



Tekniikan Waiheita ISSN 2490-0443 Tekniikan Historian Seura ry. 37. vuosikerta:4 2019 https://journal.fi/tekniikanwaiheita



The Linguistic Heritage of Industry: Case Studies from the Industrial Community of Varkaus

Leena Kolehmainen & Anna Sivula

Anna Sivula
b https://orcid.org/0000-0002-3544-7318

To cite this article: Leena Kolehmainen & Anna Sivula, "The Linguistic Heritage of Industry: Case Studies from the Industrial Community of Varkaus" Tekniikan Waiheita 37, no. 4 (2019): 35–56. https://dx.doi.org/10.33355/tw.88909

To link to this article: https://dx.doi.org/10.33355/tw.88909

The Linguistic Heritage of Industry: Case Studies from the Industrial Community of Varkaus

Leena Kolehmainen¹ & Anna Sivula²

The goal of this article is to introduce the notion of industrial linguistic heritage into the study of industrial heritage. The linguistic heritage of industry is investigated in the light of two case studies from selected linguistic landscapes of Varkaus, a small industrial community in eastern Finland. The case studies illuminate both multilingualism of the industrial community as industrial linguistic heritage and language as a means to verbalize and commemorate the industrial past of the community. The examination of the linguistic landscape data shows that language is an important strategic means to verbalize the past, to restore shared histories and participatory experiences, and to carry out commemorative identity work in the industrial heritage community.

1. Introduction

Industrial heritage is a relatively new branch of cultural heritage, which began growing in the 1960s. Before the 1960s, the remnants of industrial culture were generally not considered as cultural heritage, and industrial communities were not considered to be cultural heritage communities. The entire industrial heritage is socially constructed from certain selected, valued, and conserved tangible or intangible remnants of industrial culture. This demands the social action of remembering the past in order to construct and maintain industrial heritage, which in turn demands a heritage community that elaborates the identities of its members.³

The study of industrial cultural heritages is rooted in various academic disciplines, especially industrial archaeology, social and cultural history, and history of technology, ethnology and art history. The research interests of industrial heritage have varied according to the academic discipline. The objects of research range from the very intangible skills, e.g. memories, or even emotions of the industrial workers ⁴ and historical values as defined by

¹ Leena Kolehmainen is a professor of German language at the University of Turku. Her research interests include the study of diverse grammatical phenomena, the comparative and corpus linguistic study of languages and translated texts, and the contact-linguistic study of translation. In her current research, she is interested in the linguistic effects of industry and in questions of individual and societal multilingualism.

² Anna Sivula is a professor of cultural heritage at the University of Turku. Her research interests include the study of historiography and methodologies of historical research, and the dynamics of cultural heritage communities. In her current research, she is interested in the identity work of industrial heritage communities.

³ On heritage communities, see Emma Waterton and Laurajane Smith, "The recognition and misrecognition of community heritage". *International Journal of Heritage Studies*, 16, 1–2, (2010); Laurajane Smith and Emma Waterton, *Heritage, Communities and Archaeology* (New York: Bloomsbury, 2009), 4–16 and Anna Sivula, "Tilaushistoria identiteettityönä ja kulttuuriperintöprosessina. Paikallisen historiapolitiikan tarkastelua". *Kulttuuripolitiikan tutkimuksen vuosikirja* (2015), 65.

⁴ E.g. Maria Vanha-Similä, *Yhtiöön, Yhtiöön! Lapsiperheiden arki Forssan tehdasyhteisössä 1950–1970-luvuilla* (Turku: Turun yliopisto, 2017), 29–34.

the owners of the industry,⁵ to the industrial landscapes, buildings, machines, technologies and different skills, manners, customs, roles, oral histories, cultural symbols and representations, altogether research objects, whose intangible elements are not clearly demarcated from the tangible ones.

The historical and archaeological stratum of the study of the material traces of the industrial age derives from the tradition of industrial archeology of the 19th century in Britain. The representatives of this stratum were not interested in intangible heritage, but historians, for example, have been interested in the formation of the values of the tangible industrial cultural heritage, that is, the heritagization of old factories and other industrial monuments. Folklore researchers and oral historians were, in turn, interested in the culture of industrial work, as well as in documenting, interpreting, storing, and preserving data sources that describe the lifestyle and habitats of the industrial working population or the developed industrial cultural environment. Their focus was mostly on the laborer and working-class culture, while the heritages of industrial enterprises have merely been studied by historians and art historians.

In a multidisciplinary field of research, there are always blind spots, until a new discipline enters the field. One of the heritological blind spots are the languages and the linguistic heritage of industry that represent both the tangible and intangible side of the heritage. Languages have rarely been the main subject in studies on industrial heritage and industrial history, ¹⁰ although they are one of the resources inherent within the industrial community. Multinational and global industries influence the languages of the local community and the linguistic repertoire of its members. In industrial communities, the industry gives rise to the emergence of new linguistic neighborhoods. When the local business or manufacture ends in a bankruptcy or merger of a company, languages continue their being in the local industrial community. Perceptions and knowledge of languages continue to live in the members' cultural memory, which influences the ways how they interpret the past and present. Languages are one element that determines how the members of the industrial community identify themselves and how others see them.

The goal of this article is to introduce the notion of industrial linguistic heritage into the study of industrial heritage and to illustrate some possible ways to approach it. By combining viewpoints of cultural heritage research and language studies, we seek to open new insights into the identities and cultural resources of industrial communities. A key element in the multilingualism of industrial communities is labor migration, which industry draws in varying volumes from near and far to its production sites. The industrial

⁵ E.g. Maarit Grahn, *Perheyhtiö ja paikallisuus. A. Ahlström Osakeyhtiön historian perintö Noormarkussa* (Turku: Turun yliopisto, 2014).

⁶ Judith Alfrey and Tim Putnam. *The Industrial Heritage: Managing Resources and Uses* (London: Routledge, 1992).

⁷ Maths Isacson, "Brottningar med industriearvsbegreppen". In Annika Alzén and Birgitta Burell (eds.), Otydligt. Otympligt. Otagligt. Det industriella kulturarvets utmaningar (Stockholm: Carlssons, 2005), 44–54.

⁸ Annika Alzén & Birgitta Burell (eds.), *Otydligt. Otympligt. Otagligt. Det industriella kulturarvets utmaningar* (Stockholm: Carlssons, 2005), 8-14.

⁹ Anna Sivula: "Teollinen kulttuuriperintö vakiintui suomalaiseen historiatietoisuuteen". *Teollisen kulttuuriperinnön monet muodot. Tekniikan Waiheita 2/2014 (2014), 10–29.*

¹⁰ See however e.g. Anna Sivula. "Yrityksen kielestä teollisuusmuistojen kieleksi". In *Ruotsinkielisten kulttuu-riperintöä*, eds. Riina Haanpää and Outi Tuomi-Nikula (Pori: Turun yliopisto, 2013), 139–156.

experts and workers, along with their families, carry with them their languages and dialects when they move to a new location. Under these circumstances, the industrial communities develop into new kinds of language communities that stand out from their environment as multilingual industrial islands. Their linguistic repertoire often differs from the linguistic repertoire of the surrounding society. In addition to the presence of multiple languages, the industry leaves traces in the language itself, in the public names of the community and in the language varieties and specialized terminology known by the community members.

In this article, we explore the linguistic heritage of industry in the light of two selected case studies from Varkaus, a small industrial community in eastern Finland. The city of Varkaus emerged in the 19th century around the industrial plants, and due to its history marked by industry, Varkaus forms a "test laboratory" par excellence for a study that is interested in the linguistic effects of industry. In addition, the city is located in an originally Finnish-speaking region in eastern Finland, where the presence of other languages than Finnish in the past is explained by the industrial history. Nevertheless, Varkaus is naturally not completely unique, but can be seen as a representative of many other small industrial sites in Finland whose history has similarly been shaped by industry. The case studies on Varkaus can thus be applied to other Finnish industrial communities.

The two case studies to be discussed in this article exemplify what industrial linguistic heritage can refer to, where it can be found, and how it can be approached in research. The two case studies were selected because they highlight different perspectives on the linguistic industrial heritage. The first case study illuminates the multilingualism of the industrial community as industrial linguistic heritage. It relates to the linguistic diversity which emerged in the community due to industry, and to the linguistic traces that past multilingualism has left in a contemporary linguistic landscape of the city. The particular linguistic landscape to be investigated comprises the oldest cemeteries of Varkaus and the inscriptions on the gravestones in these cemeteries. In the second case study, the focus is not on the multilingualism, but on language as a means to verbalize and commemorate the industrial past of the community. The data of this case study comprises proper names that have been given to streets and buildings in the public space or for commercial purposes in Varkaus.

2. Previous language studies on industrial communities

Industrial communities are also language communities. In previous language studies, their language situation has been investigated, but mainly from other viewpoints than industrial culture heritage. The following overview of previous research summarizes central perspectives from which industrial communities have been approached in language studies, and what kind of methodologies have been applied.

Work-based migration, induced by industry in Finland, is not linguistically and culturally as diverse as the labor migration that took place from the 1950s onwards from South and East Europe to Central Europe. For example, in Germany and in the Netherlands, South and East European industrial *Gastarbeiter* and their offspring have been studied from a sociolinguistic viewpoint. ¹¹ In migration settings, the own-languages of migrants, referred

¹¹ See e.g. Ad Backus, J. Normann Jørgensen and Carol Pfaff, "Linguistic effects of immigration: language choice, codeswitching, and change in Western European Turkish." *Language and linguistic compass* 4/7

to as heritage languages, ¹² often compete with the other languages that exist in the multilingual environment; moreover, it is not self-evident that the heritage language of migrants is transmitted to the next generation. The possibilities of maintaining the heritage language, the circumstances leading to language shift, the possible multilingual repertoire of the next generation of speakers, and the socio-economic impact of migrants' linguistic resources are a few of the issues that have been investigated in contexts of labor migration. ¹³ In addition, as shown by the articles in a recent special issue on languages in mines, the multilingual situation often leads to language contact between industrial migrants' languages and the languages of the surrounding area. ¹⁴

Another approach, which has been utilized in recent studies on industrial labor migration, is linguistic landscape research. It is applied, for example, in Evelyn Ziegler's et al. study (2018) on the industrial metropolitan area Ruhr in Germany. The term *linguistic landscape*, which was originally introduced by Rodrigue Landry and Richard Y. Bourhis (1997), refers to the visible presence of languages in signs of public places. Thus, it is possible to study the linguistic traces industry leaves in the contemporary scenery of a place, or the traces it has left in the historical documents of a language community. By analyzing the languages of street name signs, building signs, shop and restaurant signs, billboards, public advertisements, protest messages such as graffiti and others in the linguistic landscape, Ziegler et al. (2018) ask whether the languages of the multilingual population of the industrial Ruhr area are represented in the linguistic landscape.

In Finland, in turn, the multilingualism in an industrial context has often been approached from the perspective of needs analyses of language skills, with a focus on the language and communication skills required by industry experts. Surveying the languages used at the workplace has provided important information for language education and training planning. In addition to needs analyses, there is research on the multilingualism of the Finnish "Manchester," the industrial city of Tampere. The language profile of this city, which is located in an originally Finnish-speaking inland area, has been diversified by labor migration related to local iron, textile and paper industries. The articles in Lönnroth's (2009a) edited volume on Tampere as a language community look at the role of different languages in different phases and contexts in the history of this city. Lönnroth's own research, in turn, investigates the Swedish language in the history of Tampere from different perspectives. In turn, investigates the Swedish language in the history of Tampere from different perspectives.

^{(2010), 481-495,} as well as Heike Wiese, Kiezdeutsch: ein neuer Dialekt entsteht (München: Beck, 2012).

 $^{^{12}}$ See e.g. Maria Polinsky: Heritage Languages and their Speakers (Cambridge: Cambridge University Press, 2018).

¹³ See e.g. Guus Extra and Kutlay Yağmur, *Urban multilingualism in Europe: immigrant minority languages at home and school* (Clevedon: Multilingual Matters, 2004).

¹⁴ Leonie Cornips and Pieter Muysken (eds.), "Language in the Mines," in *Special Issue of the International Journal of the Sociology of Language*, No. 258 (2019).

¹⁵ See also Bernard Spolsky: "Prolegomena to a Sociolinguistic Theory of Public Signage", in: Elana Shohamy and Durk Gorter (eds.), *Linguistic Landscape: Expanding the Scenery* (New York: Routledge, 2009), 25–39.

¹⁶ See e.g. Anneli Airola: Yritysten kielitaitotarpeet Pohjois-Karjalassa (Joensuu: Karelia University of Applied Sciences, 2004); Margit Breckle and Marleena Rinne: Yritysviestintä pohjalaismaakuntien ja saksankielisten maiden välillä (Vaasa: Vaasan yliopisto, 2016); Margit Breckle and Joachim Schlabach: "Multilingualism in Finnish Companies – Selected Results of the LangBuCom-Project", in: Kieli, koulutus ja yhteiskunta 9/2017; Marjatta Huhta, Language and Communication for Professional Purposes. Needs Analysis Methods in Industry and Business and their Yield to Stakeholders (Helsinki: Aalto University, 2010).

¹⁷ Harry Lönnroth (ed.), *Tampere kieliyhteisönä* (Helsinki: SKS, 2009); Harry Lönnroth, "Suomalainen teollisuuskaupunki, ruotsalainen kielisaareke. Ruotsinkielisyys Tampereella 1700-luvulta 2000-luvulle", in: Harry

Multilingual language services and language policies in institutions and families, in turn, are viewpoints in Koskinen's (2014) and Kingelin-Orrenmaa's (2019) studies on Tampere. By rereading the history of Tampere, Koskinen provides an overview of patterns of translational activities in 19th century Tampere. In her recent study, she investigates the archives of the Tampere city council for the translation policy of the local municipal government in the 19th century. Other multilingual services are brought up in Kingelin-Orrenmaa's (2019) study on present-day Tampere. She investigates, on the one hand, the institutional level of language policy of the Swedish school and the Swedish congregation in Tampere. On the other hand, the author examines the use of different languages in families using these services. With regard to present-day Tampere, the study by Koskinen (2013) on the linguistic landscape of Hervanta, Tampere's most multilingual neighborhood, should also be mentioned.¹⁸

The issue of language attitudes emerges in several of the above-mentioned studies. The community members' language choices and use of languages in different domains is guided by language attitudes and values that community members associate with different languages and their speakers. As shown e.g. by Kingelin-Orrenmaa (2019) and Ziegler et al. (2018), language attitudes affect the prestige of languages, or conversely, their stigmatization in industrial communities.¹⁹ These attitudes affect the visibility of languages in the public space. They influence the emergence of new mixed language varieties, and they contribute to the formation of social groups, hierarchies, and borders in the language community. The attitudes play a crucial role for language maintenance, speakers' possible language shift, and the intergenerational transmission of languages. It is not only languages that may be transmitted to next generation speakers but also language attitudes.

In sum, these previous studies on industrial contexts and industrial language communities highlight different possibilities to approach languages as industrial culture heritage. First, the influence of industry affects the languages of the industrial community. Due to industry, new linguistic diversity emerges in the community so that the community stands out from its immediate surroundings by virtue of its language repertoire. Second, the influence is on the language use of the individuals in the community. Speakers of the original language of the area encounter a new language or new languages that have arrived in the community. Speakers of the new languages, in turn, arrive in an environment where their heritage language often becomes a minority language. New mixed styles and varieties may emerge due to language contact both at the workplace and in free-time activities, and strategies for overcoming linguistic and cultural barriers are also invented. The new languages that arrive in the community can attract new learners and speakers. In multilingual settings, the question arises whether it is possible for speakers of the new language to maintain their own heritage language. Some languages may be abandoned and forgotten due to language

Lönnroth (ed.), Tampere kieliyhteisönä, 105–145 (Helsinki: SKS, 2009); Harry Lönnroth, Svenskt i Tammerfors: tre undersökningar om språk och samhälle i det inre av Finland (Tampere: Tampere University Press, 2009).

¹⁸ Kaisa Koskinen: "Turistina Hervannan kielimaisemassa: käännettyyttä etsimässä", in: Kaisa Koskinen (ed.), *Tulkattu Tampere* (Tampere: Tampere University Press, 2013), 303–323; Kaisa Koskinen, "Tampere as a Translation Space", in: *Translation Studies* 7:2 (2014), 186–202; Kaisa Koskinen, *Translating in an Emerging Language Policy* (forthcoming); Zea Kingelin-Orrenmaa: *Tammerfors som svensk språkö: en etnografisk studie av språkpolicy som praktiker, processer och val i svenska rum i det inre av Finland* (Oulu: University of Oulu, 2019).

¹⁹ Kingelin-Orrenmaa 2019; Evelyn Ziegler et al., *Metropolenzeichen. Atlas zur visuellen Mehrsprachigkeit der Metropole Ruhr* (Duisburg: UVRR, 2018).

shift, and some languages may become invisible and only be used in the private sphere. Third, the new linguistic diversity also manifests itself in the languages for special purposes and new special terminology that are needed in the industry. Some of this new vocabulary spreads to contexts outside the factory gates. Fourth, the influence permeates the language services provided for the multilingual population by different institutions such as schools, congregations and local municipal governance.

In a similar way as other forms of cultural heritage,²⁰ language is also a dynamic and changing heritage. It is preserved and protected, but it may also be forgotten, abandoned and exchanged for another language. It is shaped in the interaction and in contact with speakers of other languages. It is affected by the values community members attach to it. The studies cited in this section illustrate different methodological possibilities to approach languages in an industrial context. Their range extends from questionnaires and interviews to the analysis of (written or oral) language products of language speakers of different ages, from archives to representations of languages in fiction or in press, and from close reading of previous historical research to the linguistic landscape research. The possibilities of this final method will be applied in the case studies of this article (see Section 4).

3. Varkaus: A Swedish-speaking language island in a monolingual Finnish environment

In Finland, the multilingualism of industrial sites had already begun evolving in the preindustrial period in the seventeenth century. Our example town Varkaus represents a younger industrial development. It is an industrial community that emerged in 1815 in a historical situation when Sweden had just recently lost the war (1809) and had ceded its eastern territories (Finland) to Russia. In the multilingual Russian empire, Finland formed an autonomous Grand Duchy until it became independent (1809-1917). In Varkaus, after the initial stage of ironworks industry, other industries emerged, such as shipbuilding, engineering, and wood-processing industries. The growth of industry led to the growth of the community, which eventually became an independent municipality in 1929. Today, there are around 21,000 inhabitants in Varkaus.²¹

In the 19th century, industrial production was still relatively modest, and, as Figure 1 below shows, the population was very small. Until 1930, the data in Figure 1 refer to the Varkaus mill, not the entire area of present-day Varkaus. In the early 20th century, Varkaus began to grow when the Ahlström family purchased the industrial plants in 1909 and began to invest heavily in them. These industrial investments are reflected in the demographic trends: The population increased until the 1980s, when it peaked, at around 26,700 inhabitants (see Figure 1 below). According to Soikkanen's and Nevala's studies, ²² birth rates

²⁰ Anna Sivula, "Puuvillatehtaasta muistin paikaksi. Teollisen kulttuuriperintöprosessin jäljillä", in: Outi Tuomi-Nikula, Riina Haanpää and Aura Kivilaakso (eds.): Mitä on kulttuuriperintö? Tietolipas 243 (Suomalaisen Kirjallisuuden Seura, Helsinki 2013).

²¹ The central milestones of the industrial history of Varkaus are described in Hannu Soikkanen, *Varkauden historia* (Helsinki 1963) and in English in Hannu Itkonen: *Varkaus and Its People* (Helsinki: SKS, 2005). The latest population data on Varkaus is based on information from *Statistics Finland* 2018.

²² Soikkanen 1963, 292–293; Arto Nevala: *Vuosisata varkautelaista työväenjärjestötoimintaa: agitatsioonia, vaikuttamista ja yhteistyötä* (Varkaus: Varkauden työväenliikkeen historiatoimikunta, 2003), 27.

were not the primary cause for the population growth. It was caused by the expansion of industrial production and the resulting labor migration and urbanization.

In 1987, Ahlström's family-owned industrial plants were sold to a multinational company. These sales marked the arrival of globalization in the community,²³ which together with the decreasing demand for labor, turned the population growth into a decline beginning in the 1990s. Industrial sectors have disappeared and plant owners have changed. Some of the material resources left over from industry are reused for post-industrial purposes, and some industrial buildings have become industrial cultural heritage. For example, the factory hotel is today a museum building, and the local industry headquarters has been redesigned into a privately owned café-restaurant.

In Soikkanen's comprehensive history of Varkaus, the city is described as a "melting pot on a Finnish scale". 24 This characterization refers to labor migration, a phenomenon which resulted in a large proportion of the population having their roots elsewhere. According to Soikkanen's detailed surveys, new industrial workers moved to Varkaus particularly from the surrounding Finnish speaking area in the 19th and early 20th centuries. From the 1910s onwards, Varkaus attracted an increasing number of people both from eastern Finland and the rest of Finland, from both the Finnish and Swedish-speaking areas. In addition to Swedish, Soikkanen explicitly mentions the Finnish dialects that arrived in Varkaus. According to Soikkanen, migration from abroad has been more modest: Industrial employees, both white- and blue-collar workers, moved to Varkaus mainly from Sweden, Russia (especially St. Petersburg) and Germany. The German move to Varkaus is explained by the large investments in industrial machinery and the accompanying construction and commissioning staff and, in some cases, family members. Soikkanen explicitly mentions the German installers of the two first paper machines built in the 1920s. They remained in Varkaus, but were forced to return to Germany for military service when World War II broke out.²⁵ Some of them returned to Varkaus after the war.

There is plenty of previous research on Varkaus,²⁶ but not from a linguistic point of view. In language studies, Varkaus has been characterized as one of the Swedish-speaking language islands (alongside the other industrial communities of Kotka, Pori, Tampere, Oulu, Kauttua, Kuusankoski and Hyvinkää). The term refers to a municipality with a Swedish-speaking minority which provides or has provided its community members with services in Swedish, even though the municipality is officially monolingually Finnish-speaking and located outside Finland's actual Swedish-speaking area.²⁷

²³ Jari Jääskeläinen and Raimo Lovio: *Globalisaatio saapui Varkauteen. Tapaustutkimus yritysten kansainvälistymisen tavoitteista ja vaikutuksista* (Helsinki: Taloustieto, 2003).

²⁴ Soikkanen 1963, 298.

²⁵ Soikkanen 1963, 163, 299–300, 304, 343.

²⁶ For an overview of previous research, see Hannu Itkonen, *Varkauden tutkimukset ja tulkinnat – Mitä ja miten paikallisuudesta on kirjoitettu? Karjalan tutkimuslaitoksen raportteja* 1/2008 (Joensuu: University of Joensuu, 2008).

²⁷ See Gun Oker-Blom, Erik Geber and Heidi Backman, *Språklig mångfald i skolan*. *Språkbakgrund och muntlig språkkompetens i de svenska lågstadieskolorna i Finland*. Utbildningsstyrelsen, duplikat 2/2001 (Helsingfors: Edita, 2001), 27; Harry Lönnroth, "Swedish Speech Islands in Finland: A Sociocultural Linguistic Perspective", in: *Language, Society and Culture* (2011), 48; Sofie Henricson: *Svenska i finsk miljö: Interaktion, grammatik och flerspråkighet i samtal på svenska språköar i Finland* (Helsinki: University of Helsinki, 2013), 9; Kingelin-Orrenmaa 2019, 51.

Figure 1 illustrates the language situation in Varkaus over different decades. Official language statistics have been available for Varkaus since the 1880s. According to the statistics, Varkaus had its largest number of Swedish speakers in the 1950s and 1960s. Because other languages than Finnish and Swedish have only been recorded in Finland since the 1980s, the language statistics mirror only a part of the labor migration to Varkaus. Until the 1980s, for example, German and Russian remain hidden, although they helped shape the language situation in Varkaus. Since the 21st century, the turns in the linguistic situation are influenced mostly by other global mobility factors than industry. The statistics, of course, reflect not only industrial labor migration but urbanization and other migration to Varkaus as well. The statistics do not distinguish between industrially and non-industrially motivated stays in the locality. In addition, it is important to remember that it is possible for a person to register only one language in Finland. Due to this fact, many languages inevitably remain hidden in language statistics.

In comparison to Tampere (see Section 2), much less research has been done into the language situation of Varkaus. The needs of the multilingual population have been met by a variety of services although today, the continuity of Swedish has become fragile. For example, the Lutheran congregation of Varkaus was officially bilingual (Finnish and Swedish) until the 1990s, after which it became monolingually Finnish. The Swedish school, in turn, which was founded in 1919, was closed in 2019. Central milestones of the school's history and activities are described by Riitta Ropponen (1995) and Asta Olli (2017).²⁸

In addition to the Swedish school, there is research on the place names of Varkaus by Jenny Rimpeläinen (2011). Her insightful study highlights how the local residents remember languages of the past and rely on the local industrial history when interpreting current place names. By combining viewpoints of folk linguistics and onomastics, the author asks how the "ordinary" people of Varkaus, without a scholarly linguistic background, explain the origin of a selected group of commonly-known place names in their home town and its immediate surroundings and what kind of interpretations they rely on. For the present study, of particular interest is an explanation model in which the informants rely on their linguistic and cultural memory when searching for a motivation for the etymology of a particular name. As described by Rimpeläinen, the informants explicitly relate some place names to the Swedish language and to the phase in history when the locality was more Swedish-speaking than today. Alternatively, they link the suspected origin of the name to the industrial history or industrial landscape of Varkaus. Their explanations do not, of course, correspond to the scholarly etymology of the names, but they are important indicators of a process in which the members of the community exploit their linguistic and cultural memory as a resource when interpreting the present.²⁹

²⁸ Riitta Ropponen, *Svenska lågstadiegrundskolan i Varkaus: verksamhet förr och nu, undervisningsmetod och elevers tillägnande av svenska språket* (Joensuu: University of Joensuu, 1995); Asta Olli, "Varkauden ruotsinkielisen koulun vaiheista", in: Hannu Itkonen (ed.), *Varkaus satavuotiaassa Suomessa*, 43–50 (Varkaus: Klubin Kirjasto, 2017).

²⁹ Jenni Rimpeläinen, *Paikannimen monet tarinat. Varkautelaisten kansanetymologisia tulkintoja kaupunkinsa ja sen lähialueiden paikannimistä* (Joensuu: University of Eastern Finland, 2011).

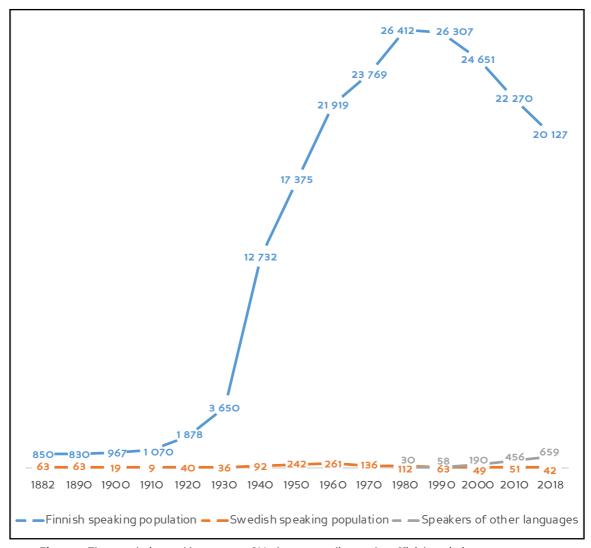


Figure 1. The population and languages of Varkaus according to the official statistics 1882–2018. Until 1930, the data refer to the Varkaus mill, not the entire area of present-day Varkaus.³⁰

³⁰ Suomenmaan tilastollinen vuosikirja 1879–, Suomen tilastollinen vuosikirja 1910–1972 and Statistics Finland 2018.

4. Two case studies on industrial linguistic heritage

Industry shapes the landscape in many ways. Typical features of a landscape of an industrial community include landmarks such as tall chimneys and other industrial buildings, which are surrounded by the industrial community. The term *industrial landscape* became established in Finnish studies on industrial heritage during the 1990s. The concept brought up a new perspective in research, shifting the focus from individual industrial buildings to cultural environments and larger surroundings.³¹ As highlighted in the linguistic landscape studies cited in Section 2, languages can be included as one detail of this landscape in the concept. In the following sections, we discuss the "footprints" that both industry and its actors have left in the linguistic landscape of the industrial community of Varkaus.

4.1. Linguistic landscape as industrial linguistic heritage

The focus of our first case study is on a special part of the contemporary linguistic landscape in Varkaus, on its three oldest cemeteries. The study is based on photo material that was made available for the researchers by the Lutheran congregation of Varkaus. The data consist of approximately 3,400 photos of all the gravestones in the three oldest cemeteries of Varkaus: the Pirtinniemi, Ala-Kankku and Ylä-Kankku cemeteries, which were established in the second half of the 19th century and in the beginning of the 20th. The photos were taken during the years 2009-2011 by the Lutheran congregation. According to the records of the congregation, at least 1,700 deceased are buried in these three cemeteries. The languages of the gravestone inscriptions and their content were analyzed according to the principles of linguistic landscape research. The same cemetery data has been utilized in two previous Finnish-language articles by Wessman and Kolehmainen (2019) and Kolehmainen (forthcoming), where the linguistic landscape of the cemeteries is, however, viewed from a perspective other than the linguistic heritage of industry.³²

Cemeteries are commemorative spaces that are especially designed for acts of remembrance. They are places not only for the deceased but also for the living who commemorate the deceased at the funeral monuments erected for them.³³ For the present article, cemeteries are, on one the hand, places that preserve voices and languages of different actors from the industrial past. On the other hand, they are places that remind the passers-by of the past of the industrial community and which pass their traces of this heritage to subsequent generations.

The inscriptions on the funeral monuments, on the gravestones, -plates and -crosses, form a multilingual linguistic landscape which entails different temporal layers. The most visually dominating part of a cemetery linguistic landscape are personal names, the names

³¹ Erkki Härö and Helinä Koskinen, "Tehdassalista teolliseen maisemaan. Teollisuusperinnön tutkimusta ja suojelua", in: Marja Terttu Knapas (ed.), *Muistomerkki. Rakennetun historian ulottuvuuksia* (Helsinki: Museovirasto, 1999), 144; Sivula 2014, 5–18.

³² Kukka-Maaria Wessmann and Leena Kolehmainen: "Monikielisyyttä ja muuttoliikkeen jälkiä: aika- ja kielikerrostumat Varkauden hautausmaiden nimimaisemissa", in: *Sananjalka* (2019), 104–129; Leena Kolehmainen, "Menneen monikielisyyden jälkiä nykyisyydessä: Varkauden hautausmaiden kielimaisemaa". Forthcoming 2020 in: Leena Kolehmainen, Helka Riionheimo and Milla Uusitupa (eds.), Ääniä idästä. Näkökulmia Itä-Suomen monikielisyyteen (Helsinki: SKS, forthcoming 2020).

³³ E.g. Pierre Nora, "Between Memory and History: Les Lieux de Mémoire". *Representations* 26 (1989), 7–24.

of the deceased. In particular, the youngest gravestone layers may contain only the name of the deceased and his/her time of birth and death. Personal names in the oldest cemeteries of Varkaus were analyzed by Wessman and Kolehmainen (2019). They show that personal names can be classified by language and that they form a multilingual landscape. In addition, the personal names reflect the migration history to Varkaus and tell about the cultural background of the deceased or their family.³⁴ In a similar way as in the industrial metropolis Ruhr in Germany,³⁵ personal names give the multilingual landscape a special flavour. However, personal names are not reliable indicators of the languages of the deceased. Because of this lack of certainty, they will not be discussed in more detail in this article.

The other inscriptions on the gravestones are more reliable clues for an analysis of language resources. Unlike engraving the name of the deceased on the gravestone, which does not involve a language choice, engraving other information and messages means choosing a language. The languages of the titles and occupations of the deceased, their death causes, quotes such as bible verses, and diverse messages by the gravestone erector to the deceased or to the passers-by reflect the language(s) of the deceased, the gravestone erector or other actors. In Varkaus, the Finnish language dominates in these inscriptions, but besides it, there are inscriptions in Swedish, German, Russian and Latin, i.e. languages that are originally not spoken by the population in this part of Finland. In Varkaus, these other languages appear mainly in the oldest gravestone layer. Their appearance in the Varkaus cemetery linguistic landscape is mainly an effect of the industrial labor-migration.

For example, the following two Swedish inscriptions in the Pirtinniemi cemetery remind the cemetery visitors of past Swedish-speaking actors in the Varkaus industry:

Ingeniören JOHAN EDVARD STRÖMBERG *4.2.1827 † 15.2.1886. Christus är mitt lif och döden är min winning. Phil. ep 1:21 (Pirtinniemi)	[Translation:] Engineer Johan Edvard Strömberg *4 February 1827 † 15 February 1886 Christ is my life and death is my gain. Philippians 1:21.
Här hvilar Kontoristen GEORG WASASTJERNA född i Wasa 11.7.1816 död 15.2.1876 (Pirtinniemi)	Here rests Clerk Georg Wasastjerna born in Vaasa 11 July 1816 died 15 February 1876

The following German-language tombstone in the Ylä-Kankku cemetery is, in turn, a memorial to the 19-year-old Kurt Zeuner, who was accidentally killed at work in the factory. According to his death notice in the local newspaper *Warkauden lehti* (5 April 1924), he was born in Kriebethal, Saxony. Zeuner was one of the installers of the first paper machine in Varkaus (1921). His death was also reported in the Newspaper *Deutsch-finnische Nachrichten* ('German-Finnish News', 6 June 1924).³⁶

 $^{^{34}\,\}mathrm{Wessmann}$ and Kolehmainen 2019.

³⁵ Ziegler et al. 2018, 31.

³⁶ Warkauden lehti, 5 April 1924; Deutsch-finnische Nachrichten, 'German-Finnish News', 6 June 1924.

Ruhe sanft!
Kurt Zeuner
geb. 3. IV. 1904. gest. 17. III. 1924
gew. von Deinem Bruder u. mitarbeitern
Warkaus
(Ylä-Kankku)

[Translation:]
Rest in peace!
Kurt Zeuner
born 3 April 1904 died 17 March 1924
dedicated by your brother and
colleagues
Warkaus

In the end, of course, we cannot be sure whose language appears in the inscriptions. In the previous examples, we are presumably dealing with the languages of the deceased and their family members, who have probably erected the gravestones. In some gravestones, like the one of Kurt Zeuner, the erector has been explicitly announced. The languages of these inscriptions remind the passers-by of past multiculturalism and multilingualism in the industrial community of Varkaus.

However, languages of other actors have also left traces in the gravestones, such as the gravestone manufacturer and his environment. This is illustrated by the following example, the gravestone of Paul August Wahl, the son of the owner of the industrial plants in Varkaus in the 19th century. The Wahl family, who came to Varkaus from Vyborg, was originally from Weimar, Germany. The family's heritage language German is represented in Paul August Wahl's gravestone, on which his date of birth and death are given in German. On the other side of the gravestone, there is Russian: Maderni and Ruggia are the family names of two Swiss-born gravestone manufacturers based in St. Petersburg. *Gorohovaya* (Pea Street') is their address in Russian. This Russian text on the gravestone is a business card-like inscription, which refers to the working environment of the two sculptors. In Ziegler's et al. study (2018) on the German Ruhr area, the researchers point out that the linguistic landscape is not a copy of the languages of the population and that minority languages typically remain invisible. The Russian inscription in the Varkaus data highlights that the linguistic landscape may also contain voices and languages of other actors than the local population.

PAUL AUGUST WAHL	[Translation:]
GEB. DEN 13 ^{TEN} OCTOBER 1830	Paul August Wahl
GEST. DEN 27 ^{TEN} FEBRUAR 1875	born 13 October 1830
Maderni & Ruggia	died 27 February 1875
Gorohovaja N° 38	Maderni & Ruggia
S [™] Petersburg	Pea Street 38
(Pirtinniemi)	St. Petersburg

In addition to the presence of multiple languages, the cemetery linguistic landscape also preserves other information of industrial history. Soikkanen (1963) and Nevala (2003) state that the social structure of Varkaus differs from that of the surrounding agrarian communities. Industrial occupations, which do not exist in the surrounding agricultural municipalities, have left their mark on the cemetery landscape. The examples in Table 1

³⁷ Anu Talka: "Kauppaneuvos Paul Wahl (1830–1875)". In: *Suomen talouselämän vaikuttajat* (Helsinki: SKS, 2009).

illustrate industrial titles and occupations of the deceased in the cemetery linguistic landscape in Varkaus.

In addition to the titles and occupations listed in Table 1, there are also many other titles on the gravestones (e.g. 'baker', 'farmer', 'shopkeeper') that are not directly related to industrial work. In earlier stages of history, the factory took care of all municipal services from birth to the retirement home. In other words, it cannot be excluded that these other title-holders were also bound to industry. In the three oldest cemeteries of Varkaus, the titles appear on the gravestones of the 19th and early 20th centuries, after which they are only seldom given in the younger layers of cemetery inscriptions. This change does not reflect a change in industrial work, but a change in the commemorative practices in the cemetery linguistic landscape. The disappearance of titles from the linguistic landscape is not only a feature of Varkaus but affects the entire Finnish funeral culture.³⁸

In Swedish:

 Ångpannmästare ('steam boiler master'), Ingeniör ('engineer'), Kontorist ('clerk'), Mekaniker ('mechanic').

In Finnish:

Rautasorvari ('iron turner'), Tehtaanhoitaja ('factory operator'), terehtööri ('director'), Insinööri ('engineer'), Ruukin isäntä ('factory host'), Tehtaanisännöitsijä ('factory host'), Työnjohtaja ('foreman'), seppä ('blacksmith'), Walaja ('melter'), Walajan waimo ('melter's wife'), Walajan poika ('melter's son'), Waskiseppä ('coppersmith'), Isännöitsijä ('factory host'), Konttoristi ('clerk'), Työmies ('worker'), Työmiehen waimo ('worker's wife'), Sahanhoitaja ('sawmill manager'), Sorvari ('turner'), Tehtaan vaakaaja ('factory inspector'), Konemestari ('master mechanic')

Table 1. Industrial titles in the cemetery linguistic landscape in Varkaus.

In sum, the examples in this section illustrate how traces of the multilingual and multicultural industrial past are still visible in a contemporary linguistic landscape. The cemetery linguistic landscape reminds the visitors of past actors and their languages in the industrial community. In addition, the occupational titles visible in this scenery represent the specialized terminology typical for the local industry in the past. Both parts of the linguistic landscape can be explained by the presence of industry in the community, and they both pass on the linguistic industrial cultural heritage to subsequent generations in a public space which is specifically dedicated to acts of remembrance. The cemeteries naturally form only a narrow window to the past languages of the community. In the Varkaus cemeteries, aspects of societal multilingualism are particularly prominent: The gravestones in different languages indicate that people of different languages have lived side-by-side in the locality. Individual multilingualism, on the contrary, remains hidden because most gravestones are monolingual. The cemetery data do not reveal what languages the persons in our examples – engineer Strömberg, clerk Wasastjerna, paper machine installer Zeuner, or factory owner Wahl – used in Varkaus. Bilingual gravestones such as the one of Paul

³⁸ See e.g. Pentti Lempiäinen and Brita Nickels, "Muistomerkkien tekstit", in: Pentti Lempiäinen and Brita Nickels (eds.), *Viimeiset leposijamme. Hautausmaat ja hautamuistomerkit* (Helsinki: SLEY-kirjat 1990), 65.

Wahl are an exception in the Varkaus data, but even here it was noted that the two languages on the same gravestone relate to two different actors. Research into the multilingualism of individuals would require other types of research material. The cemetery data only reflects traces that have been kept up to the present from the multilingual history of industry.

4.2. "Namescape" as an industrial linguistic heritage

The focus of our second case study is on another linguistic landscape. The examples in this section highlight proper names in two contemporary linguistic landscapes in Varkaus, hence the characterization "namescape" in the section title. We examine the street names of Varkaus and other contemporary names that commemorate industrial history. The examples are taken from the street name data stored in the public map of Varkaus (see *Varkauden kaupungin karttapalvelu*), as well as from our own knowledge and observations of the current linguistic landscape of Varkaus.

City names consist of different name layers. The official nomenclature covers street names, names of districts and residential areas, square names, and park names. Today, their naming in Finland is a municipal matter. Central for the purposes of the present study are the so-called commemorative names, names that have been given in memory of a person, event, or other occurrence. Commemorative names reflect power relations and ideologies of their time in society.³⁹ The fact that they are symbolic expressions of power is evident, for example, from processes of rewriting the history when street names chosen by a previous regime are rejected and replaced with new names that are compatible with the ideologies of the new regime.⁴⁰

Street names form one way of remembering the industrial history of a place. Table 2 illustrates commemorative street names related to the industrial history of Varkaus. These names occur in the Päiviönsaari, Kosulanniemi and Kommila districts, which are the key historical areas of Varkaus industry.

In public street signs, these commemorative names remind passers-by of past industrial actors and their backgrounds. Wredenkatu, 'Wrede Street', refers to Carl Gustaf Wrede, founder of the first industrial plants in Varkaus. Erik Johan Längman and Paul Wahl, whose names are also kept in the namescape (Längmanninkatu, Wahlinkatu), were the next owners of the industry after Wrede in the 19th century. Ahlströminkatu 'Ahlström Street', in turn, refers to Walter Ahlström, who bought the industrial plants in 1909. Other names of the Ahlström family are also preserved in Varkaus: Antinpuisto, 'Antti's Park' honors Antti Ahlström, father of Walter Ahlström. Walter Ahlström never moved to Varkaus, but led his industrial empire from Noormarkku, located in the Satakunta Province in western Finland. These place names in the street names (Noormarkunkuja, Satakunnankatu) memorialise his background. In addition, Sölve Thunström (Sölvenkatu, Sölvenkuja, 'Sölve Street', 'Sölve Alley'), the local managing director of the industrial plants in 1924-1929, also features in the namescape. Moreover, the passers-by are reminded of the German experts at the factories

³⁹ See e.g. Terhi Ainiala, Minna Saarelma and Paula Sjöblom, *Names in Focus: An Introduction to Finnish Onomastics* (Helsinki: SKS, 2016), 99, 101.

⁴⁰ See e.g. Maoz Azaryaho, "The politics of commemorative street naming: Berlin 1945-1948", in: *Journal of Historical Geography* 37 (2011), 483–492.

Street name	Name motive	English translation
Ahlströminkatu	← Walter Ahlström (1875-1931)	Ahlström Street
Antinpuisto	← Antti Ahlström (1827-1896)	Antti's Park
Längmanninkatu	← Erik Johan Längman (1799-1863)	Längman Street
Noormarkunkuja	← Noormarkku (Name of a municipality in Finland)	Noormarkku Street
Saksalankuja	← Germans' house (Name of a house in Varkaus)	German Alley
Satakunnankatu	← Satakunta (Name of a province in Finland)	Satakunta Street
Sölvenkuja, Sölvenkatu	← Sölve Thunström (born 1876, time of death not known)	Sölve Alley, Sölve Street
Wahlinkatu	← Paul Wahl (1797-1872)	Wahl Street
Wredenkatu	← Carl Gustaf Wrede (1775-1830)	Wrede Street

Table 2. Commemorative street names in memory of industrial actors in contemporary Varkaus.

by the street name *Saksalankuja*, 'German Alley'. This street name entails the name of the house (*Saksala* 'Germans' house'), which was built for the German industrial experts and their families. The house itself does not exist anymore.

According to Ziegler's et al. study (2018), in the industrial Ruhr area, commemorative street names have been given in memory of historical persons (e.g. Mozartstraße, Goethestraße), local scientists (e.g. Claubertstraße), local entrepreneurs (e.g. Heinzmannstraße) or even a fictive figure (e.g. Horst-Schimanski-Gasse). The recent migration history, on the contrary, has not yet left any traces in the street name scenery. The previous commemorative names in Varkaus, those that relate to the local industrial history, are in the same way ideologically biased. Owners and major players of the industry with their backgrounds appear, but workers, for example, remain invisible.

In this sense, the so-called thematic street names are different in Varkaus. Thematic names are names, which have been formed on the basis of a particular motive. They are given to streets of a certain area so that the names in this area form a thematically coherent whole. The thematically similar names give a particular flavor to the area and shape its image. In Varkaus, the street names in the Könönpelto district have been inspired by the log floating specialized terminology. These street names are illustrated in Table 3. In the same way as the above discussed commemorative street names, these thematic names remind the passers-by of the early stages of the local wood processing history. But unlike the previous names, these thematic street names represent other hierarchies of the industry than the ownership and management. They bring up ordinary log floating workers (e.g. Log Wincher's Alley, Log Roller's Alley) and phenomena of their working environment (e.g. Bundle Alley, Float street).

⁴¹ See e.g. Ainiala et al. 2016, 103.

Thematic names in the Könönpelto district	English translation	
Hankakuja	Temporary Log Barrier Alley	
Kelumiehenkuja	Log Wincher's Alley	
Lauttatie	Float Street	
Lenkkikuja	Link Alley	
Nippukuja	Bundle Alley	
Otvakuja	Side Jam Alley	
Piestinkuja	Log Bond Alley	
Purokuja	Creek Alley	
Puomitie	Log Boom Street	
Pyräskuja	Small Log Float Alley	
Rännikuja	Drain Alley	
Säiekuja	Fibre Alley	
Sestojankuja	Log Roller's Alley	
Sumakuja	Log Jam Alley	
Suomustie	Upright Log Float Street	
Tukkitie	Log Street	
Uittokuja	Log Floating Alley	
Varppikuja	Warp Alley	
Vastuumiehenkuja	Log Barrier Builder's Alley	
Vierittäjänkuja	Log Scroller's Street	
Viittakuja	Spar Buoy Street	
Vonkamiehenkuja	Log Floating Watcher's Alley	
Vorokkikuja	Capstan Alley	

Table 3. Log floating terminology in the thematic street names in Varkaus.

Commemorative naming does not only relate to street names, but it is also used for other public naming. For example, *Walterin koulu*, 'Walter's school', is the name of a new school complex in Varkaus, which was inaugurated in 2018. The name is reminiscent of Walter Ahlström (see above). The nameplate is visible on the front of the school building.

Another example is commercial naming. For example, the special menu created by the local restaurant *Amanda* in September 2019 to celebrate the 90th anniversary of the city of Varkaus also relates to industrial actors from the past. The original names of the courses entail alliteration; our English translations do not do it justice:

Starter: Ahlströmin alkukeitto 'Ahlström's soup' Main course: Patruunan pihvi 'Factory owner's steak'

Dessert: Laivanrakentajan loppueväs 'Shipbuilder's last provision'

In sum, the examples in this section show how language is, on the one hand, a means to remember and convey memories of the industrial history. The examples illustrated how the local industrial history has been verbalized and made visually accessible in the public street name landscape where it reminds the community members of their common past. The exact formation process both of the commemorative and thematic street names – to what extent it has been a top-down or a bottom-up process (when and by whom the names were introduced) – is a topic to be followed in an upcoming article on Varkaus. On the other hand, the examples in this section illustrate that the industrial history is a common resource for the members of the community. The community members utilize their collective memory to interpret the past and present. The common industrial past is a source of inspiration to draw upon when new names, both for public institutions or for commercial purposes, are formed. At the same time, of course, other name motives are used as well.⁴²

5. Conclusion

The goal of this article was to introduce the notion of linguistic industrial heritage into the study of industrial heritage and to illustrate some preliminary ways in which it can be approached in research. The case studies in the article highlighted both multilingualism and other traces of industrial history and actors in the contemporary linguistic landscape as industrial heritage. Both parts of the linguistic landscape preserve industrial history and pass it on to succeeding generations.

The article showed how industry creates new linguistic diversity and new types of linguistic neighborhoods in its production sites. New languages and dialects, which travel with industry workers and experts when they move to new locations, are introduced in areas where they are not spoken traditionally. The examples highlighted the Swedish language in particular. It arrived in Varkaus, an originally Finnish-speaking area, with industrial actors and their families, and with other movers who were driven to the city when it started to grow due to the expansion of industrial production. In addition to Swedish, traces of German

⁴² For a recent analysis of contemporary commemorative naming in Finland, see Laura Ukskoski, *Karamzinrannasta Aulis Rytkösen kadulle. Tutkimus 2000-luvun muistonimeämisestä* (Helsinki: University of Helsinki, 2019).

that the industry introduced to the local industrial heritage community of Varkaus were also discussed. The resulting multilingual community can be explained by the industrial migration history, which has left traces for future generations, for example in the cemetery linguistic landscape discussed in this article. In the multilingual cemetery inscriptions, languages appeared as a very physical, tangible heritage. In addition, the tombstone inscriptions witness linguistic expressions such as titles and occupations, which reflect earlier stages of the industrial history. The cemetery linguistic landscape is, of course, based on the immaterial side of the language, the language and writing skills of the members of the multilingual community.

The intangible linguistic heritage an industry leaves behind concerns the cultural memory of languages and speakers of different languages in the history of the industrial community. The members of the community rely on their cultural memory when they interpret past and present. As highlighted in this article, language is a means to make use of the industrial history. The common cultural memory, in turn, is a resource for the creation of new places of memory in the linguistic landscape when public places such as streets, institutions and even commercial phenomena are named. These examples bear evidence of social processes of remembering the past and remembering what is lost.

All examples in this article – the cemeteries as special commemorative spaces, the commemorative street names and building names in the contemporary public scenery, the thematic street names, the commemorative names of commercial products and services, and the cultural memory – serve to pass on parts of the industrial culture heritage to future generations. Language is an important strategic means to verbalize the past, to restore the shared histories and participatory experiences, and to carry out commemorative identity work in the industrial heritage community.

As highlighted by Antila and Nykänen (2000), it is important to notice that not every study of the industrial past is an investigation of industrial heritage. The heritological approach emphasizes the presence of the industrial past, the awareness of the technoscape and the valuation of techno-cultural industrial traces in the present. According to the current understanding and as emphasized e.g. by Smith (2006), cultural heritage comprises the social process of heritagization and not of the tangible or intangible objects that the heritage community selects to work on in the cultural heritage process. Creating industrial heritage is a process of elaborating collective and individual identities with different histories, industrial monuments, and participatory experiences and memories.⁴³ In this article, multilingualism and languages were highlighted as inherent resources in the industrial community. Past languages still exist in the cultural memory, and selected linguistic land-scapes such as cemeteries still allow access to past multilingualism of the locality. In past naming processes, cultural memory has been exploited to commemorate industrial history and its actors, and today, it continues to be utilized by the community members for contemporary naming purposes.

The case studies in this article illustrated two selected perspectives on the linguistic effects of industry and industrial linguistic heritage. The case studies do not of course exhaust the possibilities, and it is the task of forthcoming research to exploit other types

⁴³ Anna Sivula, "How Does a Factory Chimney Evolve into a Monument? The Resistant Industrial Heritage Communities", in *Tekniikan Waiheita*, 4/2017, 6; Kimmo Antila and Panu Nykänen: "Suomen tekniikan historian ja museotoiminnan lyhyt historia", in: *Tekniikan Waiheita* 1/2000, 28–43; Laurajane Smith: *Uses of Heritage* (New York: Routledge, 2006), 4.

of data and methods in order to gain a more thorough picture of what industrial language heritage may mean in Finnish industrial communities or internationally. It is our hope that this initial article will provide readers with new ideas and inspiration for future research on the multifaceted cultural heritage of industry.



6. References

6.1. Primary sources

Archives

The archive of the Lutheran congregation of Varkaus. Approx. 3,400 unlisted photos of the funeral monuments in the cemeteries Ala-Kankku, Pirtinniemi, and Ylä-Kankku in Varkaus during the years 2009–2011.

The archive of the Lutheran congregation of Varkaus. Records of the deceased of the cemeteries Ala-Kankku, Pirtinniemi, and Ylä-Kankku in Varkaus in 2015.

Statistics

Statistics Finland 2018. PX-Web-database. Population according to language and gender on 31 December, 2018. https://pxnet2.stat.fi/PXWeb/pxweb/fi/StatFin/StatFin__vrm__vaerak/statfin_vaerak_pxt_11rm. px/

Suomenmaan tilastollinen vuosikirja 1879-. Helsinki: Tilastollinen toimisto.

Suomen tilastollinen vuosikirja 1910–1972. Helsinki: Tilastollinen päätoimisto/Tilastokeskus.

Maps

Varkauden kaupungin karttapalvelu. https://kartta.varkaus.fi/ims/.

Newspapers

Deutsch-finnische Nachrichten. Zeitung für Politik, Wirtschaft, Handel, Kunst, Wissenschaft, Literatur und Sport. Access via: Historiallinen sanomalehtikirjasto ('Historical archive of Finnish newspapers'). Digital collections of the Finnish National Library. https://digi.kansalliskirjasto.fi/search?formats=NEWSPAPER&set_language=en.

Warkauden lehti. Access via: Historiallinen sanomalehtikirjasto ('Historical archive of Finnish newspapers'). Digital collections of the Finnish National Library. https://digi.kansalliskirjasto.fi/search?formats=NEWSPAPER&set_language=en

6.2. Secondary sources

Ainiala, Terhi, Minna Saarelma and Paula Sjöblom. *Names in focus: An introduction to Finnish onomastics*. Helsinki: SKS, 2016.

Airola, Anneli. Yritysten kielitaitotarpeet Pohjois-Karjalassa. Joensuu: Karelia University of Applied Sciences, 2004.

Alfrey, Judith and Tim Putnam. The Industrial Heritage: Managing Resources and Uses. London: Routledge, 1992.

- Alzén, Annika and Birgitta Burell (eds.). Otydligt. Otympligt. Otaligt. Det industriella kulturarvets utmaningar. Stockholm: Carlsson Bokförlag, 2005.
- Antila, Kimmo and Panu Nykänen, "Suomen tekniikan historian ja museotoiminnan lyhyt historia". *Tekniikan Waiheita* 1/2000, 28–43.
- Azaryaho, Maoz. "The politics of commemorative street naming: Berlin 1945-1948". *Journal of Historical Geography* 37 (2011): 483-492.
- Backus, Ad, Normann J. Jørgensen and Carol Pfaff. "Linguistic effects of immigration: language choice, codeswitching, and change in Western European Turkish". Language and linguistic compass 4 No.7 (2010): 481–495
- Breckle, Margit and Marleena Rinne. Yritysviestintä pohjalaismaakuntien ja saksankielisten maiden välillä. Vaasa: Vaasan yliopisto, 2016. https://www.univaasa.fi/materiaali/pdf/isbn_978-952-476-680-7.pdf.
- Breckle, Margit and Joachim Schlabach. "Multilingualism in Finnish Companies selected results of the LangBuCom-Project". *Kieli, koulutus ja yhteiskunta* 9 (2017). https://jyx.jyu.fi/bitstream/hand-le/123456789/55567/multilingualism-in-finnish-companies-selected-results-of-the-langbucom-project. pdf?sequence=1&isAllowed=y.
- Cornips, Leonie and Pieter Muysken (eds.). Language in the Mines. Special issue of: International Journal of the Sociology of Language, No. 258 (2019).
- Extra, Guus and Yağmur Kutlay. *Urban Multilingualism in Europe: Immigrant Minority Languages at Home and School.* Clevedon: Multilingual Matters, 2004.
- Grahn, Maarit. Perheyhtiö ja paikallisuus. A. Ahlström Osakeyhtiön historian perintö Noormarkussa. Turun yliopiston julkaisuja. Sarja C, 374. Turku: University of Turku, 2014. http://urn.fi/ URN:ISBN:978-951-29-5601-2.
- Härö, Erkki and Helinä Koskinen. "Tehdassalista teolliseen maisemaan. Teollisuusperinnön tutkimusta ja suojelua." In *Muistomerkki. Rakennetun historian ulottuvuuksia*, ed. by Marja Terttu Knapas, 144–153. Helsinki: Museovirasto, 1999.
- Henricson, Sofie. Svenska i finsk miljö: Interaktion, grammatik och flerspråkighet i samtal på svenska språköar i Finland. Doctoral thesis. Nordic languages. Helsinki: University of Helsinki, 2013. https://helda.helsinki.fi/handle/10138/40361.
- Huhta, Marjatta. Language and Communication for Professional Purposes. Needs Analysis Methods in Industry and Business and Their Yield to Stakeholders. Doctoral thesis. Helsinki: Helsinki University of Technology, 2010. http://lib.tkk.fi/Diss/2010/isbn9789522482273/isbn9789522482273.pdf.
- Isacson, Maths. "Brottningar med industriearvsbegreppen." In Otydligt. Otympligt. Otagligt. Det industriella kulturarvets utmaningar, ed. by Annika Alzén and Birgitta Burell, 44–54. Stockholm: Carlssons, 2005.
- Itkonen, Hannu. Varkaus and Its People. Helsinki: SKS, 2005.
- Itkonen, Hannu. Varkauden tutkimukset ja tulkinnat Mitä ja miten paikallisuudesta on kirjoitettu? Karjalan tutkimuslaitoksen raportteja 1/2008. Joensuu: University of Joensuu, 2008.
- Jääskeläinen, Jari and Raimo Lovio. *Globalisaatio saapui Varkauteen. Tapaustutkimus yritysten kansain-välistymisen tavoitteista ja vaikutuksista.* Helsinki: Taloustieto, 2003. https://www.etla.fi/wp-content/uploads/2012/09/B201.pdf.
- Kingelin-Orrenmaa, Zea. Tammerfors som svensk språkö: en etnografisk studie av språkpolicy som praktiker, processer och val i svenska rum i det inre av Finland. Doctoral thesis, Nordic philology. Oulu: University of Oulu, 2019. http://jultika.oulu.fi/Record/isbn978-952-62-2261-5.
- Kolehmainen, Leena. "Menneen monikielisyyden jälkiä nykyisyydessä: Varkauden hautausmaiden kielimaisemaa." In Ääniä idästä. Näkökulmia Itä-Suomen monikielisyyteen, ed. by Leena Kolehmainen, Helka Riionheimo and Milla Uusitupa. Helsinki: SKS, forthcoming 2020.
- Koskinen, Kaisa. "Turistina Hervannan kielimaisemassa: käännettyyttä etsimässä." In *Tulkattu Tampere*, ed. by Kaisa Koskinen, 303–323. Tampere: Tampere University Press, 2013.
- Koskinen, Kaisa. "Tampere as a translation space." Translation Studies 7 No.2, (2014): 186-202.
- Koskinen, Kaisa. "Translating in an Emerging Language Policy: Tampere City Council 1875–1887." In Translating in Town. A history of local translation policies during the European 19th century ed. by Lieven D'hulst and Kaisa Koskinen. London: Bloomsbury, forthcoming 2020.
- Landry, Rodrigue and Richard Y. Bourhis,. "Linguistic landscape and ethnolinguistic vitality. An empirical study. *Journal of Language and Social Psychology* 16 No. 1, (1997), 23–49.
- Lempiäinen, Pentti and Brita Nickels,. "Muistomerkkien tekstit." In Viimeiset leposijamme. Hautausmaat ja hautamuistomerkit, ed. by Pentti Lempiäinen and Brita Nickels, 62–67. Helsinki: SLEY-kirjat, 1990.

- Lönnroth, Harry (ed.). Tampere kieliyhteisönä. Helsinki: SKS, 2009.
- Lönnroth, Harry. "Suomalainen teollisuuskaupunki, ruotsalainen kielisaareke. Ruotsinkielisyys Tampereella 1700-luvulta 2000-luvulle". In *Tampere kieliyhteisönä*, ed. by Harry Lönnroth, 105–145. Helsinki: SKS, 2009.
- Lönnroth, Harry. Svenskt i Tammerfors: tre undersökningar om språk och samhälle i det inre av Finland. Tampere: Tampere University Press, 2009.
- Lönnroth, Harry. "Swedish speech islands in Finland: A sociocultural linguistic perspective." *Language, Society and Culture* (2011): 45–52.
- Nevala, Arto. Vuosisata varkautelaista työväenjärjestötoimintaa: agitatsioonia, vaikuttamista ja yhteistyötä. Varkaus: Varkauden työväenliikkeen historiatoimikunta, 2003.
- Nora, Pierre. "Between memory and history: Les lieux de mémoire." Representations 26 (1989): 7-24.
- Oker-Blom, Gun, Erik Geber and Heidi Backman. Språklig mångfald i skolan. Språkbakgrund och muntlig språkkompetens i de svenska lågstadieskolorna i Finland. Utbildningsstyrelsen, duplikat 2/2001. Helsingfors: Edita, 2001.
- Olli, Asta. "Varkauden ruotsinkielisen koulun vaiheista." In *Varkaus satavuotiaassa Suomessa*, ed. by Hannu Itkonen, 43–50. Varkaus: Klubin Kirjasto, 2017.
- Polinsky, Maria. Heritage Languages and Their Speakers. Cambridge: Cambridge University Press, 2018.
- Rimpeläinen, Jenni. Paikannimen monet tarinat. Varkautelaisten kansanetymologisia tulkintoja kaupunkinsa ja sen lähialueiden paikannimistä. MA-thesis, Finnish language. University of Eastern Finland, 2011. http://epublications.uef.fi/pub/urn_nbn_fi_uef-20110091/urn_nbn_fi_uef-20110091.pdf.
- Ropponen, Riitta. Svenska lågstadiegrundskolan i Varkaus: verksamhet förr och nu, undervisningsmetod och elevers tillägnande av svenska språket. MA thesis, Swedish language. Joensuu: University of Joensuu, 1995
- Sivula, Anna. "Tilaushistoria identiteettityönä ja kulttuuriperintöprosessina. Paikallisen historiapolitiikan tarkastelua." *Kulttuuripolitiikan tutkimuksen vuosikirja* (2005): 54–69. https://journal.fi/kultpol/article/view/60084.
- Sivula, Anna. "Puuvillatehtaasta muistin paikaksi. Teollisen kulttuuriperintöprosessin jäljillä." In *Mitä on kulttuuriperint*ö? ed. by Outi Tuomi-Nikula, Riina Haanpää and Aura Kivilaakso, 161–191. Tietolipas 243. SKS, Helsinki 2013.
- Sivula, Anna. "Teollinen kulttuuriperintö vakiintui suomalaiseen historiatietoisuuteen". *Teollisen kulttuuriperinnön monet muodot. Tekniikan Waiheita* 32, No. 2 (2014): 5–18. https://journal.fi/tekniikanwaiheita/article/view/64111.
- Sivula, Anna. "How does a factory chimney evolve into a monument? The resistant industrial heritage communities." *Tekniikan Waiheita* 35, No. 4 (2017): 6–16. https://journal.fi/tekniikanwaiheita/article/view/82343.
- Smith, Laurajane. Uses of Heritage. New York: Routledge, 2006.
- Smith, Laurajane and Emma Waterton. *Heritage, Communities and Archaeology*. London & New York: Bloomsbury, 2009.
- Soikkanen, Hannu. Varkauden historia. Helsinki [no publisher], 1963.
- Spolsky, Bernard. "Prolegomena to a sociolinguistic theory of public signage". In *Linguistic Landscape: Expanding the Scenery*, ed. by Elana Shohamy and Durk Gorter, 25–39. New York: Routledge, 2009.
- Talka, Anu. "Kauppaneuvos Paul Wahl (1830–1875)." In Suomen talouselämän vaikuttajat. Helsinki: SKS, 2009.
- Ukskoski, Laura. Karamzinrannasta Aulis Rytkösen kadulle. Tutkimus 2000-luvun muistonimeämisestä. MA thesis, Finnish language. University of Helsinki, 2009. https://helda.helsinki.fi/bitstream/hand-le/10138/302705/Ukskoski_Laura_Pro_gradu_2019.pdf.
- Vanha-Similä, Maria. Yhtiöön, yhtiöön. Lapsiperheiden arki Forssan tehdasyhteisössä 1950–1970-luvuilla. Helsinki: Kansatieteellinen arkisto and Suomen Muinaismuistoyhdistys, 2007.
- Waterton, Emma and Laurajane Smith. "The recognition and misrecognition of community heritage". International Journal of Heritage Studies 16 No. 1–2 (2010): 4–15.
- Wessman, Kukka-Maaria and Leena Kolehmainen. "Monikielisyyttä ja muuttoliikkeen jälkiä: aika- ja kielikerrostumat Varkauden hautausmaiden nimimaisemissa". *Sananjalka* (2019): 104–129.
- Wiese, Heike. Kiezdeutsch: ein neuer Dialekt entsteht. München: Beck, 2012.
- Ziegler, Evelyn, Heinz Eickmans, Ulrich Schmitz, Haci-Halil Uslucan, David H.Gehne, Sebastian Kurtenbach, Tirza Mühlan-Meyer and Irmi Wachendorff. *Metropolenzeichen. Atlas zur visuellen Mehrsprachigkeit der Metropole Ruhr.* Duisburg: UVRR, 2018.