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ÚVOD

EDITORIAL

Vážení a milí čtenáři,

letní měsíce jsou definitivně za námi a redakce časopisu opět přichází s podzimním vydáním časopisu. Do tohoto čísla byly zařazeny tři články, z nichž dva zazněly na jarní konferenci Regionální rozvoj mezi teorií a praxí a mohou tak jejím účastníkům připomenout poznatky, které tam byly diskutovány. Shodou okolností jsou všechny zařazené články napsány v anglickém jazyce. Doplněny jsou pak dvěma aktualitami.

Co tedy v aktuálním čísle najdete? Jako první je zařazen článek Mgr. Márie Fázikové a doc. Kataríny Melichové z Fakulty evropských studií a regionálního rozvoje Slovenské zemědělské univerzity v Nitře s názvem Remote Work – Towards a Definition that Works. Za ním čtenář najde článek od velké výzkumné skupiny vedené Ing. arch. Jitkou Molnárovou, MSc. Z Fakulty architektury ČVUT v Praze s názvem Regeneration of post-socialist housing stock: A method to make decisions about the future of housing estates in Ostrava a jako poslední je zařazen článek Prof. Ing. Arch. Hany Urbáškové, Ph.D. z Fakulty architektury VUT v Brně s názvem Cooperation Between Architecture Students and Municipal Government to Promote Rural Tourism. Všechny tyto články prošly double-blind recenzním řízením.

Jak již bylo avizováno na tyto odborné recenzované články navazují dvě aktuality, a to pozvánka na již 7. ročník konference GIS v plánování měst a regionů, která se letos uskuteční 31. října va Masarykově ústavu vyšších studií a informace o kurzu „Transfer zkušeností z plánování rozvoje a obnovy měst do Moldavska“, který od 22. do 29. září realizovali akademičtí pracovníci MÚVS na Státní univerzitě Alecu Russo v moldavském Bălți s finanční podporou Ministerstva zahraničních věcí ČR v rámci české rozvojové pomoci. Přeji všem inspirativní čtení.

doc. Ing. arch. Vladimíra Šilhánková, Ph.D.
šéfredaktorka

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REMOTE WORK – TOWARDS A DEFINITION THAT WORKS

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Remote work, distributedness, virtuality, commuting, information and communication technologies (ICT)

Abstract:

The remote work gained in popularity mainly since the Covid-19 pandemic. While it's currently a widely researched concept, an unambiguous definition is still missing. It's also common to use different monikers, such as telework, telecommuting, distributed work, work from home or virtual work interchangeably, to describe the same or different ideas. The goal of this article is to explore and systemize the various definitions of these terms and identify the overlapping and contradictory elements. This was done via a literature review of 40 of the most recent scientific publications indexed mostly in WOS and SCOPUS databases. The research led to the conclusion that these terms are very similar and the overlap lies in the geographical distribution and the use of Information and Communication Technologies (ICT) for interaction. The term is still a "work in progress" and an unambiguous definition is still missing.

Introduction

Remote work, despite being a buzzword and an increasingly researched objective of studies by scholars across the world, is not an entirely new concept. In fact, its origins can be traced back to the mid-seventies of the 20th century, when Nilles, J.M., (1975) introduced the idea of working from home and using Information and Communication Technologies (ICT) as a response to rising commuting costs fueled by the oil crisis in the United States.

Since then, the world has undergone and is still going through an enormous technological transformation and information revolution. While advances in technology provided a fertile ground for the implementation of remote work arrangements, in 2015 only around 19% of EU workers engaged in them (Eurofound (2020)). And then, there came Covid-19.

The year 2020 started with a breakthrough of a widespread global health pandemic. Many governments, in their quest to protect their citizens from the virus, chose to introduce extensive stay-home orders, so-called lockdowns, and to close their national borders. This made it impossible to commute to work premises and thus, for many companies, adaptation to new business circumstances was necessary to survive (Henry, M.S., Le Roux, D.B., Parry, D.A., (2021)). According to the International Labour Organisation (2021), around 34% of all EU-based employees switched to teleworking in 2020.

Nowadays, it looks like the paradigm shift to remote work, introduced as a measure of protection and a temporary crisis management solution, is likely here to stay and will develop even further (Messenger, J.C., 2019).

Naturally, the interest in the research field of remote work has grown significantly, however, one of the key challenges is an absent unequivocal definition of the term itself (e.g. Allen, T. D., Golden, T. D., Shockley, K. M. (2015); Felstead, A., Henseke, G., (2017); Yankov, K.V. (2021); Lamovšek, A., Černe, M. (2023)).

The goal of this article is to offer a comprehensive review of definitions of key concepts in remote work literature and their defining characteristics to find out which of these definitions works the best.

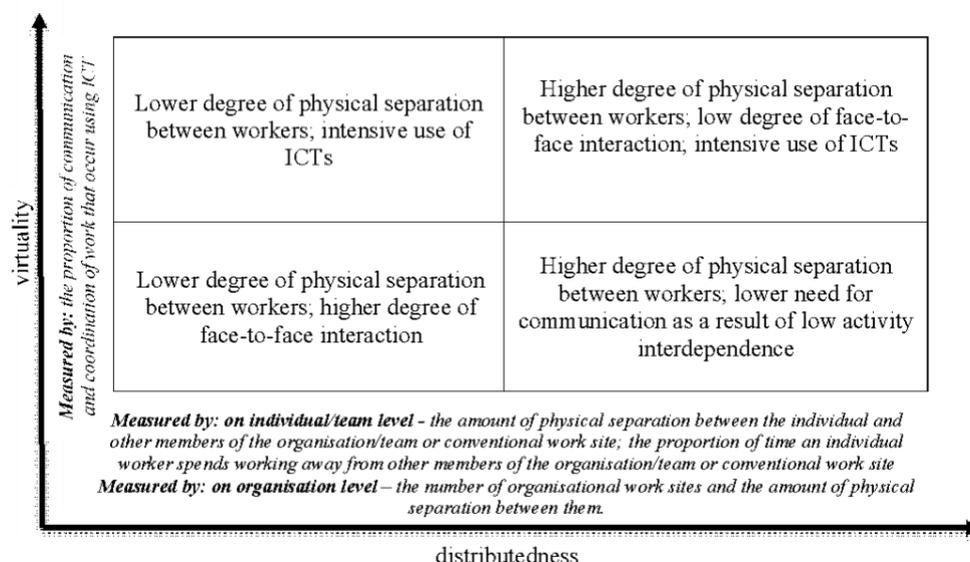
1. Conceptual framework for remote work

A very concise conceptual framework for remote and distributed work was proposed by Henry, M.S., Le Roux, D.B., Parry, D.A. (2021). By investigating different conceptualizations specifically of telework, remote and distributed work, telecommuting, virtual teams, and virtual and distributed organisation they proposed an integrated framework based on two criteria, that in various combinations could describe most of the concepts and their real-world implications related to remote and distributed work:

- **distributedness** – which they define as a “combination of two factors”:
 - the degree of physical (geographical) separation between locations where work is performed; and
 - the proportion of time that work is performed whilst work locations are physically separated;
- **virtuality** – which they define as “the degree to which work activities are interdependent, and the extent to which communication and coordination of these activities are mediated by ICTs” (Henry, M.S., Le Roux, D.B., Parry, D.A. (2021)).

Authors themselves point out that this framework should provide a useful tool for researchers as a relatively broad conceptual foundation for their empirical research ventures into the topics of remote and distributed work.

Figure 1: Work practices delineation based on the degree of virtuality and distributedness



Source: Own elaboration based on Henry, M.S., Le Roux, D.B., Parry, D.A., (2021)

2. Methodology

The chosen methodological approach to achieve the stated objective is a literature review. An analysis regarding their degrees of virtuality and distributedness was conducted, as per Henry, M.S., Le Roux, D.B., Parry, D.A. (2021).

In total, a total of 30 of the most recent scientific publications indexed mostly in WOS and SCOPUS databases were studied. Keywords that were used for the search were: “remote work”, “distributed work”, “telework”, “telecommuting”, “digital nomads”, “work from home”, “hybrid work” and “virtual teams”.

For the purpose of this article, the key takeaways from each concept’s definitions were summarised.

3. Overview of the key concepts and takeaways

Finding an unambiguous definition of remote work is rather an intricate endeavour, a struggle more than 40 years old. Di Martino V., Wirth, L., (1990) were solving this very challenge already back in the 90s in their popular work *Telework: A new way of working and living* and De Beer, A., Blanc, G., (1985) analysed different definitions of telework already back in 1985. Given that the term was born in the seventies, the dispute about the challenge of “defining a definition” appears to be an evergreen situation with different authors having different perspectives.

According to Lamovšek, A., Černe, M., (2023), the term **remote work** is an umbrella term and defines it as “Work that can be done using ICT and is done anywhere except the headquarters office.” Garro Abarca, V.M., Palos-Sanchez, P.R., Rus-Arias, E., (2020) add an aspect of remote work being done from far away location and limited face-to-face interaction between employees: “Remote Work is defined as work done at a location far from the company headquarters or factory, where the worker has no personal contact with other co-workers, but is able to communicate with them using modern technology.” Last but not least, the International Labour Organisation (2020) adds the possibility of engaging in remote work only on a part-time basis and takes into account different professions and status of employment. “Currently, there is no international statistical definition of remote work. However, remote work can be described as situations where the work is fully or partly carried out on an alternative worksite other than the default place of work. Remote work can be performed in a variety of possible locations, all of which can be viewed as an alternative to the location where the work could typically be expected to be carried out, taking into account the profession and the status of employment (International Labour Organisation (2020)).

Telework is a subcategory of remote work (International Labour Organisation (2020)) and its definitions mostly focus on the usage of Information and Communication Technologies to complete work. The distributedness aspect is present in many definitions yet the main star of most of them is the ICT (Di Martino, V., Wirth, L., (1990); Vitola, A., Baltina, I., (2013). For example, The European Framework Agreement on Telework (2002) defines telework as “a form of organising and/ or performing work, using information technology, in the context of an employment contract/relationship, where work, which could also be performed at the employers’ premises, is carried out away from those premises on a regular basis.”

The definitions of **telecommuting**, on the other hand, mostly shine the light on the fact that it is a type of work that reduces commuting while using ICT. The “father” of the concept of remote work Nilles, J.M. (1975) firstly notes that “A telecommuting network has computational and telecommunications components which enable employees of large organisations to work in offices close to (but generally not in) their homes, rather than commute long distances to a central office.”

Next in line, **distributed work**’s definitions are steered towards describing this concept with a lens of lack of physical presence. One of the most recent definitions by Rhymer, J., (2022)

describes distributed work as “principally characterised by a lack of physical proximity and by reliance on technology-mediated communication.”

Hybrid work is a sort of a follow up to distributed work when the lack of physical presence is represented by the number of individuals working outside of their regular office or the number of days that employees spend working outside the office (Rhymer, J., (2022); Gifford, J., (2022)).

Possibly the concept that is the easiest to understand is **work from home** or **home-based telework**. According to Eurofound and the International Labour Organisation (2017), it simply means “Employees working from home regularly, using ICT.”

Most definitions of **virtual work** enhance the geographical distribution as one of the key components of this way of working, similar to distributed work. For example, Allen, T. D., Golden, T. D., Shockley, K. M., (2015) describe it as “a broader term often used to describe individuals, groups of individuals, or organisations who do not interact face to face because of geographic dispersion yet who interact using technology in some fashion.”

For **virtual teams** it is characteristic to work towards a common objective, working on interdependent tasks and to be dispersed across geography, organisation and/or time (e.g. Lurey, J.S., Raisingham, M.S., (2001); Martins, L. L., Gilson, L. L., Maynard, M. T., (2004); Hertel, G., Geister, S., Konradt, U., (2005); Garro Abarca, V.M., Palos-Sanchez, P.R., Rus-Arias, E., (2020); Gilson, L. L., Maynard, M.T., Jones Young, N.C., Vartiainen, M., Hakonen, M., (2014)). The main difference between the definitions of virtual work and virtual teams is that the teams are interconnected through interdependent tasks, aiming to accomplish the same outcome.

Digital nomads are agreed to be professionals who perform their work from any part of the world, independently of the HQ of their companies or clients, using the internet and ICT to perform their work (Hannonen, O., (2020); Mancinelli, F., (2020)), a lifestyle described as embracing “extreme forms of mobile work” (Nash, C., Jarrahi, M. H., Sutherland, W., Phillips, G., (2018); Nash, C., Jarrahi, M. H., Sutherland, W., (2021)).

Selected definitions can be found in detail in Tab. 1 below.

Table 1: Literature overview on virtuality and distributedness degree of select remote work concepts

Virtuality	Distributedness	Reference
Digital nomads		
“Achieve location independence by conducting their work in an online environment “Digital nomads’ work is best described by the confluence of four key elements: digital work, gigwork, utilising digital technologies.”	transferring this independence to mobility by not consistently working in one designated personal office space but using the possibility to simultaneously work and travel to the extent that no permanent residence exists.” “...nomadic work and global travel adventure.”	Reichenberger, I., (2017) Nash, C., Jarrahi, M. H., Sutherland, W., Phillips, G., (2018) Hannonen, O., (2020)
“Digital nomads are individuals who, taking advantage of portable computing technologies and widespread internet access,	“The term “digital nomad” describes a category of mobile professionals, who perform their work remotely from anywhere in the world, can work remotely from any location and use this freedom to explore the world.”	Mancinelli, F., (2020)
Distributed work		
“We can distinguish between many types of distributed work on the basis of variations in ICT use, by reliance on technology-mediated communication.” to some extent work with computer-mediated communication in order to achieve a common goal.”	“Encompass many different alternatives to working at the traditional office. These remote work options include satellite work centres, neighbourhood work centres, flexible work arrangements, generic offices (recently named hotelling), and telecommuting or telework.” “Arrangements that allow employees and their tasks to be shared across settings away from a central place of business or physical organisational location.” location of work, and geographical distribution.”	Bélangier, F., Collins, R.W., (1998) Gajendran, R.S., Harrison, D.A., (2007) Lamovšek, A., Černe, M., (2023)
	“Distributed work is principally characterised by a lack of physical proximity and “The essential characteristics of distributed work are that employees work over geographical boundaries and	Rhymer, J., (2022) Bosch-Sijtsema, P. M., Sivunen, A., (2013)
Hybrid work		
	“Physical distribution encompasses both how many individuals work outside of an office in a given group and how much time an individual spends working outside of the physical office.”	Rhymer, J., (2022)
Remote work		
“Remote work is simply work which can be done using ICT, the worker has no personal contact with co-workers there, but is able to communicate with them using technology.”	“Currently, there is no international statistical definition of remote work. However, remote work can be described as situations where the work is fully or partly carried out on an alternative worksite other than the default place of work. Remote work can be performed in a variety of possible locations, all of which can be viewed as an alternative to the location where the work could typically be expected to be carried out, taking into account the profession and the status in employment.” and is done anywhere except the headquarters office.”	International Labour Organisation, (2020)
	“A flexible work arrangement whereby workers work in locations, remote from their central offices or production facilities,	Lamovšek, A., Černe, M., (2023) Di Martino, V., Wirth, L., (1990)
	“Remote work is defined as a flexible work arrangement in which an employee, under a written remote work agreement, is scheduled to perform work at an alternative worksite and is not expected to perform work at an agency worksite on a regular and recurring basis. A remote worker’s official worksite may be within or outside the local commuting area of an agency worksite.”	US Office of Personnel Management, (s.a)

where the worker has no personal contact with other co-workers, but is able to communicate with them using modern technology.”	“Work done at a location far from the company headquarters or factory	Garro Abarca, V.M., Palos-Sanchez, P.R., Rus-Arias, E., (2020)
Telecommuting		
using technology to interact with others as needed to conduct work tasks.”	“Work practice that involves members of an organisation substituting a portion of their typical work hours (ranging from a few hours per week to nearly full-time) to work away from a central workplace – typically principally from home -	Allen, T. D., Golden, T. D., Shockley, K. M., (2015)
“Has computational and telecommunications components using electronic media to interact with others inside and outside the organisation.”	which enable employees of large organisations to work in offices close to (but generally not in) their homes, rather than commute long distances to a central office.”	Nilles, J.M., (1975)
but the use of ICT is not obligatory, despite the fact that nowadays it is used almost all the time.”	“An alternative work arrangement in which employees perform tasks elsewhere that are normally done in a primary or central workplace, for at least some portion of their work schedule,	Gajendran, R.S., Harrison, D.A., (2007)
“The use of information and communication technologies	“Telecommuting is considered to be any work done in any location that reduces commuting,	Lamovšek, A., and Černe, M. (2023)
“The use of telecommunications technology communicating by way of computer-based technology.”	to replace or substitute for work environments that require individuals to commute to a traditional office.”	Bélanger, F., Collins, R.W., (1998)
...work performed with the help of ICT...”	to partially or completely replace the commute to and from work.”	Mokhtarian, P., (1991)
	“Working some portion of time away from the conventional workplace, often from home	Golden, T., Veiga, J., Simsek, Z., (2006)
	“The term ‘telecommuting’ is also used in the US, as well as in India and Japan, to refer to work that obviates the need for commuter travel. Operational definitions typically fall into one of two overlapping categories: ... from outside the employer’s premises (A), and work done from home (B).	Eurofound And The International Labour Office, (2017)
Telework		
“Telework is a form of organising and/or performing work, using information technology, in the context of an employment contract/relationship, interacting through the use of technology.”	where work, which could also be performed at the employer's premises, is carried out away from those premises on a regular basis.”	European Framework Agreement on Telework, (2002)
	“The term telework is generally used to connote a broader form of telecommuting that involves working from a variety of alternative locations outside of the central office (including full-time work from home but not necessarily limited to home-based work) and includes work from home-based businesses, telecenters, and call centres, and even work within an organisation’s central office between individuals	Allen, T. D., Golden, T. D., Shockley, K. M., (2015)
“Telework is the use of information and communications technologies (ICTs), such as smartphones, tablets, laptops, and desktop computers, for work	...that is performed outside the employer’s premises.”	Eurofound and The International Labour Office, (2017)
Telework... is a subcategory of the broader concept of remote work. It includes workers who use information and communications technology (ICT) or landline telephones to carry out the work remotely.”	“Similar to remote work, telework can be carried out in different locations outside the default place of work.	International Labour Office, (2020)
“Telework implies the use of ICT,	but location does not matter and telework can be done in the office.”	Lamovšek, A., and Černe, M., (2023)
with the aid of Information and Telecommunication services.”	“Telework (telecommuting) which is done partially or completely outside of the main company workplace	Hertel, G., Geister, S., Konradt, U., (2005)
the worker has no personal contact with co-workers there, but is able to communicate with them using new technology.”	“Telework may be defined as work carried out in a location, where remote from central offices or production facilities	Di Martino, V., Wirth, L., (1990)
using digital technologies such as networks, laptops, mobile phones and the internet.”	“Telework and ICT-based mobile work (TICTM) is any type of work arrangement where workers work remotely, away from an employer’s premises or fixed location,	Eurofound, (2020)

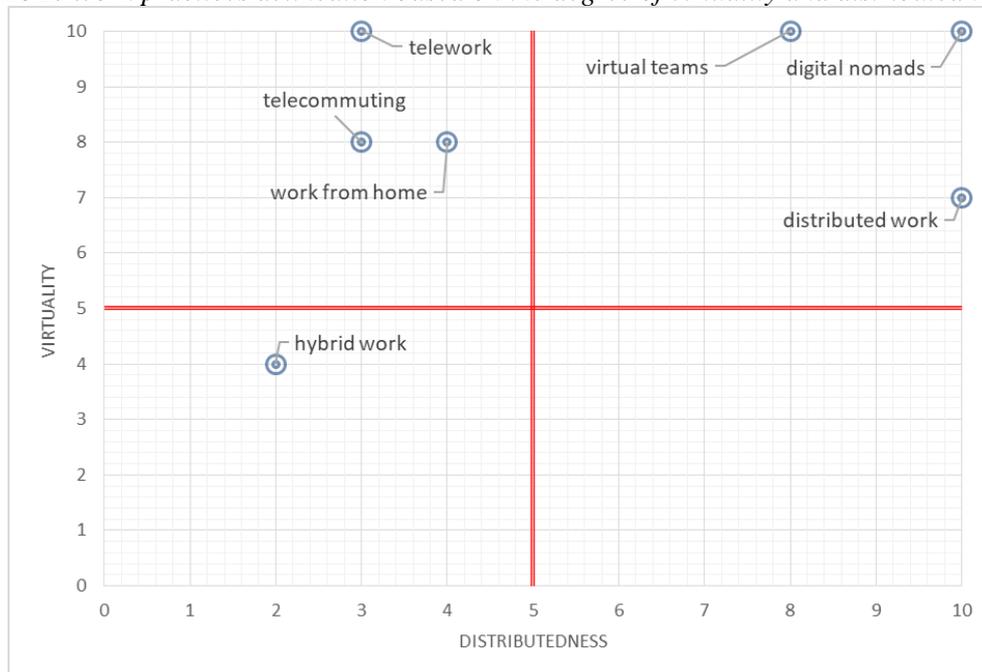
	Telework refers to a work flexibility arrangement, approved in advance by a supervisor, that allows an employee to work from an approved alternative worksite other than the employee’s official duty location for an approved number of days each pay period.	US Office of Personnel Management (s.a.)
Virtual Teams/ Virtual work/ Global virtual teams		
Consequently, these teams have a low frequency of face-to-face contact and are able to collaborate through the use of emerging computer and communication technologies.”	“Virtual teams can be dispersed across organisational, space, and/or time boundaries and are often cross-functional in nature, where team members come from a variety of organisational departments or business units.	Lurey,J.S.,Raisinghani, M.S., (2001)
Virtual teams are: “Teams whose members use technology to varying degrees	in working across locational, temporal, and relational boundaries to accomplish an interdependent task.”	Martins, L. L., Gilson, L. L., Maynard, M. T., (2004)
“A virtual team is a geographically dispersed group of individuals who work together to achieve a common goal. ICTs allow each team member to communicate and coordinate	from different locations in different time-zones outside the boundaries of the organisation.”	Garro Abarca, V.M., Palos-Sanchez, P.R., Rus-Arias, E., (2020)
so that (d) communication and coordination is predominantly based on electronic communication media (e-mail, fax, phone, video conference, etc.)”	“Virtual teams consist of (a) two or more persons who (b) collaborate interactively to achieve common goals, while (c) at least one of the team members works at a different location, organisation, or at a different time	Hertel, G., Geister, S., Konradt, U., (2005)
who interact using technology in some fashion.”	“Virtual work is a broader term often used to describe individuals, groups of individuals, or organisation who do not interact face to face because of geographic dispersion yet	Allen, T. D., Golden, T. D., Shockley, K. M., (2015)
technology-enhanced communications, and a dearth of face-to-face interaction.”	Virtual work is: “Spatially or geographically dispersed work arrangements that are generally characterised by a relatively short life span,	TwoRoger, L., Ruppel, C., Gong, B., Pohlman, R., (2013)
dependence on technology in work-related interactions between employees.”	“Virtual work has been defined in many different ways, but common to these definitions are geographic dispersion and	Raghuram, S., Hill, S., Gibbs, J.L., Maruping, L.M., (2019)
together to achieve common goals using a combination of ICTs.”	“The term “virtual work” differs from telework only by the geographical distribution, which in virtual work is not optional but necessary. Virtual teams are considered to be groups of geographically dispersed employees working	Lamovšek, A., Černe, M., (2023)
“(c) use technology-supported communication substantially more than face-to-face communication;”	“Global virtual teams are groups that (a) are identified by their organisation(s) and members as a team; (b) are responsible for making and/or implementing decisions important to the organisation’s global strategy;...” “and (d) work and live in different countries.”	Maznevski, M. L., Chudoba, K. M., (2000)
Work from Home		
using ICT.”	“Working from home’ is considered to be home-based telework, while ‘working at home’ refers to work done at home using the home as a place of work and production without ICT. Home-based telework: Employees working from home regularly,	Eurofound and The International Labour Office, (2017)

Source: Own elaboration based on literature review

4. Systematisation of remote work concepts

The literature on definitions of different overlapping remote work concepts were analysed from the point of view of Henry, M.S., Le Roux, D.B., Parry, D.A., (2021) and their conceptual framework based on virtuality and distributedness. The main findings of the literature overview are listed in Tab.1. Next, the superimposition of the virtuality and distributedness based delineation onto the remote work definitions analysed in this paper is undertaken and brought into this conceptual framework as presented in Fig.2.

Figure 2: Work practices delineation based on the degree of virtuality and distributedness



Source: Own elaboration based on literature review

As observed, different definitions of remote work emphasise different aspects of this phenomenon. As per design, the two main characteristics are the degree of virtuality and distributedness and each definition emphasises those to a different extent. Figure 2 illustrates systematisation of definitions with regard to these two aspects. Hybrid work and digital nomads could be characterised as relative opposites. While the first one enjoys a relatively low degree of virtuality and distributedness, the latter one enjoys an extreme form of both. In between are the forms of remote work defined as telework, telecommuting, and work from home, characterised by a relatively high degree of virtuality. On the contrary, virtual teams and distributed work are characterised by a higher degree of both.

It seems, however, that although consensus is apparent when it comes to strong reliance on information and communication technologies as a key defining point of various overlapping concepts of remote work, we cannot say the same thing when investigating the degree of distributedness. What we can ascertain from this, is that spatial aspects of the increasingly more frequent phenomenon of remote work are of special significance in both research and policy contexts.

Conclusion

To conclude, the terms remote work, telework, distributed work, virtual work, and others defined in this paper are, more often than not, viewed as the same concept looked through a different lens. The concept is still in the process of being formalised and an unambiguous definition is missing. Different authors, actors, both private and public, or nation-states define remote work from slightly different angles. What they do seem to have in common is the geographical distribution and the use of ICT for interaction yet with unambiguous specifications of scope and width of either, with spatial aspect being the one that can be used more effectively to demarcate these concepts.

Furthermore, the importance of the spatial dimension of remote work goes beyond just defining the phenomenon. It carries with it a slew of crucial factors to be considered policy-wise. More specifically, the different spatial distributedness of remote workers brings about different economic, social, cultural, but especially institutional and legal considerations. For example, in remote work-intensive organisations, it is not that uncommon for employees of the same company to work in different countries, where some may have different and sometimes even incompatible social security systems, different rules for employers' contribution to health insurance, or in general different legal framework regulating the relationship between employer and employees. This translates into significant policy challenges for these companies as well as for policymakers in countries with a larger share of remote workers.

From the societal perspective, the benefits and the challenges are still yet to be researched in detail due to the relative novelty of the remote work concept (Wang, B., Liu, Y., Qian, J., Parker, S.K. (2021)). There are opportunities for remote work to reduce the carbon footprint of individuals or bring more work to rural and peripheral areas, alongside their digitalisation. What is clear is that remote work is here to stay and it is an exciting time to steer the direction of its success and implementation.

As the International Labour Organisation (2021) puts it: “[...] we are now engaged in an unprecedented, large-scale experiment in mass teleworking, and it seems likely that this expanded use of telework will not end with the end of the pandemic.” It appears as if the true acceleration of the remote work phenomenon has just begun.

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REGENERATION OF POST-SOCIALIST HOUSING STOCK: A METHOD TO MAKE DECISIONS ABOUT THE FUTURE OF HOUSING ESTATES IN OSTRAVA

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Abstract:

This article presents a method of comprehensive analysis that was developed to classify a larger number of post-socialist housing-estates within one municipality. It enables to reveal certain patterns and potentials and classify seemingly uniform housing-estates into categories which share similar characteristics and challenges. Such classification helps set a regeneration strategy and further planning actions aimed at starting a longterm sustainable regeneration of housing estates. The method is illustrated on the case of the city of Ostrava where 34 housing-estates were analyzed based on their attractiveness and spatial and socio-economic characteristics. The analysis uncovered four specific groups of housing-estates with similar patterns. The method allows to visualize these conclusions and communicate them easily to the wide public. Hence, the method addresses two key factors when setting the regeneration policies: the ability to take decision and to communicate it.

Introduction

Modernist housing-estates have been criticized since 1960s (Jacobs, 1961; Lynch, 1983; Jacobs and Appleyard, 1987). Since then planners in many Western European countries have looked for approaches to regenerate this particular urban form and turn housing estates into more livable neighborhoods (van Kempen *et al.*, 2005). National governments started the first regeneration projects and programs in the late 1970s and keep implementing them ever since (van Kempen *et al.*, 2005; Kohout *et al.*, 2022).

In Central and Eastern Europe, the challenge of modernist housing-estates, that have been growing older physically as well as morally, was neglected for a long time. Nevertheless, the awareness of inevitable regeneration is increasing in this region, too (Andrews & Sendi, 2001; Maier, 2003; Lux *et al.*, 2005; Špaček, 2012; Kohout *et al.*, 2016; Gunko *et al.*, 2018; Benkő *et al.*, 2018; Nedučín, Škorić and Krklješ, 2019). Planners and researchers try to learn from the 30-40- year-long experience which Western Europe has had with the physical transformation of housing-estates, adjust it to the conditions of post-socialist countries and come up with new strategies that may be useful for regeneration processes in both post-socialist and Western European countries (Kohout *et al.*, 2022).

While withdrawing knowledge from western experience one has to pay attention to the differences between the condition in Western and post-socialist Europe (van Kempen *et al.*, 2005). In Western European countries, housing-estates usually represent 5-9 % of the overall housing stock, while in the post-socialist countries it is often around 40 % (Dekker *et al.*, 2005). Modernist housing-estates in post-socialist countries thus represent a decisive share of the local housing stock, which makes them one of the greatest challenges of urban-planning in the post-socialist region (Dekker *et al.*, 2005).

Besides the scale, the situation in Western Europe and post-socialist countries differs also in terms of social status of residents living in the housing estates, flat ownership, available financial resources of governmental bodies and their institutional capacity to implement large scale regeneration processes. In Western Europe, the concentration of lower income inhabitants and public ownership of housing estates makes their transformation both politically more acceptable and managerially more feasible. In contrast, housing-estates in post-socialist countries represent, to a large extent, middle-class neighborhoods that have gone through a process of privatization. Thus the majority of flats here is owned by individual private owners (Struyk and Daniell, 1995; Andrews and Sendi, 2001; Lux *et al.*, 2005; Murie *et al.*, 2005; Benkő, Balla and Hory, 2018). This fact can be seen as an advantage because inhabitants possess relevant wealth that they are often willing to invest in their housing. On the other hand, private ownership requires negotiation and cooperation among individual owners, and, therefore, the planning process becomes more challenging since it must be open to a significantly larger number of stakeholders.

Post-socialist and Western European countries also differ in their regeneration policies and the overall future vision of housing estates. In Western Europe most countries take an integrated approach towards housing estates regeneration with the ambition to turn them into sustainable neighborhoods (Nedučín, Škorić and Krklješ, 2019). Successful regeneration projects often encompass public space revitalization, partial demolitions, building renovations, construction of new facilities and buildings with different typologies and functions. Spatial interventions are often accompanied also with social programs. Together they aim at overall upgrading of the neighborhoods (Druot *et al.*, 2007; Wassenberg, 2011; Gomez *et al.*, 2016; Hess *et al.*, 2018; Kohout *et al.*, 2020). Western projects are most often implemented from the top by either a centralized public entity, as is the case of National Agency for Urban Renewal (ANRU) in France (ANRU, 2022), or through a cooperation between public entities and private housing companies with public interest, as is the case of the Netherlands (Wassenberg, 2011; Kohout *et al.*, 2020).

On the contrary, most post-socialist countries don't have a clear vision of how to approach housing estates and their future is thus rarely addressed through governmental or municipal programs (Nedučín, Škorić and Krklješ, 2019). There are some exceptions, however. In countries such as Hungary or Czech Republic there have been several governmental programs dedicated to housing estate upgrading. Nevertheless, these programs usually focus on one specific need; i.e. they don't address the neighborhood in an integrated way. One type of programs focuses on energy efficiency of panel buildings and through governmental funds provides financial support or subsidized loans for homeowners to install thermic insulation on their buildings. In Czech Republic, for instance, the 'Program Panel' was launched in 2003 and with slight changes continues under the State Fund for Housing Development until today (*Program Panel 2013+*, 2023). Thanks to this program the majority of panel buildings in Czech housing estates have been renovated. In Hungary, similar program called the 'Home Warm Program' (Otthon Melege Program – OMP) was launched under the Ministry of Innovation and Technology in 2014 and so far provided HUF 34 billions of non-refundable support (Otthon Melege Program, 2023).

Second type of programs that support interventions in housing estates in post-socialist countries focuses on revitalization of public space and infrastructure. In Czech Republic, for instance, there has been the ‘Housing estate regeneration program’ since 2003 implemented by the Ministry of local development (MMR, 2022). In Hungary, in 2013 the Municipality of Budapest launched a program called ‘Tér-Köz’ designed for public space upgrading and market renovation (Tér-Köz, 2023).

Among post-socialist countries, Russia has chosen a more radical approach. In Moscow, for example, since late 1990’s the City has decided to demolish mid-rise buildings from the 1950’s and use the original sites for new development under the ‘Demolition program of five-story buildings’ scheme (*Demolition program of five-story buildings in Moscow (1999)*, 2023). The program was relaunched in 2017 as a ‘Housing renovation program’ and plans to relocate 1 million residents from old buildings to new residential high rises (Fedorova and Demchenko, 2020). Similarly, in Saint Petersburg the municipality has been running a program called, ‘Development of built-up areas in St. Petersburg’ designed to demolish dilapidated mid-rise buildings in housing estates and replace them with new ones of higher density (*Development of built-up areas in St. Petersburg*, 2023).

Despite the lack of a holistic vision and integrated interventions planned by the government, housing estates in many post-socialist countries are continuously being transformed anyhow by interventions undertaken by their residents (Molnárová, 2021). Bottom-up interventions such as adapting the ground floor flats into commercial parterre, adding different types of extensions to the building in order to enlarge the flat area, undertaking public space upgrading or creating back, front or shared gardens may be found in many estates across the region (Vranic, Vasilevska and Haas, 2014, Vasilevska et al., 2015, Benkő, Balla and Hory, 2018, Molnárová, 2021).

These bottom-up interventions among other show, that integrated regeneration policies in post-socialist region are needed. However, due to the scale and complexity of the problem, planners in post-socialist countries need to find their own way to understand, manage and regenerate this type of urban environment. One of the first steps of this process is the ability to analyze key features of the estates, recognize similarities and differences among them and the different needs which need to be addressed. Only then decisions about the type of necessary interventions can be made.

In consequence, increasing amount of works across Europe looks for ways to analyze housing-estates. Recently published analytical methods concerning housing-estates can be divided into three types: those focusing on i) spatial aspects (Farida, 2013; Vasilevska et al., 2014; Bonenberg, 2015; Monclús & Díez Medina, 2018), ii) social aspects (Karji et al., 2019; Dixon et al., 2019), and iii) morphological aspects of housing-estates (Kohout and Tittl, 2013). Yet, analytical methods that combine wide range of heterogeneous aspects are missing. Moreover, most studies either evaluate individual cases or deal with general policy issues. Only a few authors cross-compare larger number of housing-estates to obtain certain classification which might show transformation potential of diverse types of housing-estates (Maier, 2003; Kohout & Tittl, 2013; Kohout et al., 2016). Arguably, finding a classification based on both spatial and social characteristics is essential to propose focused intervention strategies that would address the specific risks and potentials of each type of housing estates.

This article thus presents an analytical method which addresses the gap identified above and combines spatial and social analysis of housing-estates. The method looks for the *level of adaptability* of a housing-estate at hand, which is understood as the combination of socio-economic status, attractiveness, and spatial characteristics of the particular housing-estate type.

It consists of three stages: i) defining a „housing-estate locality“ (HEL) as a basic comparable territorial unit, ii) collecting spatial, socio-economic and housing stock data, and iii) visualizing and analyzing the data and interpreting the results. The presented method aims to provide a tool to help local governments set a long-term strategy for urban regeneration and decide where and how to begin. Further, it also allows to visualize these conclusions and communicate them easily to the wide public. Hence, the method addresses two key factors when setting the regeneration policies: the ability to take decision and to communicate it.

The method was developed and tested during the project called *Long-term sustainable transformation of housing-estates of the statutory city of Ostrava* (conducted in 2019-2021, supported by the Technological Agency of the Czech Republic.). During the project, the method helped to analyze housing-estates throughout Ostrava – regional center in Czechia with approx. 280.000 inhabitants, of whom about 2/3 live on HE. Based on the results, long-term strategy for sustainable housing-estate regeneration in the whole city was prepared. Testing the method in the city of Ostrava showed that it can help decision-makers to set priorities, define strategies for future regeneration, and allocate available resources more effectively.

Introducing Ostrava and its housing-estate

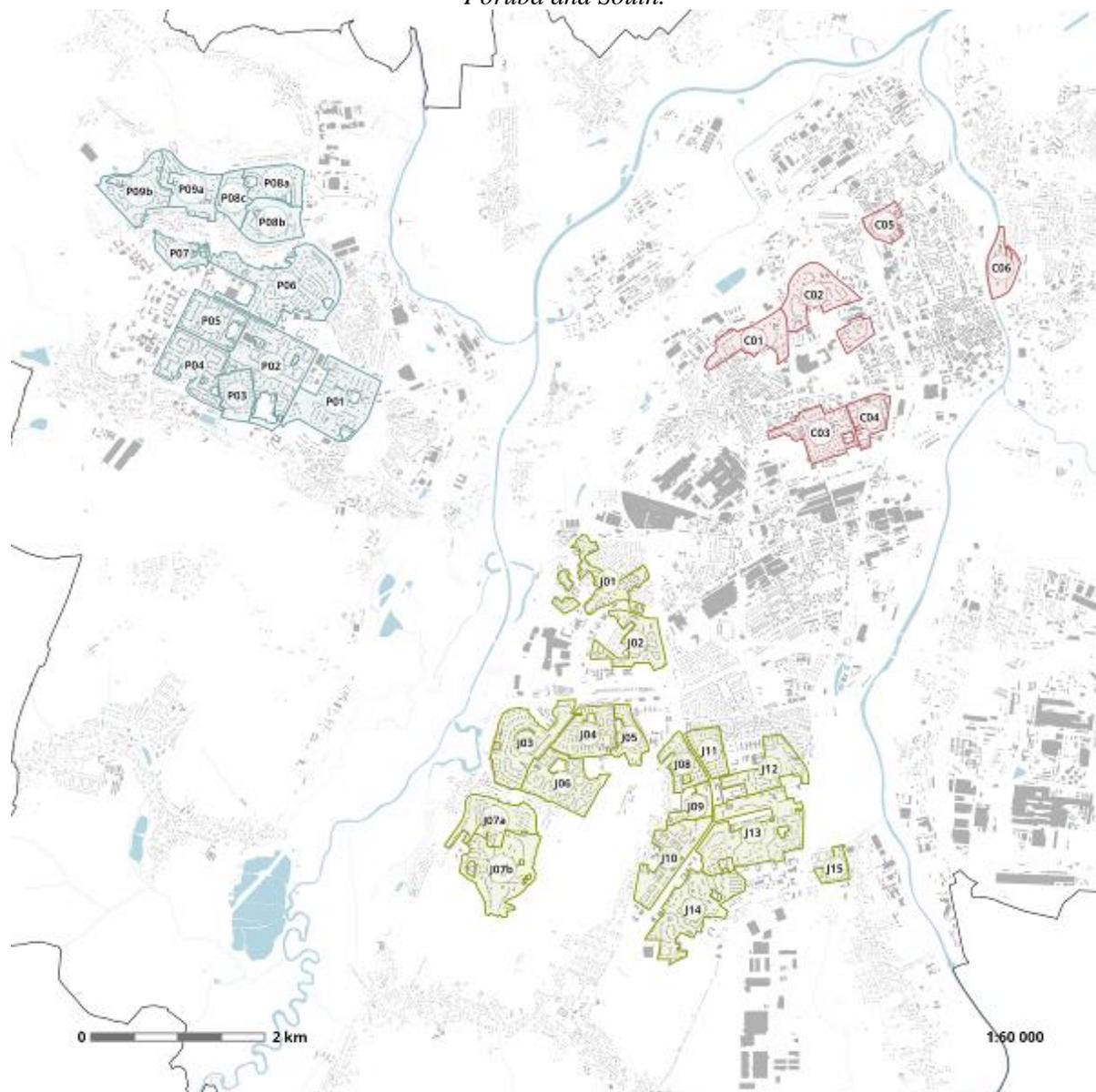
Ostrava is the third biggest city in Czech Republic. It has developed as an important mining and industrial city in the second half of the 19th and throughout the 20th century. It was one of places where massive investments went to during the socialist era. As a result, most of its housing stock is located on modernist housing estates from that era. Due to the structural economic changes of the Czech industry in the past three decades, the mining industry in Ostrava has been declining and so has the job opportunities in the city. Nowadays, the city is dealing with shrinking partly due to suburbanization and partly as people are leaving the region in search of better employment opportunities. Ostrava is therefore currently at a crossroads, deciding how to stop this process and what to build its future on to boost its competitiveness and attractiveness. As prices of housing in other bigger Czech cities such as Prague, Brno and Pilsen grow rapidly, the affordability of housing in Ostrava may become its main strength. However, it is necessary to adjust its quality to contemporary standards. Transforming housing estates into thriving neighborhoods with wide range of high-quality affordable housing is therefore becoming crucial for Ostrava's long-term prosperity.

For the purpose of the strategy it was necessary to define what localities are understood as housing estates. The criteria were based on Wassenberg's definition of housing estates (2012) and adapted to the specificities of Ostrava. For the purpose of this research a housing-estate locality (HEL) has the following characteristics:

1. Distinguishable urban unit planned and built „at once “
2. Similar character of development based on Modernist planning principles (open urban layout, separation of functions etc.)
3. Built between 1945-1990
4. Concentrated around a significant public space or commercial facility
5. Containing basic public facilities such as kindergarten and/or elementary school
6. Comprising a population between 2 000-13 000 inhabitants.
7. Covering an area between 10-45 ha, exceptionally up to 65 ha

In Ostrava, 34 HELs were found and compared with each other (Image 1).

Figure 1: Map of Housing-estate localities (HELs) in Ostrava and its three main parts – Centre, Poruba and South.



Source: Center of housing quality

Sources of data

To apply the analytical method in Ostrava, the research project used map, socio-economical and housing stock data that were collected from several sources. The maps (such as land registry, technical map, Development Plan, traffic and landscape maps) were provided by the Municipality of Ostrava. The socio-economic data (dealing with age, education, the rate of unemployment, etc.) were drawn from the 2011 Census (Czech Statistical Office CSO 2011)¹. The housing stock data (e.g. number of buildings, flats, floors, tenure, and construction period) and more data concerning population (number of registered inhabitants) were obtained from the 2017 Register of Districts and Buildings (RSO). Furthermore, additional sources (e.g. research

¹ Census in Czech Republic is carried out every ten years. In 2019 - 2020 when the analytical part of the research was conducted, the 2011 Census data were already fairly outdated. The new Census data were however not yet available.

reports) were reviewed to complete information about sensitive or unavailable data, such as data on socially excluded localities (Agency for social inclusion, 2015), unemployment (Foldynová et al., 2015), and the types of original construction technologies (Sedlecký and Endel, 2019).

Method of analysis

a) Layers of data

Data were first divided into four groups of analyzed layers: 1. spatial, 2. typological, 3. socio-economical, and 4. procedural aspects. Other important aspects, such as architectural heritage, urban memory of inhabitants, heritage of social behavior of society or perception of safety, have not been included in the analyses due to lack of available data. Such parameters are however also recommended to be taken in consideration by planners and urban experts when available.

Spatial parameters and capacities – Physical characteristics and features of the estates, such as residential density, FAR, built-up area ratio, percentage of paved and unpaved areas, average height and number of dwellings per area.

Typology of urban structure - The distribution of buildings in space and their mutual relation which influences the spatial quality of each housing-estate. Based on the morphological analysis presented by Kohout and Tittl (2013), six urban typologies of Ostrava's HELs are distinguished – rows, open blocks, pseudo-blocks, slabs, fields, and large compositions as represented on Image 03 each with different potential for further re-development.

Socio-economic aspects - Among the analyzed characteristics in this group are education, social exclusion, unemployment, average age, number of residents per flat and per building, and number of flats per building.

Procedural and other aspects – Among procedural aspects are those that influence the feasibility of the implementation process such as flat, building and land tenure. Other analyzed aspects were construction period, construction technology, and the accessibility of public and recreational infrastructure.

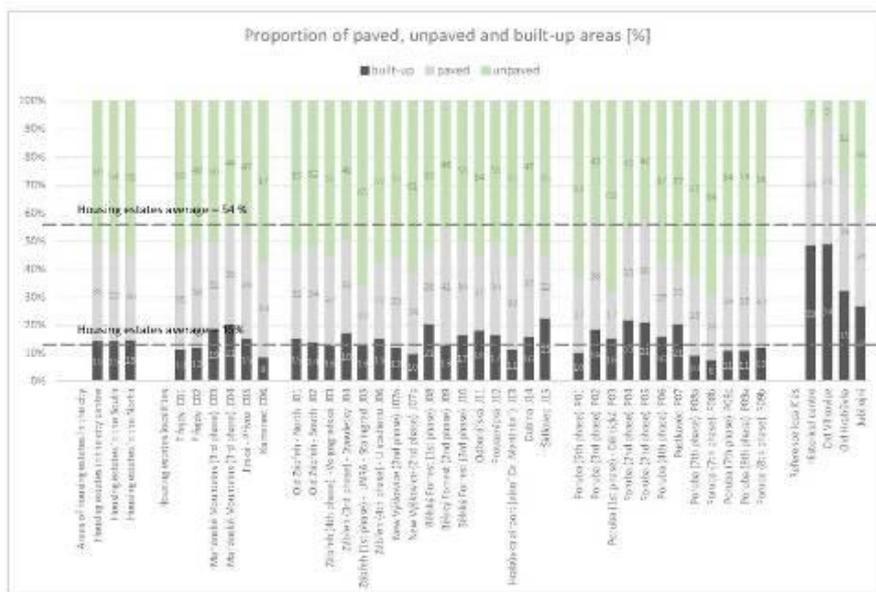
Figure 2: Typology of housing-estates' urban structure.



Source: Center of housing quality

Each layer was represented as a map (see Image 1) and a chart (see Image 3). Maps enabled to compare individual HELs among each other and identify patterns in which social and spatial potentials or deficiencies are accumulated. Charts showed quantitative indexes, the extremes and averages of analyzed layers in individual HELs (see Image 3).

Figure 3: Proportion of paved, unpaved and built-up areas in individual HELs and the city average.



Source: Center of housing quality

b) Aspects of sustainability

Once all layers were brought to a comparable state, three aspects of long-term sustainability were chosen for evaluating the 34 HELs: (1) site attractiveness, (2) social status, and (3) spatial organization. These aspects represent the three pillars of sustainability – economic, social and environmental, respectively.

Site Attractiveness

It is generally assumed that higher attractiveness of a site is positively correlated with higher real-estate prices and attracts socio-economically stronger population. Vice-versa, less attractive locations offer lower prices and tend to attract socio-economically weaker population. Since data on the real-estate prices were not available in Ostrava, the attractiveness was evaluated on the basis of assets which individual localities offer to their residents, such as the availability of education, recreation and transportation. The following accessibility of assets was chosen as the most influential (see also Maier et al., 2016):

- 600 m from elementary schools
- 400 m from local parks
- 1200 m from other recreational destinations
- 500 m from tram stops

Each criterion was given a plus or a minus point on the basis of whether the criterion was met or not. Together, the most attractive localities scored 4 points.

Social Status

To some extent, residents' social status determines their ability to participate effectively on planning processes and ensure the implementation of HEL's transformation (e.g. as partial investors). It can also contribute to inhabitants' ability to cope with temporary discomfort or long-term effects (gentrification) caused by the transformation. The criteria chosen for evaluating the degree of social status were based on the available data, and the following values were attributed to them:

- socially excluded locality (yes = -1 pt., no = 0)
- unemployment (below city average = +1 pt., average = 0, above city average = -1 pt.)
- percentage of university educated population (below city average = -1 pt., average = 0, above city average = +1 pt.)
- percentage of population with elementary or no education (below city average = +1 pt., average = 0, above city average = -1 pt.)
- average age (below 36 and above 51 = -1 pt., average = 0)

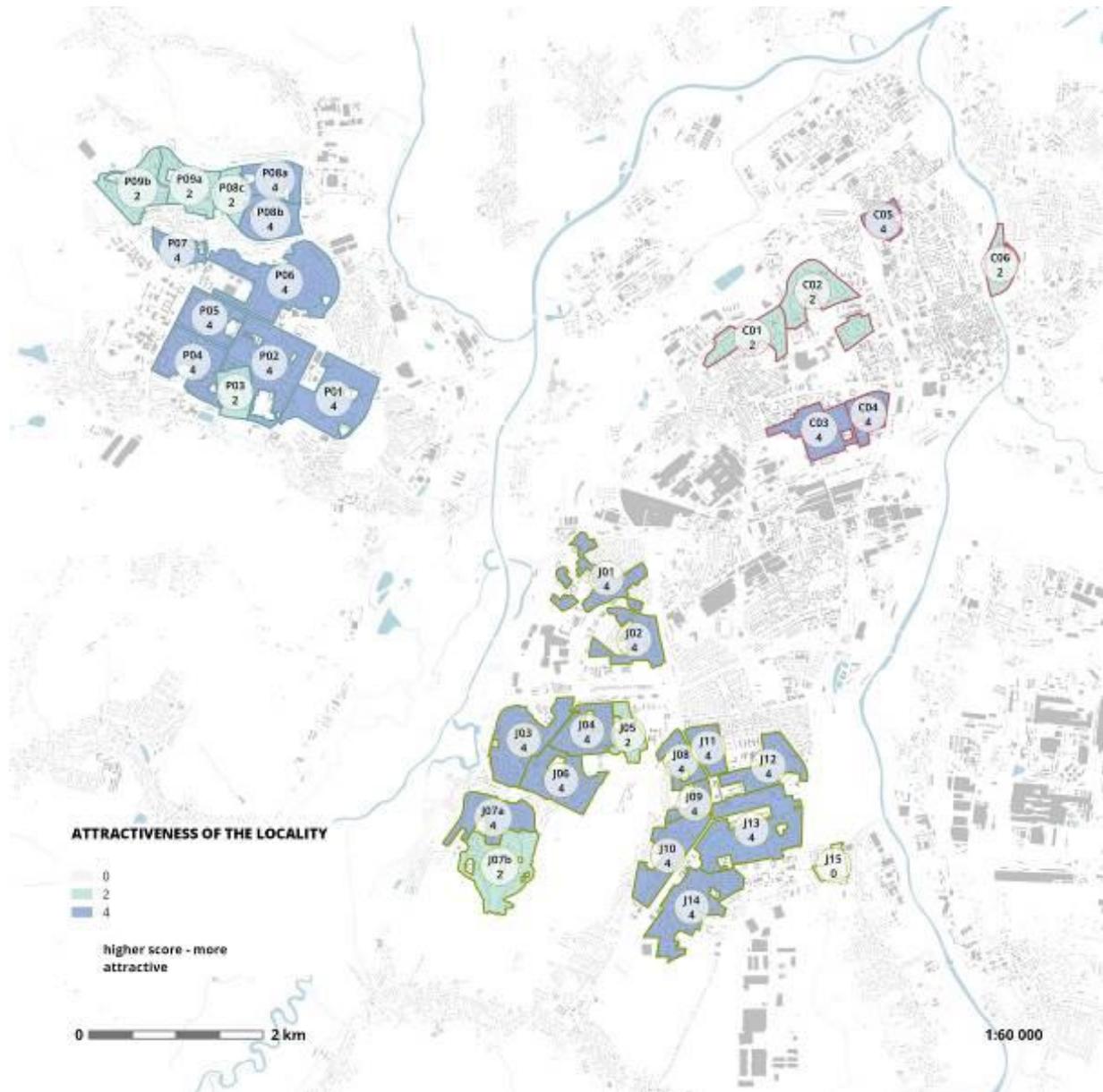
Spatial Organization

Spatial parameters affect potential to improve the living environment in individual localities. It is assumed that the more favorable the initial spatial arrangement is, the greater potential there is for the adaptability of HEL's structure and, consequently, for the more sustainable organization of locality. In this category, three basic parameters were followed: i) typology of urban structure, ii) building height, and iii) residential density. The typology was assessed on the basis set by Kohout & Tittl (2013), i.e., the HELs are classified either as rows, open blocks, pseudo-blocks, slabs, fields or large compositions (see Image 02). Rows are seen as the most adaptable structures and the large compositions, on contrary, the least adaptable. The rest of structures are regarded as neutral. As for height and density, low-rise and higher density are regarded positively. The specific values for each parameter are:

- typology of urban structure (rows = +1 pt., open blocks = 0 pt., pseudo-blocks = 0 pt., slabs = 0 pt., field = 0 pt., superstructures = -1 pt.)
- height (below 4 floors = +1 pt., above 8 floors = -1 pt.)

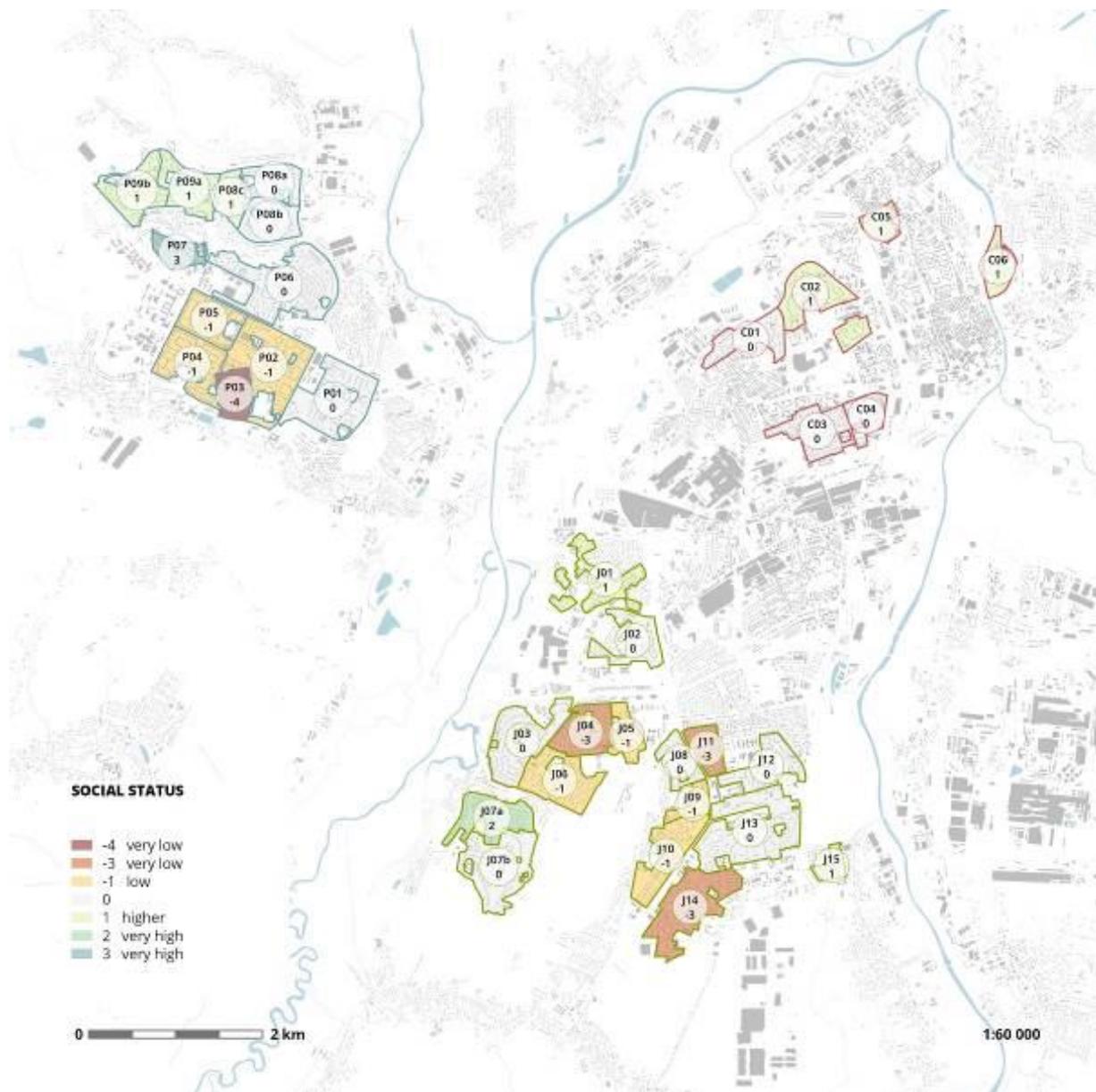
- residential density (below 110 inhab. /ha = -1 pt., above 220 inhab. /ha = +1)
- The results of this step are visualized in the following maps (see Images 4, 5, 6).

Figure 4: Map of attractiveness.

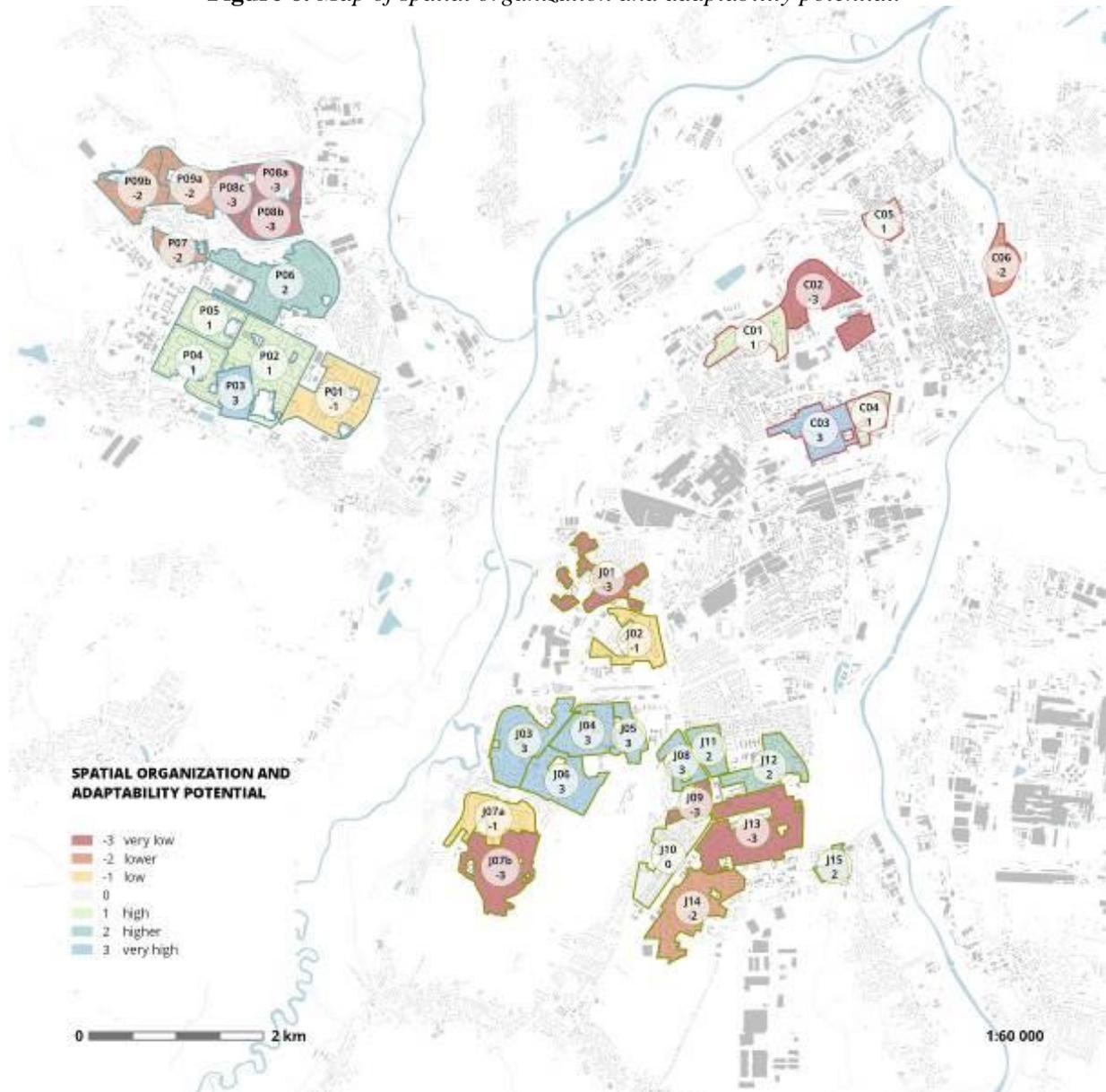


Source: Center of housing quality

Figure 5: Map of social status.



Source: Center of housing quality

Figure 6: Map of spatial organization and adaptability potential.

Source: Center of housing quality

c) Final evaluation of HELs in the city of Ostrava

In the criterion of attractiveness, all HELs in Ostrava scored positively. Therefore, the final evaluation was based only on two aspects – social status and spatial organization. The final evaluation map combined these two aspects and revealed therefore four basic categories of HELs that were somehow out of average and that the research primarily focused on (see Image 07). These are HELs with:

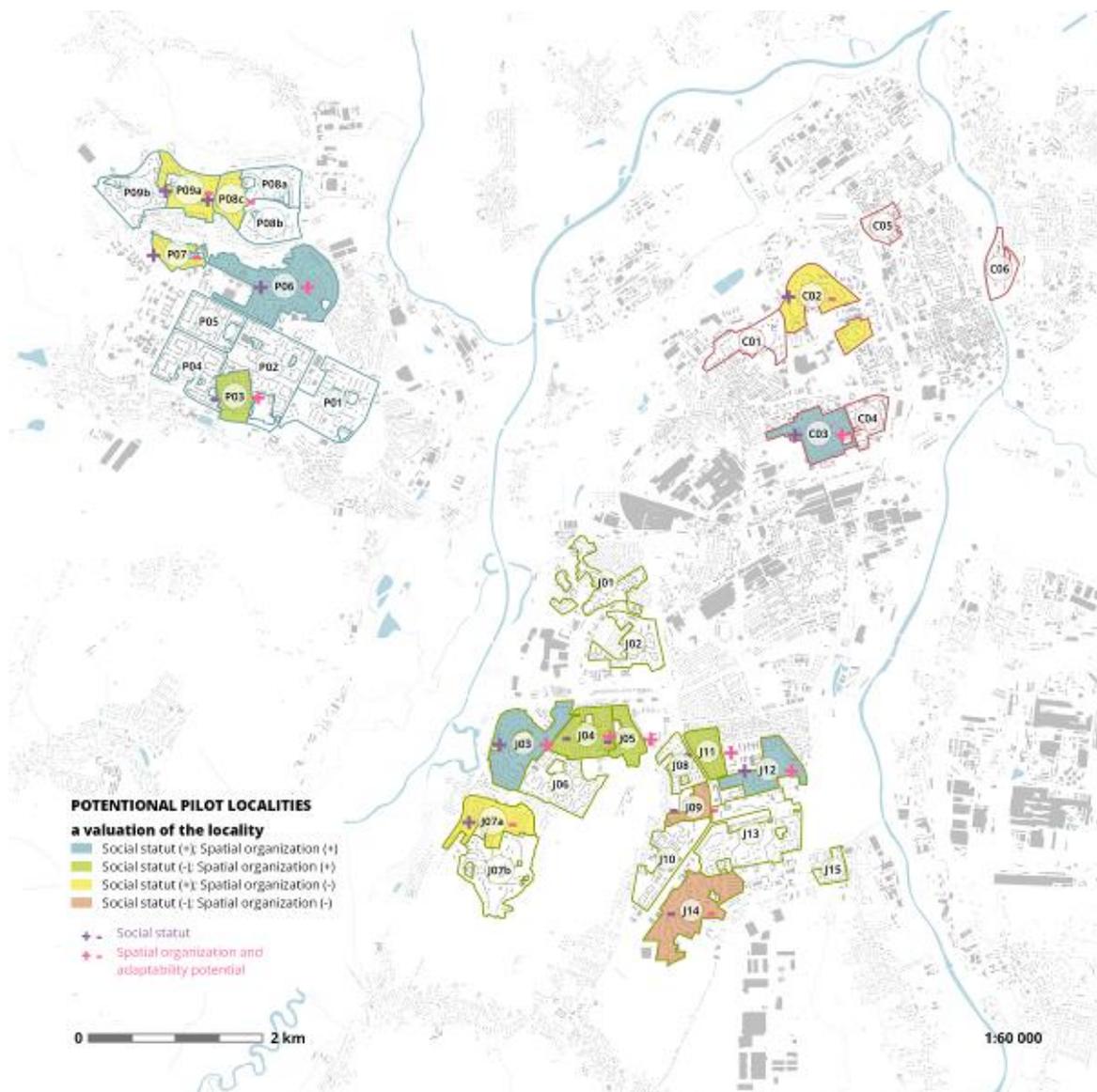
- *Bad social status and good spatial adaptability* – i.e., localities where interventions are socially desirable and have a relatively favorable spatial condition
- *Bad social status and bad spatial adaptability* – i.e., localities where interventions are socially desirable but are potentially spatially complicated, i.e., implying higher technical or financial risk

- *Good social status and good spatial adaptability* – i.e., localities where interventions are not socially pressing, but have a relatively high potential of broader engagement of local actors in combination with favorable spatial conditions
- *Good social and bad spatial adaptability* – i.e., localities where interventions are not socially pressing and where a relatively high positive potential of broader engagement of local actors is combined with relatively complicated spatial conditions

HELs which stand out as neither positive or negative are classified as neutral. Here the strategies of interventions would most likely be mixed.

This classification enables local municipalities not only to understand and communicate the different conditions of individual housing-estates but also to find localities with similar characteristics which could be addressed by similar intervention strategies.

Figure 7: Final evaluation map. Classification of HELs.



Source: Center of housing quality

Results in the city of Ostrava and discussion

HELs with *bad social status and good spatial adaptability* (J04, J05, J11, P03) are (without exemption) middle-rise estates with buildings of three to four floors. They were built in late 40's and 50's and organized in rows. They are specific by high levels of unemployment, high or very high percentage of residents with elementary or no education, and, except for J05, low percentage of residents with university degree. The age structure is average. The number of people per flat is below the city's average in the HELs in the city sector South (J04, J05, J11), which indicates high number of single-person households. The number of flats per building² (between 7-16) is very low compared to the rest of HELs. This is regarded as a favorable situation for the possible upgrades of buildings since negotiations and planning is easier with smaller number of actors, however low levels of education can complicate the negotiation process.

HELs with *bad social status and bad spatial adaptability* (J09, J14) are high-rise housing-estates, which were built in the 70's and 80's and designed as abstract urban forms, so called large compositions. These HELs possess high levels of unemployment and low rate of residents with university degree. In both localities the population is younger than is the city average. These localities also have more residents per flat than is the city average. It is likely that younger families with children move here because apartments tend to be cheaper. The number of flats per building is above 20 (higher than average), and, consequently, the number of residents per building is also high (above 50). In both localities, there is higher level of cooperative ownership. In J09, significant amount of flats is owned by one private company which might favor future interventions. In J14, the cooperative and individual ownership is more scattered. In general, these localities are the ones that need most attention and resources to be transformed into thriving neighborhoods. Due to the accumulation of problems, the regeneration processes in these localities will most probably be very complex and challenging.

HELs with *good social status and good spatial adaptability* (C03, P06, J03, J12) are mainly estates built in the 60's and 70's. Typologically, they consist of mid-rise rows or pseudo-blocks with the number of flats per building ranging from 9 to 16 and with significant percentage of flats owned by one private company (C03) and cooperatives (J03, J12 and P06). Residential density is average, ranging from 114 to 150 hab./ha. The number of residents per building (19-32) and the number of people inhabiting one flat (2 inhabitants) are at the city average. The age structure, unemployment rates, and education levels are also average. In general, these localities present rather neutral social status; however, in combination with their favorable typology, they are rated as the most positive ones regarding their overall potential for long-term adaptability.

HELs with *good social and bad spatial adaptability* (C02, P07, P08c, P09a, J07) are all mid- or high-rise large compositions with highly educated population, which correlates with low unemployment rates. Cooperative ownership is significantly represented in these localities. The age structure is average or slightly younger. The occupancy rate per flat is average; however, the number of residents per building is higher (given the fact that most buildings are above six floors). This may cause difficulties when trying to reach an agreement about future interventions. However, high social status and better economic background may outweigh this disadvantage and may allow for more costly interventions.

² A section with one entrance and a staircase is statistically considered as a building in this research. One slab-block of flats can often have more such „buildings“.

Four categories of HELs correspond with four types of strategic approaches towards their regeneration. HELs with *bad social status and good spatial adaptability* thanks to their clear spatial layout don't require a complex masterplan and complicated interventions. The strategy aims for setting up rules for low-cost interventions that can be implemented by the inhabitants themselves, such as delimiting private and share garden or shared courtyards in between the buildings with vegetable beds, places for relaxation, playgrounds or parking sheds. To certain extent these interventions are spontaneously happening already. The main task is to coordinate them and upgrade their spatial and aesthetic quality by setting some general rules (e.g. height and material of fencing, form of a parking shed, etc.).

HELs with *good social status and good spatial adaptability* are seen as localities where, due to economically stronger population, more complex and costly interventions can be made. These can be more elaborate parking solutions such as underground or semi-recessed garages with residential terraces, new buildings that help to articulate main public spaces with more clarity, and an upgrade of current buildings. A more detailed masterplan is required in order to coordinate and prioritize these interventions.

HELs with *good social and bad spatial adaptability* require a set of larger interventions that reverse their unfavorable spatial layout and to great extent redefine the structure of their public spaces. Such operation may be accompanied by greater densification (new volumes help to redefine the structure of public spaces) or even demolitions. New development should bring in new typologies of housing (e.g. rowhouses, townhouses), offering higher standard to economically stronger residents that wish to stay living in the neighborhood. A detailed masterplan with extensive coordination effort involving not only residents but also private development companies will be most likely a necessity.

For HELs with *bad social status and bad spatial adaptability* it is argued that the strategies will depend greatly on the overall strategy for the whole city. In case of a shrinking city, these localities could be first considered for important structural transformation including demolition. In case of a developing city, investments could be directed into these neighborhoods for major redevelopment. In both cases, these localities will need special attention and effort in order to reverse their adverse situation.

After grouping the HELs in Ostrava into the four categories, three localities were chosen as pilot projects (one from each category except for the one representing HELs with *bad social status and bad spatial adaptability*), and the integrated masterplans of the chosen localities were developed. These masterplans present a set of strategic interventions to be tested. If successful when implemented, these strategies could be reproduced to other estates of the same category and further serve as examples for other cities.

To evaluate the socio-economic situation of each locality, it would have been desirable to use also data on income and real-estate prices. Unfortunately, these data were not available at the given time. This fact together with the outdated census data from 2011 can be considered as the most evident limit of the analysis. Availability of this data would make the conclusions more precise. The method as such is however not affected and may be used in other contexts.

Conclusions

This article deals with housing estate regeneration in post-socialist countries, where these neighborhoods represent a significant share of the overall housing stock. Being one of the greatest urban challenges in the region, governments and urban planners have not yet come up

with a clear vision of their future development. Western examples of regeneration policies and successful projects of housing estates transformations may be inspiring to post-socialist planners, however the context in both regions is different. Housing estates in both regions differ in terms of scale and quantity, ownership structure and social status. At the same time governments in post-socialist countries have less financial and institutional capacity to implement integrated large-scale regeneration projects. That is why it is necessary to define a different approach for post-socialist housing estates specific to the local context.

In order to define such approach, it is first necessary to be able to understand the specificities of housing estates in a given area and the differences among them. Only then it is possible to prioritize and decide what, where and when to intervene.

That is why this article presents a method that was developed to classify and understand a larger number of housing-estates within one municipality. While each housing-estate is different, and the detailed understanding of specific needs of each locality might be a task exceeding the common capacities of local governments, the presented method enables to reveal certain patterns and potentials that simplify such analysis. Using available socio-economic and spatial data enables to classify seemingly uniform housing-estates into categories which share similar characteristics and challenges, and which can therefore be addressed – with all due respect to the creative process which always needs to be applied – in a similar way. The method was created to identify the *level of adaptability* of housing-estates (which is understood as the combination of socio-economic status, attractiveness, and spatial characteristics of the particular housing-estate type) and tested in the city of Ostrava. Here, it helped to find housing-estate localities with similar features and classify them into four basic categories. Once these categories are uncovered, it is possible to set a regeneration strategy for the whole city and start with neighborhoods, where it makes the most sense, i.e. neighborhoods with the highest level of adaptability and thus the highest transformational potential.

The presented method is thus designed as a tool to help local governments to set a long-term strategy for urban regeneration and decide where and how to begin. Further, it also allows to visualize these conclusions and communicate them easily to the wide public. Hence, the method addresses two key factors when setting the regeneration policies: the ability to take decision and to communicate it.

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COOPERATION BETWEEN ARCHITECTURE STUDENTS AND MUNICIPAL GOVERNMENT TO PROMOTE RURAL TOURISM

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Abstract:

Rural tourism is an important and growing sector that can make a significant contribution to solving some of the social and economic problems of rural areas, while contributing to the sensitive maintenance of the landscape and the expansion of cultural and social traditions. The mayors of the municipalities are approaching the schools of architecture to develop studies to promote rural tourism. They expect the students to come up with creative new ideas that will attract tourists and improve the public space in the village, thus contributing to the quality of life of local residents. The article deals with the benefits of cooperation between the FA BUT and municipal governments and presents, as an example, a student project to promote tourism in the municipality of Tvarožná Lhota.

Introduction

Rural tourism plays an important role in the Czech Republic and has many positive impacts on the economy, culture and the environment. It represents a potential source of income for rural regions, especially those suffering from a decline in agricultural activity.

One of the objectives of rural tourism is to focus attention on less attractive regions and to direct the offer towards environmentally friendly tourism (Kotíková, 2013). Rural tourism offers a wide range of opportunities for leisure and recreation. Rural tourism involves visiting places with unique folklore expressions, areas with preserved folk architecture and ethnographic differences, natural museums and places of natural landscape interest. Tourism is also supported by bio-spas, visits to wine cellars with tours of wine production and wine tasting, hiking, cycling, equestrian sports, fishing in river valleys and water sports, and skiing in winter.

The development of rural tourism helps to diversify the economy of rural areas, meaning that local people are not dependent on just one source of income. Rural tourism supports local accommodation and catering businesses, creating new employment opportunities in tourism and related sectors. Tourists encourage social and cultural events, the maintenance of traditional crafts, folk festivals and the preservation of folk architecture. They also raise local awareness of the importance of preserving traditional values and protecting local cultural heritage.

Sustainable rural tourism is also more environmentally friendly, which has a significant impact on the protection of the rural natural environment and the character of the rural landscape. However, if environmental ideas are not embraced by the people in whose environment tourism

activities take place and by the travellers themselves, if all parties are not part of the same game, neither tourism nor the protection of the environment and cultural heritage can develop successfully (Ryglová, Burian, Vajčnerová, 2011).

Rural tourism in the Czech Republic has great potential, but it faces many problems related to insufficient infrastructure. Many villages are not connected to public sewerage, there is a lack of quality services, and there is a lack of professionals to manage businesses and their ability to respond to changing demand and competition. Rail and road public transport are not equipped with adequate services and facilities for passengers, and there is a lack of necessary facilities for e-bikers.

The development of sustainable rural tourism will require the expansion of rural infrastructure that will serve not only tourists but especially local residents. It is necessary to create the conditions for favourable long-term development based on current realities (Freyer, 2001).

Changes are also needed in the negative attitude of many villages and their inhabitants towards tourism. The relevant municipal authorities, especially the municipal council and the municipal advisory board should pay sufficient attention to rural tourism. A prerequisite for this is the introduction of appropriate management methods in the management of public administration (Tittelbachová, 2011).

Cooperation of the Faculty of Architecture with municipalities and its benefits

Design documentation is needed to implement measures leading to increased rural ecotourism. Many municipalities, especially the smaller ones, do not have sufficient financial resources to have professional agencies prepare the projects. Therefore, individual municipalities or associations of municipalities associated in micro-regions approach schools of architecture with a request to develop student projects thematically focused on sustainable tourism that positively affects the development of the municipality.

Although student projects cannot fully replace professional design documentation, they can serve as case studies that allow for better communication with the citizens of the municipality and the integration of their opinions and needs into the decision-making process. Subsequently, the municipality in cooperation with the school can apply for grants from the European Structural Funds to obtain funding for design documentation and implementation.

The Faculty of Architecture of the Brno University of Technology has been cooperating with municipal governments for a long time and acts as a principal investigator or co-investigator in projects financed by the European Structural Funds. The Faculty has participated in the international projects EU INTERREG III Czech Republic - Slovakia "Past to Future – Natural Materials in Regional Building Culture", EU INTERREG IIIA Czech Republic – Germany "Study of the Transfer of German-Czech Knowledge on Ecological and Regionally Typical Buildings" and domestic projects aimed at supporting rural renewal. These projects include the ESF project, OPRLZ "Natural materials and unfired clay in modern and traditional buildings", MMR CR WB-42-2004-52 "Public spaces as a means of promoting local tourism". In addition, research projects of the Ministry of Education have been carried out, such as FA-J-22-8002 "Research on tools of spatial planning and territorial development of rural settlements in Central Europe", IRP 5/2014 "Evaluation of public spaces", FRP_2021_PPČ3_1 "Creation of rural landscape and its tools", FA-J-20-6391 "Future of rural areas".

The school is also actively involved in organising student workshops in the countryside. For example, in 2018, the Baroque wayside shrine in Všechnovice was restored as part of the "Project to Support Talented Students" and at the same time a workshop was held to scan the original statue of St. John of Nepomuk from the depository and 3D print it. The created copy of the statue was subsequently placed in the restored structure of the wayside shrine.

Effective cooperation between the Faculty of Architecture of the Brno University of Technology and municipal councils can bring many benefits for the municipality and its development, as well as for the students of the FA. The main benefits of this mutual cooperation include:

- Ideas and innovations: students can bring new perspectives and inspiring ideas for innovative solutions for sustainable community development.
- Increased awareness of local development: Students can conduct research and analysis of the current situation in the community, which can raise awareness of the needs and opportunities for community development and renewal.
- Community empowerment: Involving students and local residents in the development of projects can strengthen the sense of community and local identity.
- Dialogue with citizens: students can facilitate dialogue between the municipality and citizens in planning the development of the municipality, which can lead to greater public satisfaction and support.
- Improvement of public spaces: Projects created by students can lead to the creation of attractive and functional public spaces, which can improve the quality of life for local residents and increase tourist interest.
- Increased interest in nature, traditions and sustainability: For students, landscape, vernacular architecture and folklore traditions are essentially the main motivation behind the proposal to promote rural tourism.
- Developing digital technologies: student projects can help raise awareness of the use of digital technologies that not only assist in rural ecotourism services, but also help improve accessibility of services for rural residents.
- Opportunities for grants and funding: Collaboration with the university can help the municipality to obtain grants and thus funding for project documentation and implementation.
- Supporting education: working with a university can be a valuable learning experience for students. Students can engage in real projects and gain practical skills and knowledge, which can enhance their career readiness.
- Positive media attention: successful projects created by students or obtaining and successfully completing grants can attract media attention and thus contribute to a positive image of the community as well as a positive image of the university.

A Project to promote tourism in the village of Tvarožná Lhota

Tvarožná Lhota is located in the foothills of the protected landscape area of the White Carpathians in the Hodonín district, and belongs to the Strážnice microregion. The wine-growing village is very active and has won many awards (South Moravian Village of the Year 2012, Czech Landscape Award 2012, Council of Europe Extraordinary Landscape Award 2015). There is a recreational area named Lučina in the cadastre of the village, where the "Navodě" International Festival is held every year. Other cultural events are held in the village. In February there is a costumed "Carnival", a "Maypole raising" in May, a pilgrimage to St. Anne's in July associated with a folk feast and "Singing by the Christmas tree" in December.

However, the village is mainly known for its deciduous fruit tree, sorb tree (oskeruše, *sorbus domestica*), the oldest tree variety in Europe. However, in the Czech Republic it is relatively rare and almost forgotten. It is of landscape importance for its massive growth and remarkable appearance. In the past, the wood of the sorb tree was used to make musical instruments, wine presses and decorative inlays for furniture. Nowadays, the sorb tree is endangered and education is underway to inform the public about its importance and to promote this almost forgotten and rare species of the native sorb tree not only in the Czech Republic but also throughout Europe. In the village of Tvarožná Lhota, Celebration of the sorb tree is held annually in February and the Oskeruše Festival in September. Thanks to its tasty fruits with medicinal properties, the sorb tree is of great importance for the local production of products from it. Souvenirs, compotes, marmalades, liqueurs or 'oskerušovice' brandy can be purchased at the local Sorb Tree Museum.

Figure 1: *The Sorb Tree Museum, it's in bad shape.*



Source: Hana Urbášková

Although the village has tourist potential, it is not popular for tourism except for the mentioned events. Tvarožná Lhota has long faced the problem of a lack of hospitality services. Despite the relatively good civic amenities of the village, there is no pub, restaurant or guesthouse in the village. The square itself, where the Sorb Tree Museum is located, is in poor condition. It does not function as a safe public space. There is a preference for car traffic with inadequate parking. There is a lack of seating and bicycle parking at the museum. The museum building is in very poor condition and is to be demolished.

The main objective of the project is to find a sustainable solution that will satisfy the needs of the local population and at the same time promote wine-friendly tourism (enotourism) in the village. Based on research and analysis of the village and discussions with the citizens, students Klára Podešvová and Filip Nesvadba decided to place two new buildings on the village square on the plot of the demolished museum. Their location is based on the existing urban structure, respecting the scale of the surrounding buildings and the vernacular architecture.

Figure 2: *Design of new buildings (community centre and museum with café) by students Klára Podešvová and Filip Nesvadba.*



Source: Hana Urbášková

The two buildings contain different functions, but they will complement and support each other. The result is a proposal for a community centre and a museum with a café. The whole complex will also be used for leisure activities of both tourists and local citizens of all age groups (children, youth, parents and seniors). This will increase the utilisation of the facilities and their economic success.

The aim of the project is to transform the square into a quality public space and breathe new life into the whole area. The new buildings are connected by a wooden terrace in connection with the square. The square is complemented by a children's playground, new greenery and a tree line along the pedestrian zone. New furniture, lighting, bicycle racks and suitable parking spaces also complete the space.

The students' proposal was presented at a public meeting and met with a favourable response from the citizens of the community. The project serves the municipality as an incentive for further possibilities of promoting tourism in Tvarožná Lhota. The proposed solution will be used both by visitors and especially by the citizens of the village. The discussion on the project also contributes to the growing awareness of citizens of the value of the heritage of cultural and social traditions and the need to protect it.

Figure 3, 4: *The project to promote tourism in Tvarožná Lhota was developed by students Klára Podešvová and Filip Nesvadba from the Faculty of Architecture at Brno University of Technology.*



Source: Hana Urbášková

Conclusion

Overall, the cooperation between architecture students and municipalities is an important tool for promoting sustainable rural tourism and the development of rural areas. This cooperation has a wide range of positive impacts that can benefit local communities and regions as a whole.

Public awareness, education and edification are essential to promote sustainable rural tourism and to understand its benefits. The Faculty of Architecture at Brno University of Technology is involved in this awareness raising through public lectures and interactive student workshops.

During their cooperation with municipalities, students work on architectural and urban planning tasks contributing to the public benefit of the municipality in studio classes. The students' proposals are discussed with the citizens and serve to understand the urban and architectural values of the design as well as to provide ideas and suggestions for sustainable development and preservation of the cultural values of the municipality.

The aim of the cooperation between the Faculty of Architecture and the municipalities is to influence the positive perception of architecture by the citizens of the municipality in the long term. High quality architecture can play an important role in building local identity and could also attract investors and entrepreneurs, which can contribute to the economic growth of the municipality.

Another goal is to teach students to communicate, listen and take into account the needs and opinions of local residents. The architect should be a facilitator in a democratic dialogue that leads to a consensus that is acceptable to the majority of residents. This consensus can serve as an effective tool for the progressive implementation of the "Smart Villages" strategy.

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POZVÁNKA NA KONFERENCI GIS V PLÁNOVÁNÍ MĚST A REGIONŮ 2023

Nejen pro odbornou veřejnost, ale i pro ty, kterým záleží na tom, jakým způsobem a tempem se bude rozvíjet jejich region, se bude konat již 7. ročník konference **GIS v plánování měst a regionů (GISPLAN)**.

Pořadatelé jsou Masarykův ústav vyšších studií ČVUT v Praze a Česká asociace pro geoinformace.

Akce se uskuteční dne 31.10.2023 v prostorách pořádající vysoké školy na adrese Koleční 2637/2a, Praha 6 – Dejvice

Dlouhodobým cílem konference je najít společnou řeč projektantů územně plánovací dokumentace a „gisáků“. Současné trendy v územním plánování jsou jednoznačně digitální, aby byla možnost výsledky vizualizovat v chytrých mapových portálech a aplikacích, které umožňují nad získanými daty provádět nejrůznější analýzy.

Konference navazuje na tradici oblíbených seminářů GIS a územní plánování, tzv. „Bítovů“, jejichž éra se uzavřela v roce 2013.

Akce jsou tematicky zaměřeny. Mezi hlavními tématy předchozích ročníků dominovaly například Adaptační strategie v podmínkách změny klimatu, mapování bariér, digitální zpracování urbanistického vývoje regionu a úskalí při budování „chytrých“ měst. Hlavním tématem té letošní budou **Mapové portály pro veřejnou správu**.

Mezi chystanými prezentacemi je možné uvést např.:

- Geoportál města Brna a jeho provázanost s dalšími agendami.
- Mapové aplikace Centra investic, rozvoje a inovací a Odboru regionálního rozvoje Královéhradeckého kraje.
- Budování inteligentního dopravního systému v Hradci Králové a první zkušenosti s jeho provozem.
- Představení, funkcionality a využití geoportálu Českého statistického úřadu – workshop se zaměřím na prezentaci statistických dat a jejich agregaci s ohledem na různé ukládací jednotky.

Na stránkách CAGI byly spuštěny [webové stránky](#) konference, včetně rezervačního systému, rámcového programu a informací o programovém a organizačním výboru. Z konference bude vydán sborník příspěvků.

Zde si můžete prohlédnout fotografie jednoho z ročníků.

Za programový výbor konference Pavel Struha (CAGI, Statutární město Hradec Králové)

KURZ "TRANSFER ZKUŠENOSTÍ Z PLÁNOVÁNÍ ROZVOJE A OBNOVY MĚST DO MOLDAVSKA"

Od pondělí 25. září do pátku 29. září 2023 probíhá kurz **Transfer zkušeností z plánování a obnovy měst do Moldavska**, který realizuje Masarykův ústav vyšších studií ČVUT v Praze na partnerské moldavské Státní univerzitě Alecu Russo v Bălți.

V uplynulých dnech vrcholily na Masarykově ústavu vyšších studií ČVUT v Praze přípravy na plánovaný výjezd do Moldavska, kde je v rámci České zahraniční pomoci organizované Ministerstvem zahraničí ČR a Českou rozvojovou agenturou realizován kurz s názvem "Transfer zkušeností z plánování a obnovy měst do Moldavska". Smyslem a cílem projektu je transfer pozitivních zkušeností v oblasti plánování a rozvoje do území Moldavska sužovaného problémy postkomunistické ekonomiky a silným vlivem Ruska. V rámci projektu budou prezentovány soudobé postupy a procesy v regionálním rozvoji, strategickém a územním plánování rozvoje a obnovy regionů po negativním působení předchozích režimů.

V rámci projektu vyjede nejprve skupina českých expertů z Masarykova ústavu vyšších studií realizovat týdenní výukový kurz do moldavského Bălți, kde budou prezentovat postupy a zkušenosti z plánování rozvoje a obnovy zaostalých oblastí.

Projekt probíhá ve spolupráci se Státní univerzitou Alecu Russo ve městě Bălți, která je regionálním vzdělávacím střediskem pro severní část Moldavska. Ve spolupráci s uvedenou univerzitou v Bălți bude pro studenty, zájemce z řad místní správy, pedagogy a doktorandy realizován týdenní kurz obnovy území regionu, který umožní spolupracovat s veřejností, rozvinout skryté zdroje regionů, a také obnovit hospodářskou činnost v krajině.

Po první výukové části v Moldavsku bude na základě více kritérií vybrána skupina, která navštíví Českou republiku a bude získávat zkušenosti, ze zde již realizovaných rozvojových projektů.

Doufáme, že kurzy splní svůj účel a pozvednou jak region, tak celé Moldavsko.

Projekt je financován v rámci České rozvojové pomoci Českou rozvojovou agenturou a Ministerstvem zahraničních věcí ČR.



Logo projektu (Autor: Radko Palic)



Ministry of Foreign Affairs
of the Czech Republic

Michael Pondělíček

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