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# Heritage sustainability along the Danube: Small and Medium-Sized Cities

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#### **ABSTRACT**

This paper explores the transformative impacts of EU-funded projects, DANUrB+ DANube Urban Brand + (DANUrB+) and the educational project "Creative Danube: Innovative teaching for inclusive development in small and medium-sized Danubian cities" (DANUBIAN SMCs), aimed at reshaping the cultural identity and heritage of the Danube region. Instead of just attracting tourists to big cities, these initiatives highlight the Danube's role in uniting diverse communities along its banks. The projects envision the Danube not merely as a historical, geographical, and cultural entity but as a river for connecting over 81 million people. They aspire to stimulate dialogue, creativity, and holistic development across the region. However, prevalent tourism practices often fail to capture the river's unifying essence, leading to disparities between thriving urban hubs and struggling smaller towns and medium cities. Thus, small, and medium-sized Danubian cities, despite their cultural richness, encounter economic hurdles due to the underutilization of their cultural assets in tourism. Varying relationships with the river characterize these cities, from vibrant port areas to declining industrial zones or neglecting river access. The impact of urban planning on public spaces and structures along the Danube plays a crucial role in nurturing cohesive and culturally vibrant environments. Prioritizing existing structures for harmonious growth and integrating them into the cityscape is vital for sustainable urban development. This paper emphasizes the importance of an inclusive approach that honours local identities and historical legacies, underline the values of the small and medium sized cities, some of them still unrevealed, while weaving them into a broader Danube narrative. Through these projects serving as transformational tools, it underscores the recognition and leveraging of cultural heritage to drive sustainable development in the Danube region.

## 1. Introduction

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The Danube has been and still is the subject of much socio-cultural research, being the natural element around which communities were formed and, at the same time, the natural element that links these communities in the heart of Europe. For centuries, the Danube has attracted and shaped communities connecting a vast territory within Europe, from its heart in Germany to its estuary in the Black Sea, where it forms one of Europe's most important delta. Along the way, it passes through ten countries: Germany, Austria, Slovakia, Hungary, Serbia, Croatia, Romania, Bulgaria, Moldova, Ukraine; four capitals: Vienna (Austria), Bratislava (Slovakia), Budapest (Hungary), Belgrade (Serbia); numerous other towns and villages are included in its catchment area. These few elements of spatiality paint a picture of the Danube region, which might at first glance look like a mosaic to the uninitiated, a motley collection of cultures; a deeper analysis, even in a simple empirical sense, might reveal a regional culture with its own signs and particularities, but which in its depth nevertheless represents a unified picture.

Danube is a scale and approach that considers elements of identity at local, regional, and territorial levels. Today, almost 40% of the total length of the Danube is a border river. After the upper Germanspeaking parts (German and Austrian), the mix of cultures and languages is intensifying. Most of the towns along the river are cross-cultural, with similar or characteristically different cultures and languages on both sides. In the past, multilingualism here has been a necessity and an opportunity. The presence of so many nationalities lead to a reflection on the identity and significance of the Danube. Several major questions and ideas stand out: How many identities of the Danube do we have among so many communities populating the region? How do these identities manifest themselves? What do we have in the cultural-immaterial space and how has the physical space been imprinted? So, what has the Danube meant and what does it mean today? It has intertwined and linked communities, giving rise to a socio-cultural richness resulting from the mixing of these nations, even if at certain moments in history, conjecturally and for short periods of time, the Danube has served as a natural barrier and has divided.

The image of a European region where the Danube is the matrix river, generator of solid and sustainable identity values from a historical, geographical, socio-cultural, and economic point of view, represents today a sustainable and ecosystemic perspective through which the "unity in diversity" is understood at the level of the European Union, this being the identity motto of the Union since 2000. This vision of the Danube, which links and unites people, communities, and civilisations, inspires development and creativity, dialogue, and cooperation at multiple levels, so that people can perceive its value and potential to perpetuate and care for an ecosystem that is resilient on a territorial scale but certainly fragile on a local scale [1]. Education is paramount, both in terms of the level of training of young people and the level of awareness of communities.

This situation has been analysed within the framework of the EU-funded initiatives DANUrB and DANube Urban Brand + Building Regional and Local Resilience through the Valorization of Danube's Cultural Heritage" (DANUrB+) which are cooperation projects between European regions in which the "Ion Mincu" University of Architecture and Urbanism from Bucharest was partner. In fact, the first DANUrB project [3] which started in 2017, led to a series of projects: the second INTERREG project, DANUrB+, and complementing this, focusing on the academic dimension of research, the Erasmus+ project, "Creative Danube: Innovative teaching for inclusive development in small and medium-sized Danubian cities" (DANUBIAN\_SMCs).

The DANUrB+ project researched the specific aspects of the shrinking phenomenon in the Danube cities [3], this being an ongoing process, especially in cities from the former socialist countries as Romania, Bulgaria, Serbia. While DANUrB+ aims to reactivate underused cultural heritage and resources in shrinking settlements of Danube river's peripheral and border regions, and to create new possibilities to make its towns and regions attractive again, the need to think of an educational program suitable for these purposes became evident, since education is always the basis of any long-term process with such important stakes, as increasing the local prosperity and international tourist

attractiveness. Thus, for a deeper understanding and with the vision of continued cooperation at the level of the Danube basin, the DANUBIAN\_SMCs Erasmus+ project, was born [4].

In a big picture, all these projects envision the Danube not merely as a historical, geographical, and cultural entity but as a river for connecting over 81 million people. They aspire to stimulate dialogue, creativity, and holistic development across the region. However, prevalent tourism practices often fail to capture the river's unifying essence, leading to disparities between thriving urban hubs and struggling smaller towns and medium cities [5]. The projects aim at a deeper understanding of the Danube region, considering it a unique brand, for which any development objective must transcend political and cultural boundaries, embracing a wider geographical territory. In addition, the aim is to promote the Danube, more specifically the communities that should be aware of the benefits of belonging to the Danube basin and highlighting lesser known or overlooked local values. Thus, the results of these projects transcend borders, and are materialized in the establishment of European regional networks, oriented towards dialogue and cooperation, interdisciplinary research, and education, with the possibility of exploiting for development the still hidden values of the Danube cities. Crucially, these efforts are aimed at involving the younger generation, especially pupils and students, in rediscovering, enhancing, and promoting these values: values of everyday life, the possibility of sustainable tourism on a different scale from mass tourism are opportunities for local communities. In this light, we focus the article on the educational section, through the DANUBIAN SMCs (Danubian Small & Medium size Cities), ERASMUS+ project.

## 2. Methodology

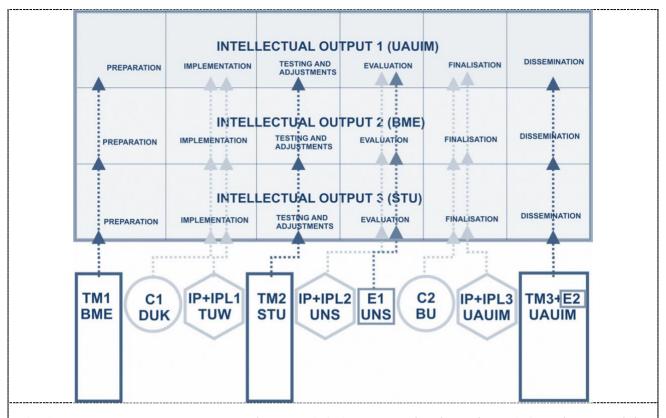
The DANUBIAN\_SMCs Project has developed its own research methodology, focused on the need to capitalize on the results of the DANUrB and DANUrB+ projects and to bring them to the education domain, creating not only a knowledge transfer system, but also a new network of universities that, through the intellectual contribution of its members, have generated a stimulating environment for research on the phenomenon of the contraction of small and medium-sized cities, viewed both through the lens of the space and communities.

The project combined in an interconnected scheme a series of tactics and methods intended to activate cooperation at the level of the teams involved in the project, but also to integrate into the project activities a series of local actors from the studied communities.

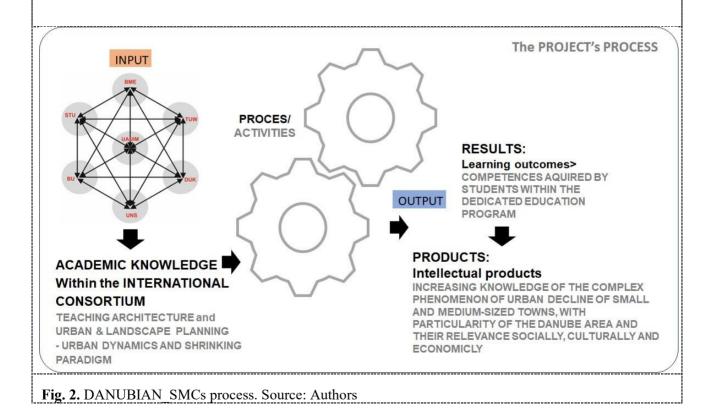
Thus, the project developed an education system in the spirit of the proposed goals, and with the aim of increasing the interest of architecture and urban planning students in understanding the challenges of the shrinking phenomenon for the small and medium sized cities in the Danube region. (Figure 1)

The 3 intellectual outputs captured the entire multi-level and collaborative development of the project, summarizing the results of the entire didactic and methodical activity of the consortium team, mirroring the 3 intensive programs for teaching staff and for higher education learners.

The process and the entire methodology of the project were not linear and predetermined, especially due to the fact that they took place partially during the years of the pandemic (Figure 2). This represented a challenge for the organization of activities, but at the same time, it stimulated the finding of innovative solutions and led to a more flexible integration of inherent exchanges.



**Fig. 1.** DANUBIAN\_SMCs structure, where: TM1, 2, 3 = Transnational Meeting, C1, 2 = Short-term joint staff training events, IP1,2,3 = Intensive programmes for teaching staff, IPL 1,2,3 = Intensive programmes for higher education learners, E1,2 = Dissemination events. Source: Authors



## 3. Understanding the project in the overall context of the Danube approach

What is DANUBIAN\_SMCs? Research on the values along the Danube is continued at academic level through student projects and ways to promote them through the involvement of young people are proposed. Thus, the project aims at sharing knowledge on new methodologies and innovative practices at the academic research level on addressing the problems of Danube cities and transferring them to the community and administrative environment. In addition, the project aims at complementing the data collected in previous projects (DANURrB) to improve the available database and to use it in future projects.

The development vision contained in urban planning and design projects can be considered a resource for the local community. Therefore, the project partners are universities but also local administrative entities and cultural institutions that contribute to challenging students, urban professionals, and locals. Heritage sustainability requires a participatory approach that involves the active engagement of the public, key stakeholders, and other relevant parties. This approach involves identifying and selecting appropriate sites with local values, establishing links with key stakeholders, integrating and promoting heritage to users. By implementing a participatory approach, heritage sustainability ensures that decisions related to the management and preservation of cultural heritage are made collectively with the input of all relevant parties involved. Heritage sustainability is about managing and preserving cultural heritage in a way that benefits not just the present generation, but also future generations. In order to achieve heritage sustainability, it is also necessary to focus on a participatory approach to management and decision-making. Heritage sustainability refers to the comprehensive and participatory management and protection of cultural heritage, with the goal of preserving its social, economic, environmental, and cultural value for both current and future generations.

Seven universities from five Danube riparian countries were included. These are the universities of Vienna (through the SimLab research laboratory) from Austria, Bratislava from Slovakia, Budapest from Hungary, Novi Sad and Belgrade from Serbia, and Bucharest from Romania. Two cities hosted two student physical workshops and a third workshop was conducted online.

The project focused on small and medium-sized cities (SMCs) and towns in former socialist countries along the Danube. Among these, Austria is the exception, but the presence of the University of Vienna's research laboratory was considered of interest for its expertise in dealing with and processing geospatial data.

## 4. Finding & Discussion

## 4.1 Why small and medium-sized cities?

Firstly, apart from the capital cities mentioned in the introduction chapter and other large cities, the Danube flows through 121 medium-sized and small cities and towns, 87 of which belong to former socialist states (without Germany and Austria) (Figure 3).

These are cities of regional and local importance, which are usually outside the scope of research and for which there is a limited amount of data and studies. Moreover, generally for cities of former socialist states, they were centrally developed and with an economy mainly focused on industry.

Secondly, because these cities were centrally developed during the socialist period and in the years that followed and almost all these cities are suffering from the economic structural realignment that has taken place because of the redefinition of political systems over the last three decades. Many of these cities are in economic and demographic decline, with noticeable impacts on the built, social, and environmental environment. The phenomena present in these towns are a) territorial contraction and economic decline; b) loss of identity and position/relevance within the national or regional territorial system; c) ignorance of the authorities and apathy of the communities, convinced that they are too

small pawns in the urban system, ignoring the fact that these cities have an important undiscovered heritage. [3]



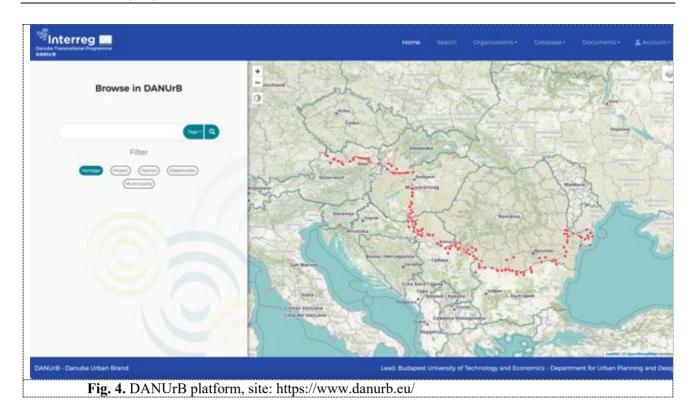
**Fig. 3.** (a) Share of Danube by size; (b) SMCs by size per country. As a base for a common understanding, are considered a medium city - a city with the population between 30-100000 inhabitants, a small city - a city with the population between 10-30000 inhabitants, and a very small city or town - a city with the population under 10000 inhabitants. [10]

Due to the presence of the river and the history it has generated, one of the ways of harnessing the potential of declining towns and cities is tourism. However, there is naturally the question of the extent to which tourism can be developed, as it is well known that tourism has become a socio-cultural phenomenon, with devastating effects on local communities.

Mass tourism, relative to the scale of medium and small towns in decline, would have long-term negative effects and this is not desirable. For the time being this is unlikely to happen as the global understanding of the Danube is focused on the four capitals as separate destinations or taken together as destinations in a regional circuit. They share a relatively common recent history as part of the Austro-Hungarian Empire, still bearing the imprint of a political system that managed to imprint common values. However, they show a limited socio-cultural dimension of the Danube, sometimes reduced to the level of stereotypes used as promotional slogans. A large proportion of cruises and sightseeing tours along the Danube do not have a common strategy and vision for the whole basin and are often reduced to the level of a few small parts of the whole Danube basin, being regional, isolated affairs that do not contribute significantly to the cultural and economic cohesion of the whole Danube region. As a result, marginal areas of tourist interest are left in an attitude of neglect and underdevelopment.

In contrast, alternative tourism, dispersed throughout the region, can be a sustainable solution for local communities. It can take on the mantle of niche tourism, without being exclusively niche. While niche tourism can be understood as focused on a few major areas - cultural, natural environment, urban, rural, each with sub-pillar areas [6], alternative tourism offers a broader framework of understanding and can encompass several areas, including social heritage or potential green urban infrastructure associated with declined sites, with the advantage of small groups that do not put pressure on local infrastructure and do not cause disruption to the daily life of communities [7].

In a contemporary understanding, an approach to heritage can reveal interesting particularities, including achievements from the socialist period. As per DANUrB and DANUrB+ projects, the great richness of the Danube basin, the values and significance that this river has, through local communities and their tangible and intangible heritage, can be discovered with beneficial effects for the well-being of communities. (Figure 4)



### 4.2 Methodology for innovative education in Danube Region

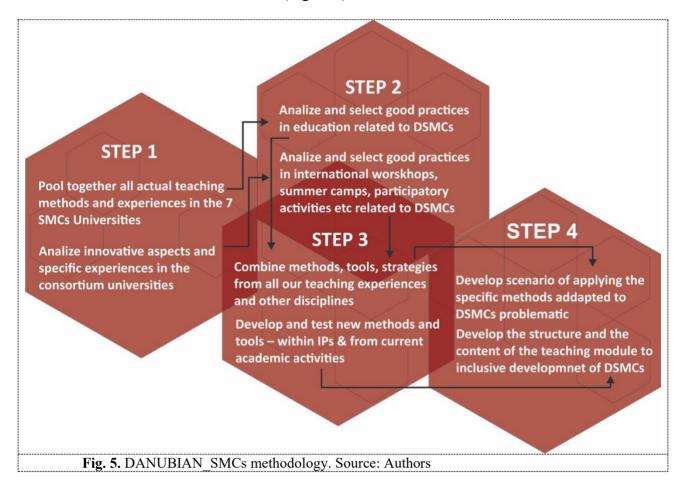
There are numerous cities in decline along the Danube and all their problems lead to the need for an interdisciplinary approach to development; the urban planning process should be complemented with data from geography, economics, sociology, etc. (The need of *interdisciplinarity* in teaching & learning inclusive development)

Projects at the level of small and medium-sized cities exist at all universities involved, but these, unfortunately, are and remain local-national works. From an educational point of view, it is important to share research experience, address various issues and possible solutions. How does this happen at other universities and what methods do they use? Thus, the teaching topics are related with the necessity for a better valorise cities' green potential; the opportunity to involve and to work with local communities; the chance to find innovative answers for Danube blue-green infrastructure. Main goal of the project was highlighted as: "Innovative research and design tools to develop and test new methods of interdisciplinary education in the domain of inclusive development of the built environment in Danubian SMCs". Based on students, teachers, and local stakeholders, with research activities online and onsite a blended teaching methods has been set; that has defined a methodological guideline for new theoretical and practical methods of interdisciplinary teaching for assessing Danubian SMCs.

The project meetings culminated in 3 Intensive programmes for teaching staff and for students. The first meeting aimed at identifying and testing research methods involving an interdisciplinary approach in the domain of inclusive development in Danubian SMCs. This workshop was conducted in 2020 by the research laboratory of the University of Vienna, SIMLab Wien, and had the theme "Sensing and mapping the city". The interdisciplinary approach to this theme involved familiarizing and using geospatial, open source data to document one route in 7 cities. The workshop was carried out according to a set schedule, which included teaching activities carried out online (overlapping the rules of the Covid pandemic period), alternating with site visits for documentation. The approach to the topic involved 2 perspectives: a technical, quantitative interpretation through Data acquisition and a qualitative interpretation through Sensitive lecture.

The methodology used followed 4 main steps: 1) Pool together all actual teaching methods existing in the 7 SMCs Universities; 2) Analyze the innovative aspects in each method; 3) Combine methods,

tools, strategies from all our teaching experiences and other disciplines; 4) Test new methods and tools within IPs & current academic activities. (Figure 5)



The workshop had 2 main topics: a) public accessibility focused on the issue of social inclusion and b) cycle paths, with leisure attractivity as the main issue and to develop a blog for each group theme (https://danubiansmcs.project.tuwien.ac.at) These topics had 5 themes covering a wide range: the city-Danube relationship; shrinking condition of city; local heritage; urban morphology and green urban structure.

The second workshop focused on participatory approaches to local community development through urban acupuncture. The meeting took place physically in 2021 and was led by the Faculty of Architecture and Urban Planning of Novi Sad University. The application was carried out on several sites of the city of Sremski Karlovci, Serbia. The methodological approach involved an introductory stage about the site, followed by site raids by the student teams to identify intervention locations, opportunities, and constraints of the chosen sites, as well as interviews with inhabitants of the city. Conceptual intervention schemes were sketched on site and will be transformed into projects in the coming days. The outcome of the workshop was a series of spatial intervention projects for the development of the public space related to the chosen micro-locations.

The third workshop was on the theme of city liveability. The meeting took place physically, in 2022, and was led by the Faculty of Urbanism of the "Ion Mincu" University of Architecture and Urbanism. The application was carried out on the city of Călărași and had an approach based on 5 themes: accessibility and sustainable micro-mobility; b) socially inclusive character of peripheral residential neighbourhoods; c) resilience based on the use of local cultural resources and heritage values; d) attractiveness of public urban green spaces; e) productive landscapes and local economy. It aimed to raise awareness of local values within the community. It is supposed to bring together in the

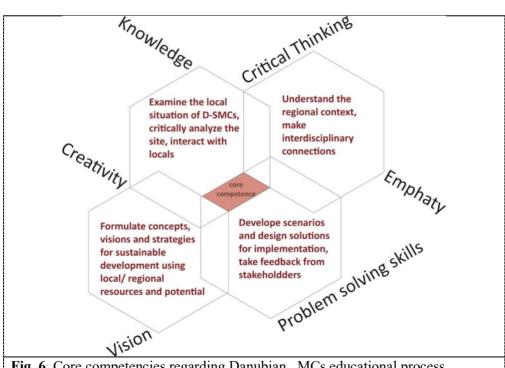
same conceptual framework the local community, professional partners, and experts in an interactive planning process.

## 4.3 Build Danubian Small and Medium sized Cities related competences

Teaching and learning through innovative and interdisciplinary methods and tools in this project align with the Education 2030 agenda, especially to Target 4.7 [8], fostering skills for future generations. Education is universally recognized as vital for sustainable development, evidenced by its integration into national frameworks. As urban development evolves, education plays a crucial role in preparing students for future challenges. Recent studies state that planning programmes and curricula need to incorporate learning and teaching approaches that prepare students in higher education for working in co-creation settings by purposefully exposing them to learning environments that involve community, science and practice [9]. At the same time, the changing demands for competencies drive educational evolution, with a focus on sustainability, technology, employability, and global citizenship. The DANUBIAN\_SMCs modules complement broader European competencies, facilitating integration. Exploring small and medium-sized cities highlights the interconnectedness of various knowledge domains within urban planning.

The DANUBIAN\_SMCs results foster competencies that integrate with the broader macro-competences emphasized at the European level. Similarly, the focus on small and medium-sized cities within sustainable planning contributes to a holistic understanding of urban development. Within the Framework of Future Competences, seven key macro-competences have been identified (Figure 6), prioritized as follows:

- i. Lifelong learning (Curiosity/ Creativity/ Critical thinking)
- ii. Self-agency (Initiative/Drive/Motivation Endurance/Grit/Resilience Responsibility)
- iii. Interactively using diverse tools and resources (Impactful use of resources/ Efficient use of resources/ Responsible consumption)
- iv. Interacting with others (Teamwork/ Collaboration/ Negotiation)
- v. Interacting in and with the world (Being local and global/ Balancing rights with privileges/ Balancing freedoms with respect).



**Fig. 6**. Core competencies regarding Danubian \_MCs educational process. Source: Authors

## 5. Results

The main outcomes of the project are:

- i. Enhanced regional dialogue among partner universities in the interdisciplinary field of spatial planning education,
- ii. Increased mobility of academic staff and students to support innovative research endeavors,
- iii. Introduction of new methodologies and innovative teaching approaches to address the current challenges faced by Danubian SMCs,
- iv. Provision of fresh perspectives, innovative data, and a creative knowledge base for fostering inclusive development in SMCs,
- v. Heightened involvement of local stakeholders in addressing real issues affecting the inhabitants of Danubian SMCs.

In the long term, the project demonstrates how unconventional and creative teaching methods can enhance understanding and appreciation of Danubian SMCs, fostering inclusivity and enthusiasm among both educators and learners, as well as local stakeholders. By doing so, the project establishes a connection between the demands for creativity and innovation in the labour market and the expected competencies of graduates in the spatial planning field.

Also, the DANUBIAN\_SMCs project resulted in three coordinated books, as shown in figures 7, 8 and 9, in which learning methods were defined and the process was framed in a master dedicated to these cities.



**Fig. 7.** Methodological guidelines and new theoretical and practical methods of interdisciplinary teaching for assessing small and medium sized cities (SMCs) on Danube and QR of the Story map as interactive use of the interdisciplinary teaching for assessing small and medium sized cities on Danube



**Fig. 8.** Report of data collection of good practices and teaching/learning cross-border cooperation



**Fig. 9.** Teaching module framework for assessing the inclusive development of

on Danube SMCs for transferring	 Danubian small and medium
research and innovation in	sized cities
continuing education	

The first one contains "Methodological guidelines and new theoretical and practical interdisciplinary teaching methods for the evaluation of small and medium-sized cities on the Danube" and is a development of presenting and evaluating the teaching/learning methods of the most relevant existing university courses of the partnership [10]. Thus, there were identified 38 different pedagogical methods and tools to be used in a specific way, in the interdisciplinary education of planning development for small and medium-sized cities in the Danube region. Among these methods, grouped in relation to the project developing process stages, we mention the most relevant ones: Photovoice and Cellphone Diaries, Storytelling (GIS) maps, Walking tours, Emotional mapping, Georeferencing Walking Tour, Living Lab, Adjusted "The Image of City" Method, DPSIR Diagram, Potential & Description of City (1988) and City Barriers Mapping, Power & Stakeholders Mapping", Super Hero" Brainstorming, Storyboard, Role Play, "Ambiguity is good" Method, Transect Planning Method, Urban Acupuncture Method. These methods are relevant for the specific spatial (Danube) context both from a pedagogical point of view - with the aim of capturing students in a better understanding of the problems of Danube small and medium sized cities, as well as from a strategic point of view, stimulating the local community to see the local development potential and paths for actions. The identified methods have been applied in different teaching and learning labs organized within the project, in different cities on the Danube, involving a range of actors – from students to local public actors, school pupils, teachers, experts, citizens. The response of the participants, the capacity for involvement, dialogue, interactivity, feedback, and debate on the specific topics, in each place, have become indicators for monitoring the methods effectiveness.

The second one, "Data collection report on good practices and cross-border teaching/learning cooperation on Danube SMC - mapping knowledge for transfer of research and innovation in lifelong learning", summarises national and international good practices from two different points of view: on one hand, it presents good practices of Danubian municipalities with international and/or educational content, and on the other hand, the university partnership collects educational examples related to Danubian small and medium-sized cities [11]. The objective is to transfer this knowledge to larger local communities, to promote mutual understanding, to establish new links or to strengthen existing ones between educational institutions and municipalities of DSMCs. To achieve this goal this book is translated and published in six languages: English, German, Slovak, Hungarian, Serb, and Romanian.

This book is divided into three sub-themes, present good practices of Danube municipalities, events, promenades, and places with international and educational content. On the other hand, it presents good examples of university partnerships in education, plans, workshops, and on-site actions, most of which are already characterised by exit and involvement. In addition to the standardized, summarising, and evaluative descriptions of this book, the interactive map of the DANUBIAN\_SMCs project makes available more detailed background material (datasheets) in English produced by the DSMCs partners [12].

There is a particular learning and teaching value when local professionals and stakeholders are involved in the implementation process of urban research, planning, and actions. In this way, those who come from the university are not only passive observers, mediators, or designers, but also get to know the real processes and actors that shape and use the place every day. Students and teachers step outside the walls of the university, enter the real world, approach the profession, even develop a connection with the local actors and users, or find a relevant professional topic for further learning/teaching (for example, in the case of Danubian SMCs, the role of water in the urban environment, shrinking cities, rehabilitation of industrial sites, renaturalisation, etc.). For the locals, these encounters can also be fruitful, as young external "eyes" from far away can see, appreciate, and plan differently from what they are already familiar with. As a consequence, they can get new ideas

and new perspectives, and start to think a little more responsibly about the values and future development potentials of their own Danube commune. Maybe some young local people, based on this exchange experience, decide to study architecture and urbanism, or just become more active in the local development process. In this way, the involvement is reciprocal, the participants reassess their own knowledge, bring their theoretical and practical worlds into contact, and experience a diversity of perspectives and approaches. However, every participant may become more accepting and openminded as a result of the shared experience.

The third book "Teaching module framework for assessing inclusive development of Danubian SMCs" is based on the two others and on the shared experience of DSMCs Intensive Programmes to propose a plan for a potential future joint educational training program of the Erasmus+ partnership on DSMCs [13].

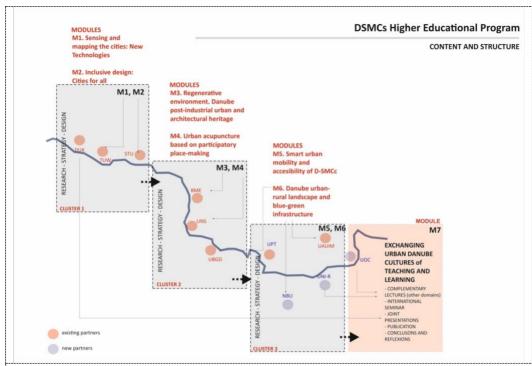
The educational process in the DANUBIAN\_SMCs project is based on the teaching of modules. These modules are designed to focus on current thematic areas that support the transformation and improvement of the urban structure and the formation of viable local communities of small and medium-sized cities around the Danube. Each module emphasizes the application of relevant analytical and creative methods to address the urban problems faced by these cities.

The composition of the modules is tailored to address contemporary issues and themes pertinent to the revitalization of urban infrastructures, which have been subject to varying levels of deterioration yet possess significant social, cultural, natural, and economic potential. These modules are designed to focus on current thematic areas that support the transformation and improvement of the urban structure and the formation of viable local communities of small and medium-sized cities around the Danube. Each module emphasizes the application of relevant analytical and creative methods to address the urban problems faced by these cities.

The composition of the modules is carefully tailored to address areas and topics related to the regeneration of urban structures affected by varying degrees of degradation but with significant social, cultural, natural, and economic potential. the modules are structured to encompass methodologies and strategies pertinent to the regeneration of urban centers and their components, including but not limited to:

- i. Sustainability and resilience initiatives;
- ii. Implementation of cutting-edge technologies for city sensing and mapping;
- iii. Promotion of inclusive design principles for universally accessible cities;
- iv. Adoption of urban acupuncture techniques through participatory place-making;
- v. Facilitation of urban renewal endeavors within small and medium-sized cities along the Danube;
- vi. Exploration of the Danube's urban-rural interface and the integration of blue-green infrastructure;
- vii. Fostering multilateral stakeholder collaboration and engagement to support sustainable initiatives within the urban-rural continuum of the Danube region.

The resulting master programme *Master Program Danube Regional Interdisciplinary Master Program (DRIMP) focusing on Danubian SMCs*, building also on past projects like DANUrB and DANUrB+, is adaptable (can dress 3 variants) and contains the 7 modules and 4 clusters (Figure 10)



**Fig. 10.** Configuration of the future DANUBE REGIONAL INTERDISCIPLINARY MASTER PROGRAM (DRIMP. Scenario modules. Source: Authors

Although the need for an interdisciplinary master's degree at Danube level is intuitive, the project demonstrates, documents and provides the methodology for its realisation. It will involve universities across Danube countries and collaborate with relevant partners such as municipalities, NGOs, and entrepreneurs. The program aims to promote excellence and internationalization while addressing spatial and social challenges. Core disciplines include architecture, urban planning, sociology, with additional subjects tailored to the curriculum. Integration among participating institutions, student backgrounds, and academic content will be a key feature of DRIMP. DRIMP's primary disciplines include architecture, urban and regional planning, urban design, landscape planning and design, and sociology.

Additional subjects such as anthropology, geography, geodesy, topography, and cultural studies will be incorporated based on the proposed curriculum. The program's standout feature will be its extensive integration among participating institutions, students' backgrounds and interests, and academic content and knowledge. DRIMP strives to elevate the quality and appeal of European higher education concerning the Danube, contributing valuable insights to the global understanding of this iconic European river. With a focus on inclusivity and sustainability, this master's program will attract ambitious young professionals seeking to apply their knowledge practically. Graduates will be empowered to drive projects and local development in DSMCs, offering viable solutions to reverse the decline and shrinkage plaguing many of these cities.

#### 4. Conclusions

Beyond the symptomatic phenomenon of population loss for at least 5 consecutive years and the restructuring of the local economy, which roughly defines shrinking cities, according to Ja Oswalt and Rienitz [14] and studied by Cities International Research Network, these cities deserve to be considered even through the corner of the existence of the phenomenon itself. The information gathered from these projects can classify cities into three distinct major patterns for which development necessarily means consideration of existing heritage [1]:

- i. Cities in natural decline, which grew artificially during the years of socialism, in a boom supported by forced industrialisation, and which in recent years have regained an identity that should have meant their natural growth, by reorienting themselves towards services, trade and agriculture. Like a living organism, this reorientation is rather instinctive but marks a certain quest, dynamism, and effervescence, with (still) resources to spare. And a good part of these resources is represented by the socio-cultural mix but also by the variety of the existence of a tangible and intangible heritage [15].
- ii. Cities in risky decline, represented by cities with a mono-industrial economic structure or even new cities without a historically validated identity and whose. These cities suffer the most and their recovery requires reinvention [16]. Here, development can be endogenous (particularly based on cultural patterns, which could be identified), but external resources (the region in which the city is located) are also important and could support this reinvention.
- iii. Cities in a socio-economic stagnation and which are more the result of a state of economic and social abandonment they are a kind of periphery, cities that are not fashionable and do not attract. They have remained closely linked to the traditional way of life, where values can be more easily identified and whose revitalisation must come predominantly from within, through public awareness and active participation in the planning process. It is a question of consciously assuming local identity at all social levels, where the school, as a training process, plays an important role.

Also, a very important observation of the research through the mentioned projects, which is not a novelty but proves an intuited situation: the disconnection of these localities from the territorial urban system, their marginalization and isolation, their retreat in certain temporal periods, makes it possible to identify discrete and distinct values [1,3]. In many cases we are dealing with a rural-natural or urban-natural specificity, in a quiet/slow, calm, and settled rhythm of life, where one finds local products, authentic crafts and still unchanged traditions, houses and nature. We find all the prerequisites for a clean, sustainable development, with the aim of a better quality of life. They can be the objectives of a specific tourism identity of the Danube basin. These are "eco-city", "liveable-city", "15 minutes city", "sustainable city" and the list could go on - all being concepts of urban planning understanding, embodied in the urban theories promoted today.

By covering a wide range of knowledge and skills necessary for the sustainable regeneration and transformation of small and medium-sized cities around the Danube, DANUBIAN\_SMCs project aims to empower participants with the tools and insights needed to drive positive change in their communities. In conclusion, the educational modules of the project are designed to equip participants with the knowledge and skills needed to address urban challenges and contribute to the sustainable development of small and medium-sized cities around the Danube. By embracing an inclusive and collaborative approach, the project aims to nurture a sense of belonging and shared responsibility among local communities, ultimately fostering a more vibrant and cohesive Danube region. Through this approach, the project seeks to foster a collaborative and inclusive environment where local identities and historical legacies are respected and leveraged as assets for the development of vibrant and resilient communities.

Approaching the SMCs on the Danube using different methods, focusing on the existence of a heritage, considered either from a historical perspective or from the perspective of a more recent development, where elements of particularity interweave the dimension of a vast heritage at the level of the whole Danube region. Employing various methods, the project focuses on the heritage of small and medium-sized cities along the Danube, examining both historical and contemporary perspectives. It recognizes the unique elements of each city's heritage and its broader significance within the Danube region.

The ERASMUS+ project is an exercise of sketching a possible curriculum, an exercise generated by what DANURB projects reveals. The identification of resources and values less known and studied

in current projects has revealed needs but, above all, development opportunities for local communities. The application of this study and the creation of the master program has the potential to generate and develop local growth models through the training of future groups of specialists. The project has the potential to be tested by universities due to its flexibility and its opportunity lies precisely in the variety of the issues that characterize small and medium-sized towns in the Danube basin.

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