MENDELU

THE EASTERN AUSTRIAN ALPS – THEIR EXCEPTIONAL DEMOGRAPHIC STATUS IN THE ALPINE REGION

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Abstract: In most Alpine regions with current negative migratory balance, new in-migration from urban areas has meanwhile become a relevant factor. However, this phenomenon is insignificant in Austria's Eastern Alps. The aim of this thesis-led work is to empirically demonstrate the main reasons for this demographically exceptional position. The Styrian-Lower Austrian Limestone Alps, representing the peripheral core area of Austria's Eastern Alps, were chosen as the study area, as in this region the population decline and above all, migratory losses are particularly high. Through various qualitative and quantitative data acquisition techniques it was shown that new inmigration is still insignificant. The main reasons for this are the perseverance of large estates and the dominance of forestry.

Keywords: Eastern Austrian Alps, peripheral areas, newcomers, large estates

Zusammenfassung: Während in den meisten alpinen Regionen mit gegenwärtig negativem Migrationssaldo Neuzuwanderungen aus urbanen Räumen mittlerweile ein relevanter Faktor geworden sind, ist im alpinen Osten Österreichs diesem Phänomen bisher kaum Bedeutung beizumessen. Der vorliegende thesengeleitete Beitrag setzt sich zum Ziel, die Hauptgründe für diese demographische Sonderstellung empirisch nachzuweisen. Als Untersuchungsregion wurden die steirisch-niederösterreichischen Kalkalpen gewählt, die dem peripheren Kernraum des alpinen Osten Österreichs entsprechen, in dem die Bevölkerungs- und vor allem Wanderungsverluste besonders hoch sind. Durch qualitative und quantitative Methoden konnte belegt werden, dass Neuzuwanderungen nach wie vor unbedeutend sind. Die Hauptursachen dafür liegen vor allem in der Persistenz des Großgrundbesitzes sowie in der Dominanz der Forstwirtschaft.

Schlüsselwörter: Östliche österreichische Alpen, Periphergebiete, Neuzuwanderung, Großgrundbesitz

1. Objective and state of research

In 2014, a study by Čede et al. (2014) on the new in-migration to the Alps could verify that the Alps as a whole are no longer an area of out-migration (Fig. 1) (see also Perlik, 2006, Bender & Kanitscheider, 2012 or Löffler et al., 2016a, 2016b). Proceeding from France around 1970, this new demographic trend has meanwhile also affected the eastern part of the Italian Alps (Montagna friulana) and, with some time delay, the adjacent section of the Julian Alps (Julijske Alpe) in Slovenia, but not the eastern part of the Austrian Alps. The aforementioned essay addressed this exceptional position: in contrast to most Alpine regions, population losses here have even increased in recent decades. The main reason for this is the very high level of migration losses, in addition to a negative birth balance that follows the general European tendency. While newcomers can usually be found in other areas of the Alpine arc where emigration still predominates, this is hardly the case in eastern Austria. This region represents now the most significant demographic problem area in the Alps. Fig. 2 illustrates the main reasons for this.

The deficiency of in-migration is linked to a number of interrelated factors, with less scenic attractiveness, development deficits, forestry, large land ownership and image issues playing a key role. While Čede et al. (2014) have explored these causalities in a hermeneutical way, the purpose of this study will be to further analyse the main reasons, specifically the large estates, to provide concrete facts for the first time and to examine them with a model region.

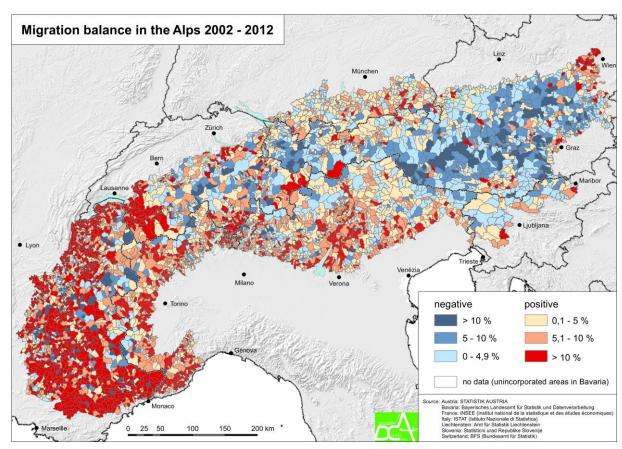


Fig 1. Migratory Balance of the Alpine Communities 2002–2012. Source: Čede et al. (2014)

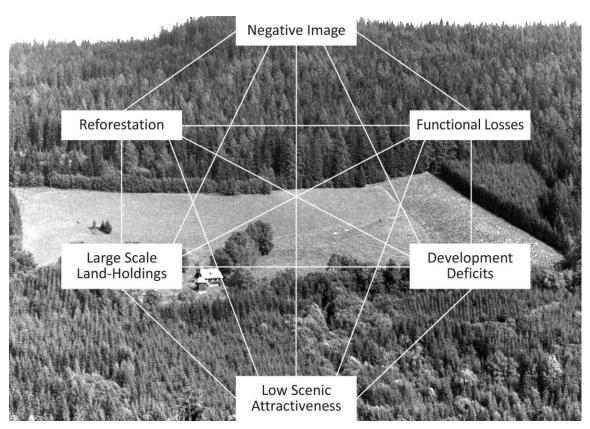


Fig 2. Correlation of the Detrimental Factors for a New In-migration in the Eastern Austrian Alps. Source: Löffler et al. (2016a, p. 164), photograph by the authors (2016)

Dax et al. (e.g. 2009) repeatedly examined the demographic dynamics in rural Austria. The authors address among other also the problem areas in the internal and fringe Alpine regions of the Eastern Alps in Lower Austria, Styria and Carinthia and offer recommendations for action. In a large-scale new study, which also considers the trend reversals in the Alpine region and provides numerous regional examples at the district level, Dax et al. (2016) demonstrate again the demographic change in Austria. In the foreground of their normatively laid out surveys are general regional strategies to achieve an increase in population or stabilization in the problem areas. The question of why new in-migrants also settle in out-migration regions, as is the case in the traditional depopulation areas of the Cottian Alps of Piedmont (Alpi Cozie, Piemonte), in the Montagna friulana or along the Alpine Isonzo (Soča) (Čede et al., 2014), however, is not addressed in the latter study.

While Konzett & Grüner (2017) confirm the research results generated in Friuli and in the north-west of Slovenia, using the example of the current out-migration areas in Montafon (Vorarlberg) and in the Gail Valley in East Tyrol, and emphasize the cultural and economic influence of newcomers, the study by Stöckl (2014) shows that further in the east, in the Gurktaler Alps (Carinthia), there can be no question of a new in-migration. The reasons, the author claims, are the unfavorable factors cited in Fig 2.

This study is based on the main thesis that there are structures of the natural, but especially cultural and socio-economic kind in the eastern Austrian Alps that make this region less attractive to newcomers.

In order to explain these "exceptional" spatial factors, it appears reasonable to first outline theoretical aspects of the new in-migration in peripheral areas of the Alps. Since there are sufficient publications on this topic, we restricted ourselves to a short overview. As a second step, a study area in the Alpine East of Austria is to be presented, which deviates significantly from the new demographic trend in the rest of the Alps. The main part of this study is devoted to a quantitative analysis of the factors that inhibit a settlement of new in-migrants. The new findings can be obtained from the evaluation of the current state of research and official statistical data, also from on-site surveys with qualitative interviews, and a community survey in the study area (complete survey) as well as from a media analysis. Methodological details will be discussed in the respective sections of this study.

2. Theoretical concepts for demographic change in the Alps

The new in-migration into mountain areas has been the subject of interdisciplinary research for several decades (for example, Fourny, 1994; Cognard, 2011; Stewart, 2002; Moss, 2006; Löffler & Steinicke, 2007; McIntyre, 2009; Gosnell & Abrams, 2011; Perlik, 2011; Moss & Glorioso, 2014; Zäch et al., 2015; Löffler et al., 2016a; 2016b). Examples from various cultural areas support the thesis that out-migration from mountainous regions linked to industrialization was replaced by in-migration in the late modern period, which was shaped by the effects of globalization. This is impressively demonstrated by the example of the traditional depopulation area of the French Alps, which has become an important in-migration area over the past four decades (Warmuth et al., 2016).

On the one hand, the concept of counter-urbanization (Berry, 1976; Mitchell, 2004) and, on the other hand, that of amenity migration offer a methodological approach for explaining the current demographic change. Both refer to the rediscovery and revaluation of rural areas as a settlement and economic section of a predominantly urban population ("urban refugees"). In contrast to counter-urbanization, amenity migration (cf. Moss & Glorioso, 2014), also includes people living in multiple locations (Fig. 3). The latter represent a type of mobility that does not necessarily involve a permanent change of residence (Williams & McIntyre, 2012). Nevertheless, this process is the driving force of current settlement expansion and current population growth in most Alpine regions – but not in many parts of the Eastern Austrian Alps.

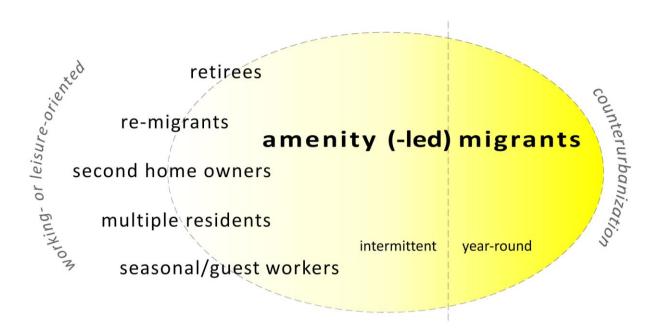


Fig 3. Counter-urbanization and Amenity Migration. Source: Model by the authors (2017)

The new in-migrants have consciously decided to live in the mountains and in many cases contribute (through the spirit of innovation) to an intact, vibrant village life. Most of these newcomers – often families with children – work and have either brought their own work or created a new occupation on site. In the area of overlap between local population and amenity migrants, there are also remigrants, i.e., locals who have left the community in search of work and later returned, as well as so-called relationship migrants, i.e., people who have immigrated for partnership or marriage into the community (Löffler et al., 2016b).

Based on this trend of the repopulation of peripheral rural (Alpine) areas, the question arises in the following sections why the importance of this process is so low in Austria's eastern Alpine region.

3. The Alpine east of Austria is different

Čede et al. (2014, pp. 253f; Fig. 1 and 2) show how much the demographic development in the Alpine east of Austria differs from the rest of the Alps. Consistent negative net migration figures, with the most unfavorable values in the Austrian part (Fig. 1), characterizes the very east of the Eastern Alps. This exceptional status was also recognized by Bätzing (2015a), but not addressed by his example of the Ötscher region (Bätzing 2015b). Thus, for this study, the peripheral core range of the Alpine east of Austria presents itself as the investigation area (cf. Fig. 4a–c).

The research area is located in the Styrian-Lower Austrian border area and in administrative terms currently comprises twelve municipalities. Of these, nine are in Lower Austria, from Hollenstein an der Ybbs (political district of Amstetten) in the west to Schwarzau im Gebirge (political district of Neunkirchen) in the east. The municipality Wildalpen in the political district Liezen, as well as Mariazell and Neuberg an der Mürz (political district of Bruck-Mürzzuschlag), merged and enlarged communities since the 2015 municipal structural reform, are situated in Styria.

3.1 The study area of the Styrian-Lower Austrian Limestone Alps

The study area encompasses the peripheral communities in the Lower Austrian-Styrian border off the main traffic routes ("Forgotten Rural Areas" Gramm et al., 2008). It is located in the chain-shaped limestone Alpine foothills (northern Ybbstal Alps, Türnitz Alps, Gutenstein Alps) in the north, where the mountains have mid-range character and are heavily forested, and in the isolated plateau-like High Limestone Alps (southern Ybbstal Alps, Hochschwab, Veitsch, Schneealpe, Rax, Schneeberg) in the south. While the higher mountain ranges with rugged rock

walls built from Mesozoic limestone and dolomite, the gentle and mostly forested elevations consist of marl and sandstone (Heinrich & Wessely, 2015, p. 7).

Unlike other Alpine parts, the region was only partially glaciated during the Pleistocene. The glaciation, which was slightly compared to the western part of the Eastern Alps, did little to form the landscape (Seger, 2005a, 2005b). After the melting of ice masses, the Lunzer Lake and the Erlauf Lake developed. The river Erlauf formed gorges and settlement-hostile trenches to the east and north of the Ötscher (1,873 m), which have been protected as the Nature Park "Ötscher — Tormäuer" since the renunciation of a further energy-economic use. Since the construction of the two mountain spring water supply lines, the Karst springs at the foot of the large limestone mountains have been largely used as the water supply for the city of Vienna.

From a climatic point of view, the Styrian-Lower Austrian Limestone Alps are characterized by high precipitation (more than 2,000 mm per year) in geographic barriers to north (Wakonigg, 1978, pp. 394f; Federal Ministry of Agriculture and Forestry, 1991-2013).

Overall, the general proposition by Čede et al. (2014, p. 264) proves to be accurate for Austria's eastern part of the Alps, according to which parts of the study area that may also appear scenically less attractive to newcomers, due to the unfavorable relief conditions with large vertical distances, periglacial steep slopes and high precipitation.

3.2 Population losses as a main demographic feature

In the municipalities studied, the population development deviates in some cases considerably from the changes at the provincial level (Lower Austria, Styria) and political districts (Amstetten, Lilienfeld, Neunkirchen, Scheibbs; Bruck-Mürzzuschlag, Liezen). Development in most peripheral communities has initially been characterized by a retarded increase in population late in the period of promoterism and a decline in the interwar period. In Schwarzau im Gebirge, the population decline began as early as the second half of the 19th century. From the first modern census in 1869 to 2016, the population shrank from 2,114 residents to 673 residents (-68.2%). With reference to the entire cadastral area, Schwarzau im Gebirge was the least populated municipality in Lower Austria in 1991 (Österreichisches Statistisches Zentralamt, 1993, p. 2). In the districts of today's community Neuberg an der Mürz, however, the population increased parallel to the development of mining and the iron industry in the high period of promoterism. The cessation of mining activities was responsible for the population's decline in 1900 (Statistik Austria, 2017b).

With regard to the development since 1981 (Figure 4a), it can be observed that Mariazell, Gaming and St. Aegyd am Neuwalde lost the most inhabitants. The population decline was highest in almost all municipalities in the study area from 2001 to 2011. The figures of the recent years point to a continuation of declining numbers in an attenuated form. Reasons for the prevailing decline in population are both the negative birth balance (Fig. 4b) because of increasing aging, and the negative net migration (Fig. 4c). The birth deficit in Mariazell is particularly high, where an above-average number of people of working age have already emigrated in the 1980s and 1990s. A different age structure shows only the municipality Göstling an der Ybbs with a relatively high proportion of children and adolescents in the total population (Statistik Austria, 2017b).

Population Development 1981 - 2017

changes in % and absolute values

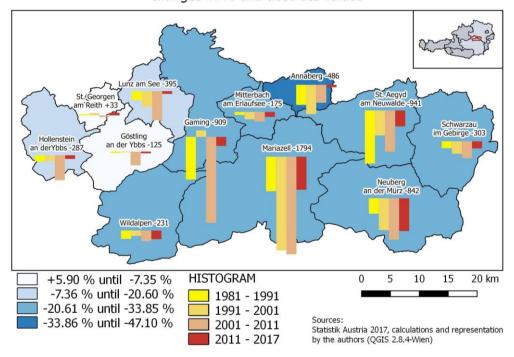


Fig 4a. Population Development 1981-2017.

Natural Population Growth 2002 - 2016

changes in % and absolute values

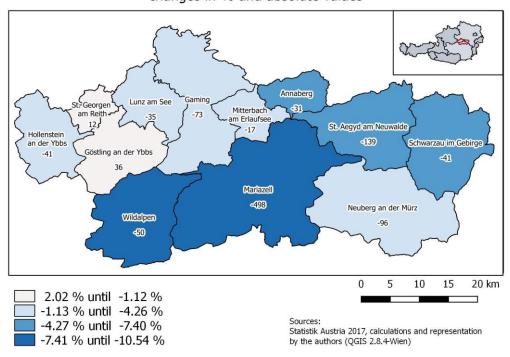


Fig 4b. Natural Population Growth 2002-2016.

Migratory Balance 2002 - 2016

changes in % and absolute values

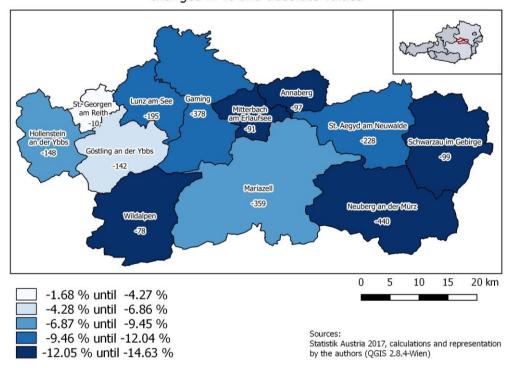


Fig 4c. Migratory Balance 2002-2016.

In most municipalities in the study area, the migration losses had a greater impact on the population decline than the birth rate. The relative migration losses are very large in Annaberg and Mitterbach am Erlaufsee. In absolute numbers, the exodus, accompanied by a lack of or inadequate in-migration, was particularly high in the large municipalities of Gaming, Neuberg an der Mürz, Mariazell and St. Aegyd am Neuwalde. The reason for the out-migration lies in the lack of job opportunities in the region. With respect to employment, agriculture, forestry and industry retain high significance, while the service sector has below-average representation. Companies in the creative industries and the digital work environment are largely missing. Despite the great distance, Vienna is an important destination for commuters in almost all municipalities in the study area (Statistik Austria, 2017b).

3.3 Results of the community surveys

Surveys in the Friulian mountains showed that the leaders in the communities – even those with negative net migration – were well aware of the new in-migration (Steinicke et al., 2014). In order to locate this phenomenon, it was therefore advantageous to carry out similar surveys in the present study area.

All twelve municipal offices were sent a standardized questionnaire by mail, asking them to answer the question of whether there are newcomers (amenity migrants) present and, if noteworthy, their numbers, origins and effects on the community. At the end of the questionnaire, questions about the secondary residences followed. The weak response rate made telephone inquiries necessary. From these, it emerged that after a negative reply to the initial questions ("there is no in-migration" or "the phenomenon is not significant"), the municipal authorities no longer considered it necessary to return the questionnaire at all. The information was therefore also obtained by telephone.

The results are not surprising. The municipal authorities said that although there were numerous secondary residences, there could be no question of any significant new in-migration anywhere in the study area. These secondary residences, most of which are owned by elderly citizens from

Vienna, St. Pölten and Graz, are visited on weekends at irregular intervals for tourist purposes; they are therefore exclusively (and affordably) leisure residences.

Their number is also considerable in municipalities with particularly high negative net migration. In Annaberg in 2011, 562 people were registered with main residence and 469 persons with secondary residence. In Mitterbach am Erlaufsee, too, the number of secondary residences in relation to the population with primary residence is extremely high, because occupational outmigrants to the central areas often do not completely abandon their home. An essential prerequisite for this is the predominance of ownership of housing space in the rural periphery.

The number of secondary residences is generally very high in Lower Austria. However, their owners do not form a socially homogeneous stratum in the study area. In the period of promoterism, some villas were built on the fringe of existing settlements, along the railway of Mariazell and the Erlaufsee. In the last years, it could be observed that vacant buildings have been bought, revitalized and thus saved from decay. Several peripheral districts (for instance, in the municipality St. Aegyd am Neuwalde: districts Fadental, Lahnsattel, and Ulreichsberg; in the municipality Gaming: districts Nestelberg, Taschelbach, Trübenbach) could thereby be saved from complete depopulation. Settlements with holiday houses and isolated secondary residences of wealthy persons developed only in small numbers. For this estate acquisition, ownership of a private hunting property is usually in the foreground.

The owners of the secondary residences only marginally increase the demand for consumer goods. Consequences of the departure are the renaturation of the infrastructure and the deterioration of the local supply system. Meanwhile, the elementary schools and post offices were closed in all peripheral districts (Henkel, 2004, pp. 332f.).

3.4 Large-estate ownership and forestry

In addition to the natural features of the environment, the increasingly uniform and monotonous cultural landscape is another reason why very few new in-migrants move to the study area. First and foremost, this is due to the increase in forest areas due to afforestation of former agricultural land and, associated with it, large-scale land ownership. Low real estate mobility also reflect its century-long persistence. It can be assumed that the sale or purchase of land are also presently insignificant. This is demonstrated by an exemplary evaluation of real estate advertisements in regional and national daily newspapers (Kleine Zeitung, Niederösterreichische Nachrichten, DerStandard, and Die Presse) as well as conversations with real-estate agents. Thus, in the period from the beginning of January to the end of June 2017 only five ads to this effect could be found for the study area.⁵

In order to answer the main question of the present study, it seems indispensable to examine more closely the enormous importance of large-scale land ownership in the eastern part of the Austrian Alps and the related effects with the example of the investigated municipalities and to map it in its spatial dimension.

3.4.1 A map of the extensive land ownership

Visualizing the large-property ownership in the study area was associated with considerable effort and many difficulties. As a first step, the names and contact addresses of the large forestry land holdings had to be determined. The "Forest Yearbook" and the "Green Handbook" provide valuable information (Österreichischer Agrarverlag, 2016; Steiermärkischer Forstverein and Kärntner Forstverein, 2010; Forstverein für Niederösterreich and Wien, Burgenländischer Forstverein, 1994⁶). However, as these publications are only orientation guides, all municipal offices were also asked to provide the names and contact details of the forest administrations. Some valuable information could also be taken from community histories or obtained in the course of talks with residents of neighboring properties. The next step was to contact all eligible

⁶ The planned new edition failed because of the resistance of many major landowners (Kranz, telephone conversation 2/2017).

⁵ A quantification of all sales cases would require a systematic analysis of the land registers in the individual district courts, but this would go beyond the scope of this work.

landowners or their administrators. The favorable internet presence of the provinces of Lower Austria and Styria (Land Niederösterreich, 2017; Land Steiermark, 2017) proved to be an advantage for our further research. The digital atlases allow a search query for the numbers of the cadastral communities (= land register numbers) and deposit numbers as well as the production of shape files for further cartographic processing.

Additional information to demarcate the forestry estates was obtained from interviews with residents of adjacent lands. Most wooded acreages form a rounded property complex. Within the framework of the survey, all relevant deposit figures were also determined and queried in the land register of the district court in charge or at the municipal office.

Fig. 6, which will be discussed in the following section, is the result of the individual methodological steps. At first, however, a look at the land use (Fig. 5) would be of advantage.

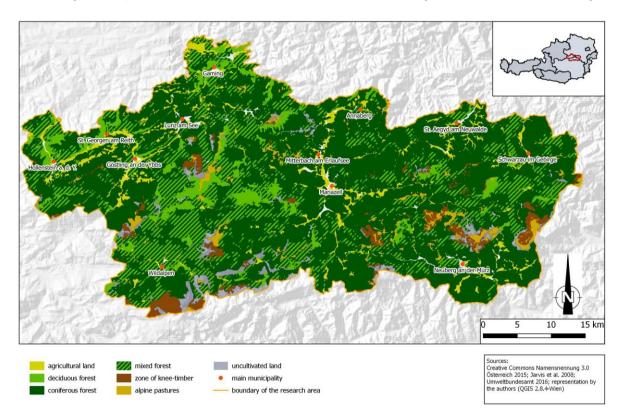


Fig 5. Land Use in the Study Area (2016).

3.4.2 Land use and property ownership situation

In most municipalities of the study area, the forest share is over 80 percent (Andrian-Werburg et al., 2008; Seger, 2005c). The extensive and monotonous coniferous forests (Fig. 5) originated primarily in the 19th century in connection with the creation, enlargement and consolidation of large estates through the purchase of farmers' property ("Bauernlegen")⁷ and the utilization of forestry. In Neuberg an der Mürz and Lunz am See, the proportion of forest is slightly lower, because the limestone of the Schneealpe (1,903 m), the Rax (2,007 m) and the Dürrenstein (1,878 m) occupy larger areas. There, the knee-timber belt spreads in the course of the regression of transhumance. Agriculture, with regard to the number of holdings and the size of the areas, plays only a noteworthy role in Göstling an der Ybbs (Tasser & Tappeiner 2008; Seger 2011).

Large-scale land-holding (Fig. 6) goes back in part to feudal times and is characterized by extraordinary persistence. The Cistercian monastery Lilienfeld and the former aristocrat family Hoyos are – since the monastery was founded in the Middle Ages and the acquisition of the manor Hohenberg in the course of the Counter-Reformation – among the largest landowners in

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⁷ Expropriation and confiscation of farms by landlords, to manage them as part of their own estate.

the region. In the northern valleys of Gaming and St. Aegyd am Neuwalde as well as on the upper Mürz, industrialization began already in the first half of the 19th century, mostly at sites of former hammer mills. It was accompanied by the purchase of numerous farm properties to supply the businesses with charcoal, creating new forms of landlordism. After the use of charcoal as an energy base was no longer relevant, the large forestry estates were bequeathed independently of the enterprise.

In the period of promoterism, the bourgeoisie also established in the region, which was after the imperial (hunting castle Mürzsteg) and aristocratic model mainly interested in hunting. Thus, in 1875 Albert Freiherr von Rothschild acquired extensive forests in Gaming, Göstling and Hollenstein an der Ybbs from the "Actiengesellschaft für Forstindustrie." After the insolvency of the Creditanstalt 1931/32, in which the house of Rothschild was involved as the majority shareholder, a large part of the forest ownership was ceded to the Republic of Austria and integrated into the Austrian Federal Forests (Bruckmüller, 2015, pp. 152, 155). Karl Kupelwieser bought the forest estate Seehof in Lunz am See in 1897 and extended the large estate by acquiring numerous farm properties (Bruckmüller, 2015, p. 157). After the agrarian reform in 1848, the farmers incurred a debt crisis, which was excessively exploited for the construction of new major estates by the upper bourgeoisie and the nobility until the beginning of the First World War.

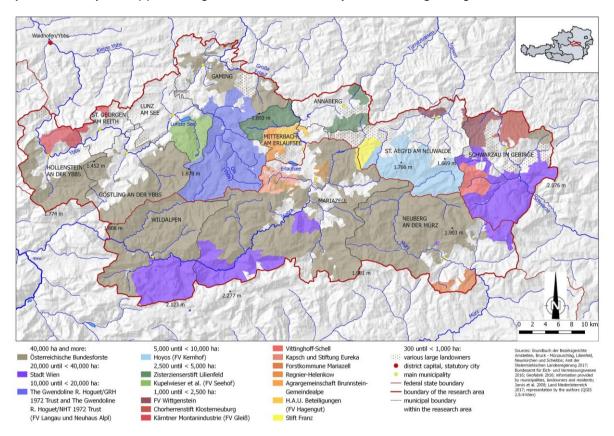


Fig 6. Large-scale Land Holdingship in the Study Area (2017).

However, the land reform planned after the disintegration of the Habsburg monarchy to redistribute ownership and resettle farmers was not to be successful in Austria, in contrast to the eastern middle-European neighbors (Melichar, 2008). In Schwarzau im Gebirge, the treasurer of the Hoyos estates at Gutenstein acquired the farmers' lands and consolidated them into a larger property unit. The nobility, who subsequently rapidly changed in possession, continued the concentration tendencies (Ast, 2002, p. 210). In 1937, the monastery Klosterneuburg made the acquisition; it had the necessary financial means through the compensations from the property cessions for the establishment of Höhenstraße (High Street) in Vienna. Apart from individual divestitures, in recent years, the monastery has sought to round up its property by

acquiring more plots, which has recently reinforced the landlord structures even more (Kranz, phone call 2/2017).

The large estates of former noble families such as the Hoyos shrank, however, in the course of the 20th century was a result of the abolition of the Fideikommiss in 1938. Prior to this, these legal means guaranteed the indivisibility of property and were used primarily by nobles. Ernst Hoyos-Sprinzenstein experienced economic difficulties in the interwar period and sold 2,100 hectares of his land to the City of Vienna (Melichar, 2008, p. 603). The latter had previously acquired land in the region in connection with the protection of the catchment area of the two Vienna mountain spring water supply lines.

The number of owners of large properties remained stable in the first half of the 20th century. The owners of forestry lands, however, changed more often than in the decades after (Melichar, 2008, p.631). The area of the former Gleiß estate in the upper Ybbstal still belonged to the Orsini-Rosenberg at the beginning of the 20th century. The subsequent owner, Rudolf Freiherr von Drasche-Wartinberg, extended the estate by a few farming properties before it was acquired in 1934 by the Carinthian Mining Industry (Bissenberger, 2003), which is also owned by a formerly aristocratic family. Other industrialists such as the Kapsch and former noble families such as the Vittinghoff-Schell, recently also acquired forestry property in the region or extended it in the form of foundations. The largest property is the land belonging to the Austrian Federal Forests, which originated from the property of the former ruling dioceses of Neuberg, St. Lambrecht and Gaming, from the forests of the Rothschild in Hollenstein and Göstling an der Ybbs and the Innerberger main labor union in Wildalpen. The abandonment of agriculture contributed significantly to the decline of the Alpine cultural landscape (Penz, 2005a, 2005b; Borsdorf & Bender, 2007).

3.5 Additional indicators

Remarkable features of the study area are on the one hand its unsatisfactory functional endowment (Čede et al., 2014, p. 266), which is in close interaction with the loss of inhabitants, and on the other hand its remoteness. While both are important aspects for understanding further population losses, however, they cannot explain the low rate of new in-migration. Especially amenity migrants seek seclusion, and the lack of centrally located functions does not pose a problem for them. Nevertheless, the following section seeks to outline these two characteristics of the study area, as they emphasize the low attractiveness for amenity migrants in connection with natural space, ownership structure and land use.

The poor image of former and crisis-stricken mining and industrial areas (Čede et al., 2014, p. 266), which also applies to parts of the area studied, as well as signs of deterioration in the cultural landscape and deficits in the tourist infrastructure also have an unfavorable impact on in-migration.

3.5.1 Accessibility and centrality

Apart from some districts in the municipality of Neuberg and der Mürz (until 2015, municipality Kapellen), the entire study area is difficult to reach. The traffic is limited because of the mountainous relief and the sparse settlement on a few superordinate roads (B 20 Mariazeller Straße, B 21 Gutensteiner Straße, B 24 Hochschwabstraße, B 25 Erlauftal Straße.

In addition, the Eisenwurzen was for centuries economically oriented towards the Erzberg region (Bender, 2011). Since the industrialization, however, iron ore has lost its centripetal force, apart from the brief interruption during the National Socialist tyranny and in the early post-war years. The surrounding area had to reorient itself in economic terms. The statutory city Waidhofen an der Ybbs has lost as much economic momentum in favor of Amstetten as parts of the Mur-Mürz-Furche, in which the population has been declining since the steel crisis in the 1980s.

The pilgrimage destination and also formerly important summer resort Mariazell, experienced a continuous demise in the last decades, which is reflected in the population decline, in the decrease of the overnight stays, in particular in the summer half-year (Statistik Austria, 2017a) as well as in functional losses (ÖROK, 2006). The stores on the outskirts are closed. A lack of

investment and foreign acquisitions characterizes the situation of the hotel industry. Most recently, the congress and event center Europeum and the indoor pool closed. In Mariazell and in all other towns of the study area, there is no opportunity for higher education except agricultural colleges. In smaller communities such as St. Georgen am Reith, local supply has also collapsed (Borsdorf, 2005; Machold & Tamme, 2005).

The branch rail lines built in the late period of promoterism were discontinued after 1985, deconstructed or reduced to freight traffic. Today, only the *Mariazellerbahn* is operated with modern railcars from St. Pölten to St. Sebastian near Mariazell. The supply of public buses on major roads from the municipal capitals to the district capitals has improved only scarcely in recent years.

3.5.2 Image deficits and signs of deterioration of the cultural landscape

Other reasons for the low attractiveness are the decay and demolition of cultural monuments, abandoned or missing walkways near community capitals, closed commercial enterprises, and the antiquated industry. Another problem is the lack of interest in former hammer works and hammer manor houses, which could have an identity-fostering function for the region. The former hammer works are used only in rare cases for museum purposes. In St. Georgen am Reith, the only stately hammer manor house in town was torn down (Hackl, 2012). The station buildings, bridges and tracks of the branch lines have not been restored or removed since their settings. The weakness in the protection of historical buildings and monuments is also evident in the fact that old inns in a central location fall victim to demolition and leave empty sites, or in peripheral locations after the closure are left to decay. These losses of culturally important architecture weaken the potential of the Eisenwurzen (Brodda & Heintel, 2009) and the *Mariazellerbahn* as possible UNESCO World Heritage Sites.

Further to the north of the research area and around the upper Mürz, larger industrial plants have developed in the flat sections of the mostly narrow and fluviatile-shaped valleys at the locations of the former small-scale ironmongery industry. Kienberg bei Gaming, St. Aegyd am Neuwalde and Gußwerk near Mariazell are still home to metalworking companies. After the beginnings of industrialization in Lanau and Krampen, a concentration of the plant facilities on Neuberg an der Mürz, which was more favorably situated in terms of traffic geography, took shape on the upper Mürz. The deindustrialization began here as early as the end of the 19th century in connection with the abandonment of the mining operation and continued through the closure of the ironworks in 1924 until the end of the remaining production in 1951. The former sawmill of the Austrian Federal Forests is also out of operation. The subsequent use of the brownfield sites proved difficult (Pickl & Kanzler, 1996, pp. 613–615, 629–630). Today, only one operation in Neuberg an der Mürz remains at the site of the former magnesite plant and a small metal processing enterprise.

Overall, the EU funded programmes on development of rural areas have less socio-economic impact in the study area than in other peripheral areas. Here, too, landlordism plays an essential role, as it often counteracts innovative tourism projects in endogenous regional development, for example, through access bans, restrictions on outdoor sports or insignificant land sales for inmigrants.

4. Synthesis and Conclusion

The objective of this contribution was to also empirically prove the exceptional demographic position of the eastern Alpine part of Austria, for which the aforementioned study of Čede et al. (2014) presented the main reasons (cf. Fig. 2) in a hermeneutical manner. The authors thereby drew on the concepts of counter-urbanization and amenity migration, which are both a counter-movement to rural and mountain exodus, the latter type of migration being associated with multi-residential living style. The main question was to uncover whether in the sample municipalities, despite negative net migration and declining population, these new in-migrants, that is amenity migrants as well as counter-urban residents, had settled. This would indicate that parallels exist with other traditional emigration areas studied in the Eastern Alps and – as in Slovenia and Friuli – may reflect early stages of amenity migration. However, if these processes and structures

cannot be proven, the exceptional position of the Alpine East of Austria must be explained in an idiographic sense.

In the course of the empirical surveys in the study area of the Styrian-Lower Austrian Limestone Alps, the authors were able to verify the main thesis in its entirety. The main reasons for the insignificant new in-migration in the eastern part of the Austrian Alps are - in addition to the lesser natural attractiveness compared to the high mountains of western Austria – the largescale land holdings resulting from the cultural landscape genesis with their persistent spatial structures as well as the closely related forestry and monotonization of the cultural landscape. Nowhere in the Eastern Alps has there been such a spatial concentration of large estates as in the Styrian-Lower Austrian Limestone Alps, where they existed for centuries. This results in strong property continuities, and real estate acquisition is only rarely possible for newcomers. Economic impulses from the outside are therefore slim. Economic innovations by large landowners – such as in forest management and hunting – are, however, not necessarily reflected in the local labor market, also not in a positive demographic development. Improvement deficits and loss of functions in many communities reinforce the weaknesses discussed – despite various EU funded programs. Other reasons are – in addition to the decline in importance of the traditional seasonal summer resort - in regional image issues as well as in the present, compared to the second half of the 19th century, less prestigious hunt.

Considering the population forecast of the EU (trend forecast), a strong growth of the urban regions of Vienna and St. Pölten can be expected by 2030; the investigated municipalities of the Styrian-Lower-Austrian Limestone Alps will, however, not be affected by this development (Bätzing, 2015b, pp. 30f). In Styria, the communities researched are similarly remote from the still expanding city region of Graz. Accordingly, migration losses in the study area will reinforce the population loss significantly in the future, even if new arrivals through amenity migration and counter-urbanization conceivably increase. Therefore, as empirically evidenced in the sample communities, under the given conditions that disfavor new in-migration into the east of the Austrian Alps, in the next few years, no demographic change in trend can take place in the Alpine peripheral areas of eastern Austria compared to other Alpine regions with a previous decline in population. This contribution shows that large landowners and forestry in particular are still dominating the spatial structures.

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Municipalities in the research region.