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Landscape and digital nomads in Spanish rural areas. The case of Valverde de Burguillos

Abstract

The article examines the opportunities and challenges of peripheral rural areas with high landscape values in the context of digital nomads, who combine remote work with leisure. The problem addressed concerns the protection and development of such areas under the pressure of digital nomadism on the sample of the Spanish town Valverde de Burguillos. The literature review has shown that the nomadic lifestyle is becoming popular globally. The impact of digital nomads on rural landscapes has not yet been sufficiently investigated in the literature.

The method employed was a case study, including an on-site study visit and a students' idea for the town of Valverde de Burguillos in the form of a simulation.

The analysed case study of an idea for Valverde de Burguillos presents a development centre and a digital nomad village. It focuses on integrating digital nomads into the local community and on their impact on the urban structure of the town and the adjacent landscape. On the one hand, it introduces new architecture and infrastructure into the rural landscape, transforming it. On the other hand, it enables conservation, protection, and access to the Water Culture heritage. The research highlights the importance of landscape values in social identity, branding, and sustainable development. Relationships were explored between the need to protect and develop valuable rural landscapes and the emerging tourism and residential trends related to digital nomads. At the same time, attention was given to the increasing prevalence of remote work and its impact on spatial structures, architecture, and landscapes. Emphasis was put on the adaptation and potential impact on local communities and surrounding landscapes, which can be considered a revision of design and housing paradigms.

Key words: rural landscape, digital nomads, new housing paradigm, values of landscape, cultural heritage and landscape of the region

Introduction

The article examines the opportunities and challenges of peripheral rural areas with high landscape values from the European perspective in the context of teleworking and combining work and vacation (so-called workation, see Fig. 1) on the example of the small Spanish town of Valverde de Burguillos. Relationships are explored between the need to protect and develop valuable rural landscapes (Strecker 2018) and the emerging tourism and residential trends such as workation. In this article, individuals and groups who combine work with leisure and sightseeing activities are referred to as digital nomads. We investigate digital nomadism as a form of remote work and a lifestyle but beyond that we focus on its impact on landscape change, protection, and degradation as well as proposed spatial and architectural solutions accommodating new temporary settlements. While this is a global problem, our article focuses on the European perspective, which so far has been rarely examined in the literature. This article provides a brief overview of evolving nomadic lifestyle and habitation and their impact on European landscapes.

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Fig. 1. Workation diagram (elaborated by M. Jagiełło, A. Kozińska-Kasparek)

Il. 1. Diagram "workation" (oprac. M. Jagiełło, A. Kozińska-Kasparek)

Depopulation and economic decline

Global urbanization trends (Antrop 2004) mean that peripheral rural areas are facing increasing demographic challenges, depopulation, relatively weaker economic conditions, and weakening social bonds. This is happening regardless of their often-significant landscape values, whether natural or cultural (Biedenweg et al. 2019). An example of such a region is the Spanish Extremadura, where the analyzed town of Valverde de Burguillos is located, but there are also other European examples, such as the Italian region of Tuscany, which is also struggling with depopulation in some areas (Reynaud et al. 2020). While these areas may be perceived as attractive for tourism, they are becoming less and less appealing for young people to live in and settle permanently due to economic, social, and cultural factors.

Landscape values

Regardless of the definitions and meanings of landscape (Buława et al. 2022), landscape and landscape values are important for societies in cultural, social, economic, and ecological terms. The cultural aspect is a key component of social identity, branding, and sustainable development. In this light, landscape and its value are seen as a guarantee of social continuity and heritage preservation. Landscape also has important features impacting the well-being of the residents (Casini et al. 2021). This is an important attribute for areas aspiring to be attractive also to digital nomads.

The goal of the study and scientific problem

This study aims to contribute to the construction of appropriate spatial and landscape development models for the future of rural areas in the context of the growing number of digital nomads. Our goal was to discuss the phenomenon in question before it occurs, since by then it is too late to plan and design – then we can only observe, measure, and experience the effects. The focus of this article is the anticipated future of landscapes (its threats and opportunities), as architecture and urban planning are primarily concerned with future (planning and designing).

The scientific problem addressed is the impact of the pressure of emerging trends in remote work, workation and digital nomadism on the direction of development, transformation, and method of preserving valuable natural and

cultural rural landscapes (Strecker 2018). On the one hand, this presents opportunities for small peripheral communities dealing with demographic and economic challenges; on the other hand, it poses a threat to the preservation and nurturing of cultural and natural values of landscape, as they may be sacrificed for current economic needs.

The research question posed is the following: What are the opportunities and threats for landscapes in peripheral rural areas considering the growing interest among digital nomads and the efforts of municipalities to attract them?

State of research

The literature review relates to digital nomads, their habitation, and impact on the local community as well as on the environment and landscapes.

Digital nomadism

Remote work has become increasingly popular in recent years, although the digital nomad movement began already at the turn of the 21st century (Makimoto, Manners 1997). The radical increase in the number of digital nomads has been made possible by the development of information technology (Amaral et al. 2021), but it is worth noting that it was accelerated in the years 2021-2023 by the recent Covid-19 pandemic, which necessitated social distancing and remote work on a global scale (Eronen et al. 2023). More and more employers are realizing the benefits of allowing their employees to work from home or other locations outside of the traditional office setting. With the advances in technology and communication tools, remote work has become a viable option for many people and many types of work (Voll et al. 2022). Sometimes, people decide to work remotely from an exotic location and combine work with vacation. They are mostly young people who are professionals in the IT and creative industries. However, families are also choosing this way of life, finding it more affordable and more family friendly (Dreher, Triandafyllidou 2023). These nomads work mainly in a system based on tasks and assignments, so they include numerous language teachers, architects, programmers, graphic designers, etc.

Currently (after the Covid-19 pandemic), there is also a global increase in the mobility of people seeking to combine remote work with leisure. These trends are especially visible in Asia and Southern America (ClubMed "The Top Countries in the World to Live as a Digital Nomad"), while in Europe they are particularly true in southern regions (Cuadrado-Ciuraneta et al. 2017). In Spain, this phenomenon encompasses mostly coastal areas of the Mediterranean, from Costa del Sol to Costa Brava (Zambon et al. 2018). Peripheral, agricultural, and less tourism-oriented areas, such as Extremadura, have already started their experience with digital nomads (Red Nacional de Pueblos Acogedores "Buscas Un Pueblo..."). It is worth noting that there is a Spanish web portal for digital nomads offering rural accommodation throughout the country (other than the popular destinations) with co-working facilities tailored to their needs. It contains categorized offers of peripheral yet attractive and affordable remote work locations at about 43 towns and villages all over rural Spain (Red Nacional de Pueblos Acogedores "Buscas Un Pueblo...").

Digital nomadism as an urban regeneration tool and its impact on the local community

In the literature, digital nomadism has been studied as a regeneration tool, but mostly in non-European realities, especially in Asia, e.g., Thailand (Jiwasiddi et al. 2022), where the related industries are growing, but also in Canada (Dreher, Triandafyllidou 2023). Only a few European regions and cities have been examined with respect to this topic, especially in Finland and Estonia, where the capital Tallinn has been transformed into a digital nomad hub (Eronen et al. 2023). The Portuguese region of Alentejo, neighbouring Extremadura, has also been investigated for its cultural potential for digital nomads (Amaral et al. 2021). Other regions of Southern Europe are also impacted by digital nomadism, such as Croatia and Bulgaria, which even organize a year-round calendar of dedicated events ("Bansko Nomad Fest" 2023). The above-mentioned Spanish web portal (Red Nacional de Pueblos Acogedores "Buscas Un Pueblo...") also serves as an urban regeneration tool for the advertised towns. However, even though the attractive "peripheral" landscapes are among the most important developmental challenges for Europe ("Agenda Urbana de Valverde de Burguillos 2030"), the relationship between rural areas and the new trend of digital nomadism is still not well explored in the literature.

The example of Thailand (Jiwasiddi et al. 2022) shows the presence of digital nomads also affects the local community and local services such as accommodation, restaurants, and cafés. Their activity results in longer operating hours of work-friendly premises (or co-working spaces) due to remote work often synchronized with another time zone. Digital nomads also influence the offer of catering establishments and other meeting places (Jiwasiddi et al. 2022). As a result, they make such places more vibrant, but on other hand, this clearly distorts local culture, customs, and traditions. Moreover, this phenomenon contributes to increases living expenses and real estate prices for the inhabitants, as seen on the example of Costa Rica. Also, new social inequalities are arising in digital nomad hubs in many exotic locations around the world.

In the cases seen in the above-mentioned web portal for digital nomads in Spain (Red Nacional de Pueblos Acogedores "Buscas Un Pueblo…") the scale of the phenomenon is so far low as it concerns small rural settlements, but the experience of other regions and continents shows that, if successful, it will grow, and new challenges will emerge (Zhou et al. 2024).

The impact of digital nomadism on the environment and landscape

The impact of digital nomadism on rural landscapes in general has not yet been widely explored and investigated in the literature because in most cases the focus is on the negative impact on the environment. The latest literature describing this phenomenon concerns mainly Asian but also other attractive and most famous tourist destinations around the world (both planned and spontaneous). Travelling involves using a means of transportation such as a plane, car, or at best train, which generates additional emissions of CO₂e (Wagner 2022). In the case of electric vehicles, it is recommended to use locally generated electricity (Herzog 2022, 92-93). This affects landscape features such as photovoltaic panels (used in architecture and photovoltaic farms), wind turbines, and hydro-power plants (Herzog 2022, 116, 117). Another problem is energy storage (also in cars), necessitating a network of charging stations in remote areas and local energy storage facilities. These new elements also impact the landscape. In addition to the communication aspect, digital nomads, by their very nature, have high energy demands as they use computers and constant wi-fi connections. This means the energy consumption of dozens of computers and routers (on the users' side) and of the entire transmission network (on the Internet provider's side). It is worth noting that many towns (e.g., Benidorm, province of Alicante, Spain) are deploying free high-speed public internet connections to attract digital nomads (Visit Benidorm Foundation "Digital Nomads"), which results in huge energy consumption. These changes in naturally attractive locations result in development pressure on leisure areas such as beaches and riverbanks. New communication and recreation infrastructure is also emerging at important locations such as rental centers or travel agencies on the edges of attractive areas (forests, canyons, water areas).

The case is different for peripheral rural areas with high landscape values. Only a few articles dealt with the impact of digital nomads on rural landscapes. Mainly rural landscapes and their transformations in relation to rural tourism are considered (Abellán, García Martínez 2021; Lane, Kastenholz 2018), while the relationship between rural landscapes and rural tourism with digital nomadism is missing. Some researchers have highlighted the importance of the heritage and landscape of Alentejo (a Portuguese region neighbouring Extremadura) (Amaral et al. 2021), but they focused mainly on digital nomads as a new tourism sub-sector. Other researchers have addressed the issue of the care of the place, but without clear conclusions regarding the impact on the landscape (Liegl 2014). It is worth noting that a master's thesis aimed at creating a digital nomad centre in the abandoned, peripheral village of Brzeźnica in Poland has been developed (2021/2022) (Malec 2022). The MA thesis presents the Polish perspective on the phenomena in question. The proposal shows possible redevelopment with new structures and buildings in relation to the existing linear village layout and incorporating the lakeshore area and the adjacent park.

Materials and methods

An overview of the analysed case: Valverde de Burguillos, its demography, and undertaken actions

The issue was analysed using the example of the small town of Valverde de Burguillos in the province of Badajoz in the Extremadura region of Spain (Fig. 2). The town has



Fig. 2. Location of Valverde de Burguillos in Spain (elaborated by B. Buława, based on Google Maps 2023)

Il. 2. Lokalizacja Valverde de Burguillos w Hiszpanii (oprac. B. Buława, na podstawie Google Maps 2023)



Fig. 3. The urban structure of Valverde de Burguillos and the fabric of the adjacent landscapes (source: Google Maps 2024)

 Struktura urbanistyczna Valverde de Burguillos i forma przyległych krajobrazów (źródło: Google Maps 2024)

experienced extreme depopulation. As an illustration of the problem, it had around 800 inhabitants in the 1970s, 309 inhabitants in 2011, and only 273 inhabitants in 2022 (Ministerio De Politica Territorial y Memoria Democratica 2023). This means that now the town has only about a third of the population it had in the 1970s. The rapidly shrinking town resulted in an aging population and a shortage or even lack of vacancies and development opportunities. Another emerging problem concerns the degradation of buildings as many of them are no longer used and maintained. Public transportation to neighbouring cities is rather poor. In general, due to the rapidly progressing depopulation associated with rural emigration, the town has been struggling with a wide range of social and cultural crises since the 1960s. The social, economic, and cultural problems of Valverde de Burguillos are strongly interconnected and have deepened in recent years. However, the case of Valverde de Burguillos reflects a broader trend of progressing depopulation, seen across rural Spain (Gómez Valenzuela, Holl, 2023).

It is worth highlighting the current active involvement of the local community and local government, who have made determined efforts towards activation and revitalization with tools that go beyond the traditional urban strategies. Because of that, the town has been the subject of a pilot project of the Spanish government for innovative strategies in local rural development (Domínguez-Ruíz et al. 2020). The authorities of town, in collaboration with the regional authority of Junta de Extremadura, have adapted the mechanisms and tools needed to develop such a small population as opposed to the common urban planning theory and policies applied to larger urban populations. The flexibility requirements and the way to proceed need a different perspective, agility, and much more intense connection with the citizens, where individual demands can be heard due to the small population size. Based on these considerations, a new urban planning tool has been developed that is more focused on strategic objectives, activities, and middle and short-term actions that are faster than the traditional urban planning. The tool in question is the Urban Agenda (Spanish: Agenda urbana) ("Agenda Urbana de Valverde de Burguillos 2030"), which the national government originally designed to make urban policies and actions more agile and versatile, but it has proven to be a useful tool for smaller populations that have little capacity to develop complex urban plans. Urban Agenda of Valverde de Burguillos used here as an example has already been approved and is being implemented. Starting from an in-depth analysis that focuses on the concerns of the citizens and the potential of the municipality, it pays explicit attention to social areas. One result of these initiatives is the cooperation between the town of Valverde de Burguillos, University of Seville, and Academy of Silesia that is presented in this article.

Valverde de Burguillos and its landscapes

The municipality of Valverde de Burguillos occupies an agricultural area of 19.41 km², with the compact historic urban structure of the town covering about 0.12 km² and measuring length approximately 600 m by width approximately 300 m (Fig. 3). The adjacent and surrounding landscapes are typical of Extremadura with its distinctive patterns of plantations and crop fields, which means that they have been heavily transformed by agricultural activities. In any case, they are aesthetically valuable.

Importantly, there are many visual connections between the town and its surroundings, which comes from the fact that the town centre is located on a hill and the surrounding areas are also hilly with valleys.

There are many visual landscape openings, axes, and panoramas, both from inside of the town (Fig. 4) and from the outskirts of its urban fabric (Fig. 5). Please note that the photos were taken in January.

An important element of the landscape of the town and its surroundings is the so-called Water Culture (Spanish: *La Cultura del Agua*). This is the term that describes the-

heritage and monuments associated with hydraulic engineering, which was highly developed in the past. There are many water facilities, some of which are still in use. They are an important part of the contemporary landscape, as in the case of an old laundry (Fig. 6). In 2020, the Spanish government recognized them as a single entity, which was declared a Cultural Heritage Site (Spanish: Bien de Interés Cultural) (Decreto 10/2020, de 4 de Marzo, Por El Que Se Declara Bien de Interés Cultural La Cultura Del Agua, En La Localidad de Valverde de Burguillos (Badajoz), Con La Categoría de Lugar de Interés Etnológico 2020).

The method

The research is based on a case study including an onsite study visit (conducted by a co-author of this article) and one (chosen) students' idea called Digital Nomad Village for the town of Valverde de Burguillos is Spain, which is considered as a simulation method (Groat, Wang 2013, 349–374). We conducted a case study of a project idea that includes future envisioned solutions, rather than a case study of any existing place in Spain (Red Nacional de Pueblos Acogedores "Buscas Un Pueblo..."). The reason is that this phenomenon is still in its infancy and so far, there is little literature related to the actual impact of digital nomadism on Spanish rural landscapes. This approach, involving the use of the simulation method, allows us to prepare for or prevent the effects of the phenomenon in question well in advance (Groat, Wang 2013, 367).

The simulation was intended to provide an architectural and landscape overview of the proposed solutions, but above all to project the consequences of the associated social and strategic developmental changes for the town. We also wanted to draw attention to the consequences of a new technical and communication infrastructure, which is not itself the subject of the study, but which will affect the landscape (e.g., landscape dominants). Consequently, the simulation method was used to predict the physical (visual) changes of the space, as well as the associated effects, which we believe is most relevant to the study in question. Consequently, drawing techniques and ways of developing visualizations are less important for the study in question, and more important is the embedding of the simulation process itself in the real socio-economic environment.

The three-day study's visit to Valverde de Burguillos took place in January 2023 and included on-site analyses, photo documentation, and an interview with the mayor of the town combined with a presentation of the progress of the students' works. One students' term work conducted at the Academy of Silesia has been chosen for this research from all works made in both universities in winter term 2022/2023.

Results. The students' idea of Digital Nomad Village for Valverde de Burguillos

The substantive scope of the term project encompasses, on the one hand, a general overview of the global phenomena and trends observed in Europe (especially in Spain), and on the other hand, it focuses on a specific example



Fig. 4. Visual openings and landscape connections as seen from inside the town (photo by B. Buława, January 2023)

Il. 4. Otwarcie widokowe i relacje krajobrazowe widoczne z wnętrza miasteczka (fot. B. Buława, styczeń 2023)



Fig. 5. Visual openings and landscape connections as seen from the town outskirts (photo by B. Buława, January 2023)

Il. 5. Otwarcie widokowe i relacje krajobrazowe widoczne sprzed miasteczka (fot. B. Buława, styczeń 2023)



Fig. 6. Old laundry, an element of the Water Culture in the town (photo by B. Buława, January 2023)

 Stara pralnia, element "kultury wody" w mieście (fot. B. Buława, styczeń 2023)

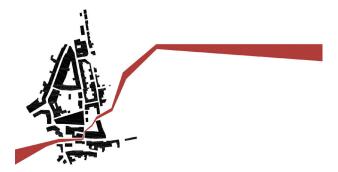


Fig. 7. Nolli's plan for the town of Valverde de Burguillos with the idea of a digital nomad zone (elaborated by M. Jagiełło, A. Kozińska-Kasparek)

II. 7. Plan Nolliego miasteczka Valverde de Burguillos z koncepcją strefy cyfrowych nomadów (oprac. M. Jagiełło, A. Kozińska-Kasparek)

within the town of Valverde de Burguillos. The overall goal was to develop the town in the social, economic, and spatial spheres. In the spatial aspect, the goal was to regenerate urban public spaces, make them more vibrant, increase demand for services, and develop public transportation.

The idea was presented at the working stage during the interview with the mayor in Valverde de Burguillos, and his feedback was implemented in final form of the idea, which was finished in February 2024.

The idea was to integrate a digital nomad community into the local community by creating attractive conditions in the spatial sphere of the town and the surrounding landscapes (Fig. 7). This was considered as a tool to reverse

unfavourable trends and increase the number of inhabitants (Fig. 8). The analysed concept proposes an action plan consisting of two stages: revitalization of the internal urban fabric and development planned outside in the adjacent area, thus transforming landscapes both inside and outside the town.

The first stage assumes the construction of the Development Center for Digital Nomads (later referred to as the Center) (Fig. 9). For this purpose, an inner urban quarter was chosen, located in the north-eastern part of the historic center of Valverde de Burguillos. The location was chosen because of the possibility of building a village for nomads in the vicinity, which together with the Center would create a route between accommodation and recreational areas related to the Water Culture. These recreational areas consist of a sequence of significant historic elements related to the water culture, infrastructure, and landscape. The Center is an essential infrastructure of the Nomad Village. It creates favourable working and interaction conditions, such as individual work zones, co-working spaces, and a library.

The second stage of the project is the construction of the Digital Nomad Village (Fig. 9), which will offer comfortable accommodation as well as recreation and relaxation zones for nomads, surrounded by distinctive patterns of plantations, crop fields, and oil tree orchards. The goal of the village construction is to increase the number of workplaces, which will have a positive impact on the population growth of Valverde de Burguillos after completion of the first stage. The anticipated strengthening of the town's economy will enable the revitalization of the monuments of the Water Culture and the creation of a route connect-

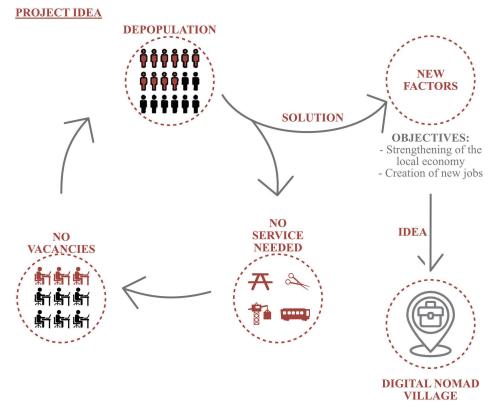


Fig. 8. Project idea of digital nomad involvement in Valverde de Burguillos (elaborated by M. Jagiełło, A. Kozińska-Kasparek)

II. 8. Idea projektowa zaangażowania cyfrowych nomadów w Valverde de Burguillos (oprac. M. Jagiełło, A. Kozińska-Kasparek)

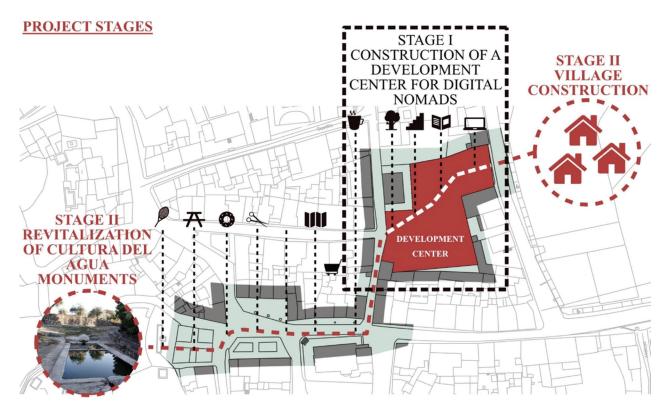


Fig. 9. An idea for a digital nomad village in the town of Valverde de Burguillos (elaborated by M. Jagiełło, A. Kozińska-Kasparek)

Il. 9. Idea wioski cyfrowych nomadów w miasteczku Valverde de Burguillos (oprac. M. Jagiełło, A. Kozińska-Kasparek)

ing the village to the recreation areas in the western part of the town.

The proposed solution will impact the landscape and internal fabric of the town. It introduces a new housing development situated among crop fields adjacent to the town. The new nomad houses are to be erected outside the town, in the adjacent "landscape." The project also includes new access roads and recreational paths for pedestrians, joggers, and cyclists. However, the second stage provides for revitalization of the Water Culture on the opposite end of the town, which will allow to preserve and make available valuable landscape elements and structures. The new architecture and activities should be sustainable, and CO₂ emission should be reduced. Therefore, there are plans for local sources of renewable energy. The plans provide for photovoltaic panels incorporated into architecture or a panel farm. Alternatively, wind turbines will appear on the horizon around the town.

Discussion. Opportunities and threats for peripheral rural landscapes in the context of digital nomadism

The trend of digital nomadism is growing worldwide. Without appropriate legal regulations, it will continue unchecked, and be difficult to stop. The process of concentration, over-tourism, and pressure on the landscapes of digital nomads is advanced mainly in attractive exotic places with beautiful nature and landscapes, such as in Asia and Central America. The situation looks different in periphe-

ral rural areas in Spain like in investigated Valverde de Burguillos. Here, the process of attracting and concentrating digital nomads is visible only on a small scale and is still in its infancy. However, nomadism, projected as the future of freelance jobs, will be a significant factor in determining the needs and requirements for adapting the built environment to accommodate this way of life. In locations expected to attract digital nomads, their concentrated demand for different types of services may become one of the key factors shaping spatial structures, architecture, and landscapes, as well as exerting pressure on nature, even in small, depopulated areas, such as Spanish Extremadura. Facilities that were previously not commonly available in certain regions or towns will appear in the form of new architectural and landscape developments such as sport, leisure, and dining facilities, glamping sites, vinotheques, as well as new transportation.

On the one hand, it is an opportunity for individual peripheral regions, towns, and villages; on the other hand, it may conflict with the values, interests, and priorities of existing communities (Buława et al. 2022; Zhou et al. 2024). It poses a serious threat to their social functioning and raises environmental and ecological concerns related to landscape protection and planning based on sustainable spatial development. Below, we discuss opportunities and threats based on the concept for Valverde de Burguillos in the context of the literature review carried out.

Opportunities: The introduction of a nomadic population into the rural town Valverde de Burguillos brings several important opportunities to its peripheral rural landscapes and communities. Bringing a new group of people

to the town activates the economy and social life while mitigating adverse demographic trends and rural decline, as outlined in the idea for Valverde de Burguillos. The social environment of the inhabitants will be rejuvenated and will not be as hermetic as before. The rotation of nomads also popularizes the place and increases appreciation of landscape value. In the case of the idea for Valverde de Burguillos, the surrounding landscapes are to be explored by the new inhabitants (by walking, jogging, and biking). Contact with nature fosters emotional bonds with the natural world, which increases the tendency to care for and protect nature and the natural landscape (Cullinan 2011). Additionally, regarding new investments in the second stage of the project, important cultural heritage elements and landscapes, such as the town itself and the surrounding Water Culture (as described in paragraph Valverde de Burguillos and its landscapes; Fig. 6), are to be protected, restored, and made available to visitors. In general, the literature and analyses of popular destinations around the world show that the growing number of professional visitors is making towns and regions more recognizable, as digital nomads are well-educated and have a wide range of online contacts and friends. It facilitates the brand building of a particular landscape (town or region), which increases the possibility of landscape assessment by people from outside the town and region. Overall, the integration of nomads in rural communities has significant potential for positive and sustainable development provided that a balance is struck between the interests of business, external investments, local communities (in social and economic aspects), and the trend of digital nomads.

Threats: Activities related to digital nomads can be considered as a regeneration tool in depopulated Valverde de Burguillos, but in many cases – in places that have already become very popular - they are considered as a degradation factor contributing to over-tourism and gentrification processes. An important threat to peripheral rural landscapes of the Valverde de Burguillos in the context of digital nomads includes the dominance of economic priorities over cultural heritage and natural values, including landscape. This applies not only to the economic priorities of the local community of the town or digital nomads themselves but also to the economic priorities of the global economy, including external investments focused on, among others, rental income. Socially, this leads to an economic monopoly that pushes locals out of business and takes over urban centers as well as attractive districts and areas in terms of housing and living spaces. This problem is not yet visible in depopulated town Valverde de Burguillos, but it seems that transforming a part of the town into the Development Center, as proposed as a concept under the question, would eliminate current local activity (however poor) in this area and reduce its offer to residents, replacing it with other, probably more expensive, services and activities. In general, there is a risk of disruption to the existing social structures and community ties; moreover, the population of digital nomads fluctuates, and their community is unstable and organized on a short-term basis compared to traditional multi-generational social structures and social bonds. It is crucial to address these threats to ensure sustainable integration of digital nomads into the local community.

In the region under study, the growing population of digital nomads and proposed investments may contribute to the degradation of the environment and surrounding nature. In addition, new construction and transportation projects are expected to disrupt the integrity of the original rural agricultural landscape in the surroundings of the Valverde de Burguillos because the proposed digital nomad village is to be located outside the town. Excessive commercialization may prioritize visual appeal over valuable landscape qualities, while a focus on marketing may overshadow the importance of preserving natural and ecological aspects. One of the expected risks is the neglect of natural and ecological values, as they are more difficult to monetize, in favour of exploration of visual and aesthetic values reduced to a marketable product. In this case, the landscape may lose its authentic visual and cultural values. Another risk is that economically driven efforts to attract digital nomads, such as the construction of desired infrastructure and landscape transformations, may prove to be a temporary solution. While the landscape and urban structures of Valverde de Burguillos have been sustained for a long time and this is expected to continue, we do not know how long the trend of digital nomads and desired destinations will last. The case of Valverde de Burguillos shows that landscape acts as a guarantor of the continuity of cultural heritage. By contrast, we are convinced that digital nomads as individuals and groups can come and disappear in one day, leaving the prepared infrastructure useless. This may be due to other, just more attractive destinations in Europe or anywhere else in the world (offering competitive quality, living costs, or even tax solutions).

The opportunities and threats for small towns and their surrounding landscapes (such as Valverde de Burguillos) arise from the way they are adapting to accommodate digital nomads. In referred cases from Asia and Central America, landscape and urban solutions that adapted facilities and areas to the lifestyle of digital nomads overshadowed other aspects, including cultural and natural considerations. This means that new factors shaping the future work environment may have negative, counterproductive effects. Consequently, the transformation to attract digital nomads should simultaneously reinforce local values and ensure that temporary needs are not met at the expense of centuries of heritage. It is crucial to consider cultural and landscape aspects alongside architectural and urban solutions to create sustainable environments. Harnessing the economic potential of local communities and preserving authentic qualities can attract digital nomads while promoting sustainable development, as seen in rural Spain on the example of a web portal for digital nomads (Red Nacional de Pueblos Acogedores "Buscas Un Pueblo...").

This requires proactive analysis and assessment of the opportunities and risks associated with the influx of remote-working population to new areas. One such activity is the research in question, with the students' work serving as a simulation of a possible scenario and its consequences as well as a source of ideas for the local community of Valverde de Burguillos. It is desirable to establish principles

for project and spatial planning activities addressing these new challenges and opportunities (Calcatinge 2012). Thus, development goals, including nomadic activities that affect landscape, must be considered in long-term perspective. This means that hasty adaptations made solely for the needs of digital nomads, which may prove to be temporary, may not be necessary. Authentic and original features may be more appealing to digital nomads than creating products designed specifically for them. This presents a real opportunity to attract digital nomads, create a competitive and stable brand, and reap the economic benefits of such activity. Such an approach reflects the principles of sustainable development.

Conclusions

For the Valverde de Burguillos digital nomadism development means important social changes as well as transformations in landscape of outskirts of the town. The urban form and relation of the town with the surroundings are the symbol of continuity of habitation for local society. In contrary, digital nomadism is a kind of redefinition of the concept of the home, which is no longer a specific place and the genius loci of home is becoming ephemeral

and virtual. This causes a risk of kind of a shock period for development of the town of Valverde de Burguillos. In this light, careful analyses and simulations are necessary to asses benefits and losses.

Digital nomads are witnesses to our times. Their lifestyle has a significant impact on the built and natural environment, shaping landscapes and exerting pressure on nature. Adapting rural areas to accommodate their needs requires a careful analysis of the opportunities and risks to minimize unwanted consequences. At the same time, the diminishing connection between a place of residence and a place of work in society poses a new challenge for architects, landscape architects, and urban planners, not only in Valverde de Burguillos but worldwide. This may require a revision of design and housing paradigms in terms of spatial models, location of new investments, and adoption or development of effective forms of landscape protection and management, heritage preservation, and elimination of threats. There is a big question mark whether digital nomads can become emotionally attached to many places and will thus care about them as well as the planet. Perhaps the emotional attachment to "home" fades over time, resulting in indifference to the successively inhabited places and the entire Earth.

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Streszczenie

Krajobraz i cyfrowi nomadzi w hiszpańskich obszarach wiejskich. Przykład Valverde de Burguillos

W artykule przeanalizowano możliwości peryferyjnych obszarów wiejskich o wysokich walorach krajobrazowych i stojące przed takimi regionami wyzwania w kontekście cyfrowych nomadów, którzy łączą pracę zdalną z wypoczynkiem. Podjęty problem dotyczy ochrony i rozwoju takich obszarów pod presją cyfrowych nomadów, na przykładzie hiszpańskiego miasteczka Valverde de Burguillos. Studia literatury przedmiotu pozwalają na stwierdzenie, że nomadyczny styl życia staje się popularny na całym świecie. Wpływ cyfrowych nomadów na krajobrazy wiejskie nie został jednak jeszcze wystarczająco zbadany.

Zastosowaną metodą było studium przypadku obejmujące wizytę studyjną badawczą i projekt koncepcyjny dla miasta Valverde de Burguillos, jako symulację.

Studium przypadku – projekt dla Valverde de Burguillos – przedstawia centrum rozwoju i wioskę cyfrowych nomadów. Projekt koncentruje się na integracji cyfrowych nomadów z lokalną społecznością i ich wpływie na przyległy krajobraz i strukturę urbanistyczną miasta. Z jednej strony wprowadza nową architekturę i infrastrukturę w krajobrazie wiejskim, zmieniając go. Z drugiej strony umożliwia utrzymanie, ochronę i dostęp do dziedzictwa kultury wodnej. Badania podkreślają znaczenie wartości krajobrazu dla tożsamości społecznej, budowania marki i zrównoważonego rozwoju. Zbadano relacje między potrzebą ochrony i rozwoju cennych krajobrazów wiejskich a pojawiającymi się trendami turystycznymi i mieszkaniowymi związanymi z cyfrowymi nomadami. Jednocześnie zwrócono uwagę na rosnącą powszechność pracy zdalnej i jej wpływ na struktury przestrzenne, architekturę i krajobrazy. Podkreślono potrzebę adaptacji i potencjalny wpływ na lokalne społeczności i otaczające krajobrazy, co można uznać za rewizję paradygmatu projektowania i mieszkalnictwa.

Słowa kluczowe: krajobraz wiejski, cyfrowi nomadzi, nowy paradygmat mieszkalnictwa, wartości krajobrazu, dziedzictwo kulturowe i krajobraz regionu