vinden in vroegere, huidige en toekomstige industriële productie contexten.

De publicatie definieert ook vier verschillende thema's met betrekking tot regionale ontwikkeling, elk relevant voor de target regio's: 'Industrie Cultuur, Innovatie en Creativiteit', 'Industrie Cultuur en Lokale Identiteit', 'Industrie Cultuur, Locatie-Branding en Toerisme' en 'Industrie Cultuur, Onderwijs en Aantrekken van arbeidskrachten'. Elk van de thema's wordt geïllustreerd aan de hand van een reeks voorbeelden, afkomstig van de door het partnerschap uitgevoerde activiteiten. Op die manier onderstreept de publicatie de Europese dimensie van het concept en het potentieel om (voormalige) industrie regio's te verbinden over de grenzen heen.

In het algemeen voorziet dit document een brede theoretische basis voor de term 'Industrie Cultuur', en kadert het de term als een dynamisch fenomeen, gebaseerd op plaatsgebonden en lokale sociale interactie en netwerken. De tekst schetst een bredere discussie met betrekking tot zowel het potentieel als de tekortkomingen van Industrie Cultuur en opent zo nieuwe horizonten voor toekomstig wetenschappelijk onderzoek. Bovendien worden verschillende betekenissen alsook de relevantie van Industrie Cultuur in het licht geplaatst aan de hand van talrijke praktische voorbeelden voor niet stedelijke industrie regio's, ontwikkeld door het InduCult2.0 partnerschap. Op basis daarvan, toont de publicatie aan dat Industrie Cultuur ingezet kan worden om regionale ontwikkelingsuitdagingen te tackelen, en om de huidige industrie transitie processen te ondersteunen.

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