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PROGRAMS FOR FORTIFICATION AREA CONSERVATION IN THE NETHERLANDS

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Abstract. The article is aimed at familiarizing readers and specialists with programs for the preservation of fortification territories and methods of using historical landscapes in the Netherlands, the legal aspect of preserving the remains of fortifications and terrain. The project method of integrating the territory into the tourist observation network is considered. Over the past 30 years, the Netherlands has been developing a legal framework in the intersectoral branch for the protection of a significant historical landscape, including existing or lost objects of fortification art of the XVIII and XX centuries. Reasonable protection criteria, a well-formed strategy for systematic use and subordination of the territory prevents violation of the legal framework of the monument and its physical integrity accelerates the process of developing architectural and design proposals for restoring the spatial appearance of the fortification object.

Key words: monument protection, historical landscapes, valuable territories, the Netherlands, conservation programs, fortifications, renovation of areas.

Problem statement

Ukrainian monument and security activities have a long history, many published materials, critical views and professional recommendations by industry specialists. On paper, all innovations and recommendations are special – they are real and emphasize relevance. In practice, the situation looks different. The isolation of monument protection from other branches of economic development of the state leads to a conflict of interests between scientists and enterprises. On the one hand, specialists study and add new monuments to the list of the state register or prepare documentation on making changes to security zones. On the other hand, the agricultural sector does not stop production facilities near existing security facilities (Public Relations Department, 2015) and destroys part or all the territory of a historical object. This is evidenced by numerous aerial photographs that record plowed areas of fortifications and mounds. Quite significant in the field of archaeology is the decrease in the number of mounds in the Kherson region, where since 1995 the difference in the number is 25 % from lost to newly found (Havryliuk, Mykhalechshyn, 2008). There are no markings in cadastral registers or at the places.

Similarly, fortifications, that nowadays in Ukraine are not systematized and have an unspecified status, are subject to aggressive actions of entrepreneurs and municipalities. The integral architectural structures and complexes, archaeological sites and territories, the legal field of conservation are spelled out in sufficient detail in the Law of Ukraine and Methodological Recommendations¹. However, some individual sections of earthen fortifications have a different state. The answer to the question “What do we protect?” gives a divergence of opinions: historical territory, historical object, valuable historical landscape. The unspecified use of the term “monument-protected object” leads to significant speculation in society and complicates the system for evaluating this object from the point of view of the economy, budgeting, culture and history. Some objects fall under the law without significant justification by the fact of historical value, while others, that tangent to the territory of this object, are intentionally lost over time, being previously taken from the socio-cultural dialogue.

At the time of significant social and cultural changes in Ukraine, came the period of introduction of new relevant methods and approaches in monument protection. The issue of cultural heritage should go beyond narrow-profile research groups and professional publications, intersect with other budget-forming sectors of the Ukrainian economy: land and water resources, united territorial communities.

The experience of specialists and politicians in the Netherlands shows a significant amount of work done to implement the principles of sustainable development of the territory in the legal field of monument protection activities. The process of changes affected the combined branches of the territorial and economic structure of the country. It gradually formed a legal framework for the development of strategies and programs for the economic and cultural development of provinces. The changes affected the national idea - the cultural core of the nation.

Analysis of recent research and publications

Since the 1990s, a program for restoring the cultural identity of the Dutch has been operating on the territory of the united communities in the Netherlands, which provided for the search and development of methods for restoring cultural heritage sites. Small settlements received financial and regulatory support through sustainable local development projects and the integrated economy program. The Action program on Spatial Planning and Culture 2005–2008 (Summary, 2008) and the municipal regional development program Ruimtelijke atlas 2015–2025 were developed and the regulatory and legislative documentation was approved (legal documents in the field of urban planning and architecture: the Space for Architecture (1991); Architecture of Space (1996)²; Shaping the Netherlands (architecture policy 2001–2004); The Nota Belvedere policy document (2000–2009)³; Cultuur als confrontatie; uitgangspunten voor het cultuurbeleid 2001–2004); “Protecting and Developing the Dutch Archaeological-Historical Landscape” (PDL / BBO). They formed the conceptual boundaries of architectural intervention in the spatial development of settlements; the term “cultural landscapes” was introduced⁴ for the entire territory of the country without

¹ Order of the Ministry of culture and tourism of Ukraine No. 956/0/16-09 dated 02.11.2009

² The policy document *De architectuur van de ruimte* (“The architecture of space”) 1996, states that the cultural-historic perspective is essential to an integrated policy aimed at quality, and is summed up as “an analysis of the historic and spatial development” (The Belvedere, 1999, p. 15).

³ The Nota consisted of integrated plans in which the more protection-driven care for monuments was combined with the ongoing transformation of the landscapes. (Verschuure, 2014).

⁴ Under the motto ‘conservation through development’, the Belvedere policy fosters a development-oriented approach that increases the prospects for maintaining the cultural heritage while enabling spatial planning to benefit from cultural history considerations. The aim of the policy is to strengthen the importance of cultural history in spatial planning and design. As a source of inspiration, cultural history can lead to a wide range of interpretations and applications: from restoration, reconstruction and borrowing to contrasting or ignoring. In the frame-work of the

exceptions, and the future spatial development of which should emphasize national cultural significance, contribute to the reassessment of cultural identity and diversity of our living environment (Schoorman, 2003). And most importantly – a change in the paradigm of historical and cultural research – better use of area-oriented approach instead of traditional object-oriented approach for the protection of cultural heritage (The Netherlands Ministry of Education, Culture and Science, 2005). Over time, the understanding of the term “cultural” has been deepened and expanded to 3 components (Verschuure, 2014): a landscape in situ (the physical place or landscape), a landscape in visu (the constructed image of the landscape or a text) and a landscape in mente (mental landscape or ideas (from earlier times) which formed the landscape) (Uytendhoeve, 2012). In the mental landscapes, defined as landscapes of memory, ideas of the past leave marks in the physical landscape. These specific places were defined as ‘lieux de memoire’ or memory places (Nora, 1989)

Objective of the article

The author suggests examining the process of changes in the attitude and interpretation of the object of protection in the field of architecture and urban planning in the Netherlands, the introduction of which made it possible for rapid and sustainable development of the territory of communities, strengthening the socio-cultural significance of cultural monuments. The article also aims to reveal the interdisciplinary significance of this issue in the further design and strategic development of the territories of Ukraine.

Results and discussions

Due to significant urbanization and the development of agriculture during the 1970s, the earth and river areas of the provinces of the Netherlands underwent significant changes: the networks of small and medium-sized rivers, which in the XVII century served as a natural element of strengthening the territory were almost completely disrupted; stone and earth fortifications were destroyed or forgotten. Nowadays, Ukraine also faces challenges of large-scale land transformations. The lack of tools to protect earthen fortifications as a part of fortifications leads to the loss of spatial characteristics, destruction by economic equipment. Experts in the field of history and architecture of the National Academy of Sciences of Ukraine now pay attention to the issues that the Netherlands began to solve at the end of the twentieth century, namely: historical-cultural identification⁵, preservation of cultural and historical monuments, restoration of memorial spaces.

The main discrepancy between the state and regulatory acts of the two countries is the internal core of the approach – the formation of philosophy and national consciousness of citizens through highlighting the high value of inheritance. In the case of the Netherlands, open state propaganda of national identity can be traced at all levels. A geographically small country after the Second World War set a goal not only to get out of the territorial and economic crisis but also to form the foundation of national dignity and the spread of national history as the idea of uniting communities, where cultural heritage becomes a catalyst for urban and regional revival (Janssen, 2012; Janssen, 2013).

Belvedere Policy Document (2000–2009), the government stimulated initiatives aimed at increasing the influence of cultural history on spatial development in the Netherlands.

⁵ Cultural-historic identity is to be seen as a determining factor in the future spatial design of the Netherlands, for which the government shall aim to create appropriate conditions. (The Belvedere, 1999, p. 6)



Fig. 1. Comparison of the territory of Ukraine and the Netherlands (available at <https://mistosite.org.ua/uk/articles/kompaktne-misto-niderlandskiyi-dosvid>)

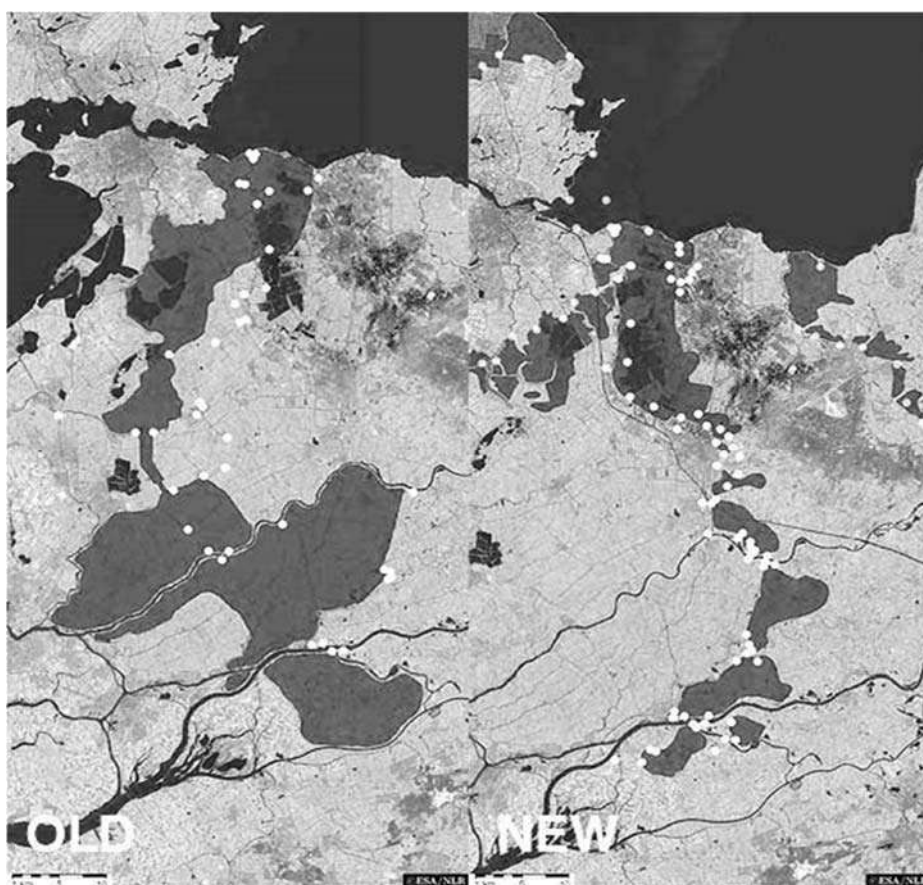


Fig. 2. The Old and New Waterlinie, superimposed on satellite imagery of the modern Netherlands; [Online] Available at: <http://www.forten.info/index.htm?http://www.forten.info/catalogus/ohw/hoofd.htm>

As noted above, the reform of the field of monument protection in the Netherlands has been closely linked to changes in regional management approaches and tools. The introduction of sustainable development and environmental safety required an appropriate intersection of intersectoral interests. Architecture and urban planning in this grand scheme of transformation played a spatial-forming aspect. The above documents⁶ determined the limits of influence and vectors of state development. The Nota Belvedere – Memorandum, a policy document examining the relationship between cultural history and spatial planning, *By using the historic structure based on the structure of the landscape, the identity and the continuity of the landscape were not only explained but maintained and used as a guideline for new spatial development.* (Verschuure, 2014), the motto „Conservation through development”⁷. This approach involves investing in projects that will benefit the future generation. A non-confrontational combination (a love-hate relationship) of two areas of activity – conservation and development – requires a well-structured professional discussion, acceptance of the need to reorganize, rebuild and renovate existing facilities, taking into account the current needs of society.

Based on the results of interdisciplinary and industry research, the Cultural-historical Values Map of the Netherlands was created, which determined the priority of territorial development, territories and objects that should be preserved (natural landscapes) and those that can acquire further development (high combined cultural-historical values and areas with high sectoral-historical values); historical areas and cities were identified.

*The National Project*⁸ New Dutch Water Line is the current name of the Dutch Cultural Heritage Site category, which was proposed for inclusion in the UNESCO World Heritage List in 1996, and contains more than 49 individual structures and engineering communication networks. The nomination included a network of fortifications dating back to 1629, when Prince Frederick Henry, inspired by the successful use of floods as a defence mechanism during the Dutch War of independence, began implementing a plan to build a “line of flooded land protected by fortresses”. Locks were built in dams and forts, and fortified cities with cannons were created at strategic points along the line. The water level in the flooded areas was carefully maintained at a level sufficient for pedestrian progress to be unstable and shallow enough to exclude the effective use of boats (other than the flat-bottomed cannon barges used by the Dutch defenders). Additional obstacles such as ditches, cables, and later barbed wire and mines were hidden below the water level.

The idea of hydrology using weapons was firmly established in the national consciousness, and after the formation of the United Kingdom of the Netherlands in the early 19th century strengthened national borders, a new Dutch waterline was built east of the original Waterlinie. Three to five kilometres wide, the potential flood zone extended “approximately 70 kilometres from Muiden (located on the Zuidersee, now IJsselmeer), past the city of Utrecht to the east, up to the area of the great river (Nieuwe Merwede) and Bissbosch” at a depth of 35 to 50 centimetres (deep enough to prevent crossing with artillery, but not deep enough for boats) – approximately one hundred and seventeen thousand cubic metres of ominously empty space riddled with military potential. The system consisted of 6 so-called flood pools, which could be regulated by dams, culverts, channels, dams, and sluices. A system of defences, such as forts (2 to 32 hectares), was located on flood approaches, such as near higher roads or where flooding could cross existing dams, lakes, or rivers and wherever it was necessary to protect flood sites. There were more than 60 defensive structures of various types in this flood line. Unfortunately, in World War II, the Waterlinie proved obsolete, as German troops parachuted down behind the Waterlinie to capture key targets, including

⁶ The Space for Architecture (1991); Architecture of Space (1996); Shaping the Netherlands (architecture policy 2001–2004); The Belvedere policy document (2000–2009), Protecting and Developing the Dutch Archaeological-Historical Landscape (PDL/BBO)

⁷ *By seeking new uses, old landscapes and buildings can be saved. However, it is just as much a question of 'development through conservation. By using our cultural heritage in a frugal and responsible manner, we are investing in the development and strengthening of our identity, knowledge, comfort, business climate and potential for tourism.* (The Belvedere, 1999, p. 19)

⁸ Italics are saved by (Verschuure, 2014) as an underscore of the value.

bridges in the heart of the Netherlands, and forced the Dutch to capitulate due to the crushing aerial bombardment of Rotterdam, in both cases bypassing it. Waterlinie. Although in the Fifties there were attempts to restore Waterlinie as an obstacle to the invasion of the Soviet Union (reinforced by the deployment of anti-aircraft weapons), now all Waterlinie are outdated. (Rob Holmes, 2009).

The regional tourism development program RUIMTELIJKE ATLAS (eng. “spatial atlas”) is a municipal program for the regional tourism development of small towns and a project of a network of tourist points in the province (Fig. 6). The project initially provided for the creation of a common tourist route, which would include a newly created camp for children and places for comfortable rest (camping), the restoration of the earthen characteristics of the bastion fort, the construction of an observation deck, and the adaptation of the part. This program provided an opportunity for the development of a local community and a small historical town.

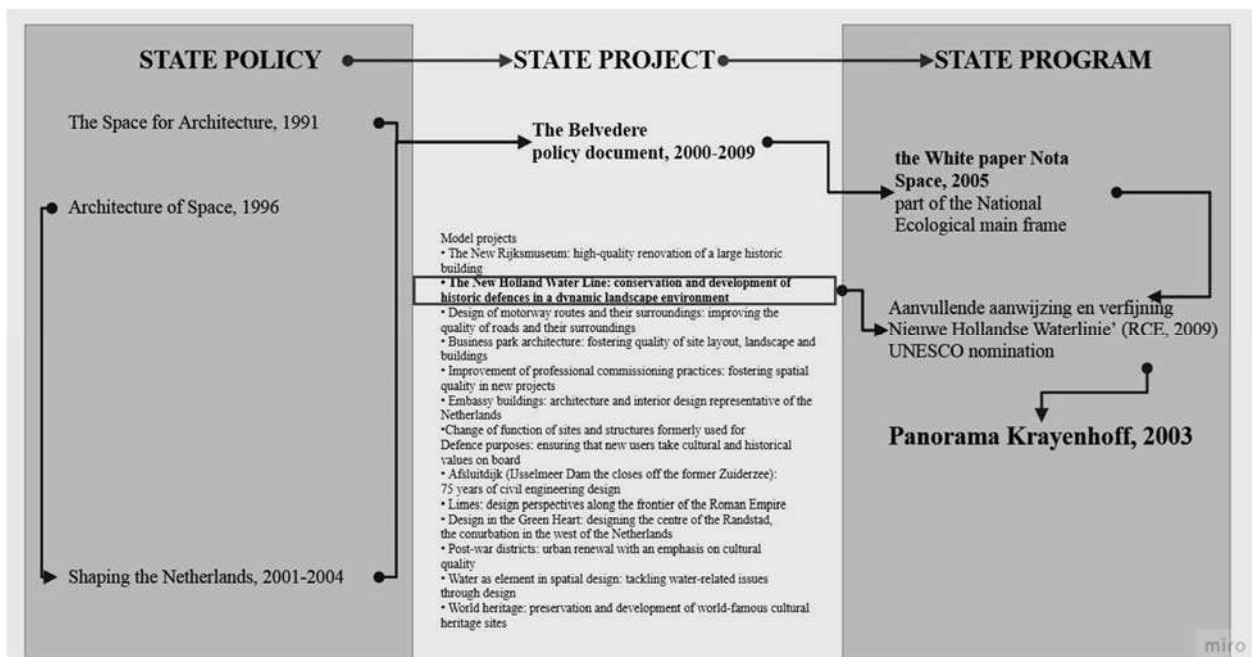


Fig. 3. Regulatory and legislative documents of the Netherlands have been implemented, which have formed a model of modern renovation of fortifications in the country

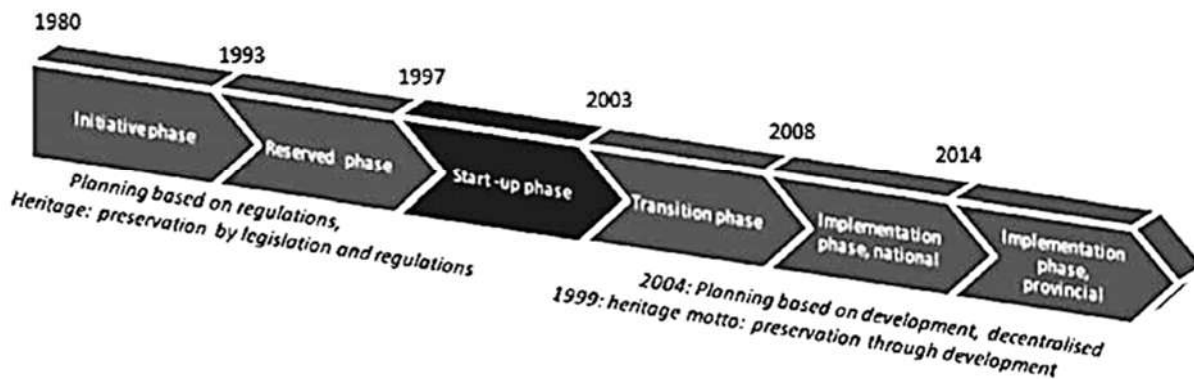


Fig. 4. Six stages of the transformation process of The New Dutch Line from the 1980s to the present day. (Source (Verschuure-Stuip, 2020, p. 261))

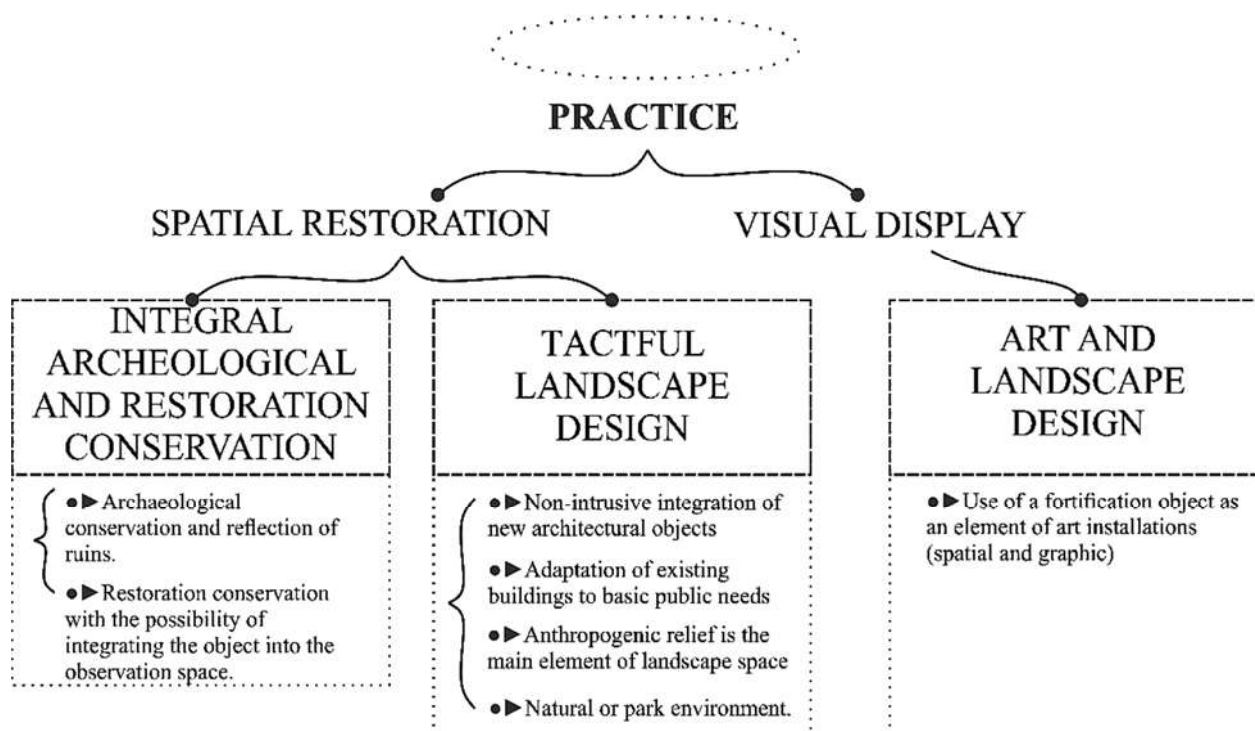


Fig. 5. Summary list of means of restoration and reflection of the fortification complex in the practice of specialists in the Netherlands. (researched by the author)

Waterlinie museum – a museum on the territory of Fort Wehten, the authors of the project are the architectural firm Studio ANNE HOLTROP. Project implemented in 2011–2014. The project provided for the restoration of the water ditch and the walls of the stone fort, strengthening existing structures and integrating a new spatial element – a large movable model of the water border, a symbol of the fortification art of the Netherlands authored by _____. A significant element of this project, in addition to museumification of the general state heritage of fortification art and interactive exhibition methods, is also a *tactical attitude to the field of fortification*. A small part of the territory of Fort Wehten was cleared of landscaping to create a “clean” historical panorama, a strip of spatial viewing of the fortress, and the layout of the historical line of fortifications with new museum premises is integrated into the plane of the land moat of one of the bastions, thus not violating the overall architectural solution of the fortification object (Fig. 7).

Landscape environment project of the preserved fragment of the Green Road (Groene Weg), New Waterline, Utrecht province, the Netherlands. Author of the REDscape Bureau Project (arch. Philip van Roosmalen Andreas Mulder), the Netherlands. Implementation date: 2014. The project provided for the preservation of 36 bunkers and trenches on the territory of 10 hectares, transformation and improvement of it into a landscape park of a militaristic character. Glacis, trenches, and waterlogged areas that simulate tactical flooding were spatially restored. (Fig. 8). The park is combined with a general network of tourist visits by ferry.

Projects for the restoration of fortresses in the Netherlands have attracted attention with a new and relevant approach for Ukraine in the use of fortification construction facilities. It turned out that the newly created fortification museums and restored defence facilities have three common features: 1) they are included in the state register of monuments and have the status of especially important for the national idea; 2) they are included in the large network fortification museum, have a combined route of visiting; 3) the development of the restoration project was transferred to local architectural

bureaus. Thus, it becomes possible to introduce the approach of “preservation through development”, when each monument of architecture and history becomes an integral part of the modern society of the country.

For Ukraine, this approach can become innovative, flexible and strategically realistic. After all, it is now problematic to carry out large-scale complex restorations of large objects for a centralized budget, also due to the obstruction of investment and the complexity of the procedure for approving the restoration project. “Preservation through development” can also become a Ukrainian restoration strategy. An architectural monument can receive new functions and be adapted to the needs of local communities.

The practice of spatial restoration and visual display of fortifications in the Netherlands involves the use of tactical landscape design tools with the integration of modern architectural objects into the space of the fortification complex. New architectural structures are designed in such a way as to have a minimal visual impact on the historical site. Earthen bastions fortifications, water ditches and foss are used as elements of park improvement, with the restored geometric characteristics and a network of pedestrian connections between objects. There are no themes for such park areas because the fortifications themselves give it a historical mood and military aesthetics. Almost all areas of the fortification complexes contain information stands and interactive planes that provide the necessary information about the inspection route and the general regional system of museums (all fortresses are combined into one large map of local tourism).

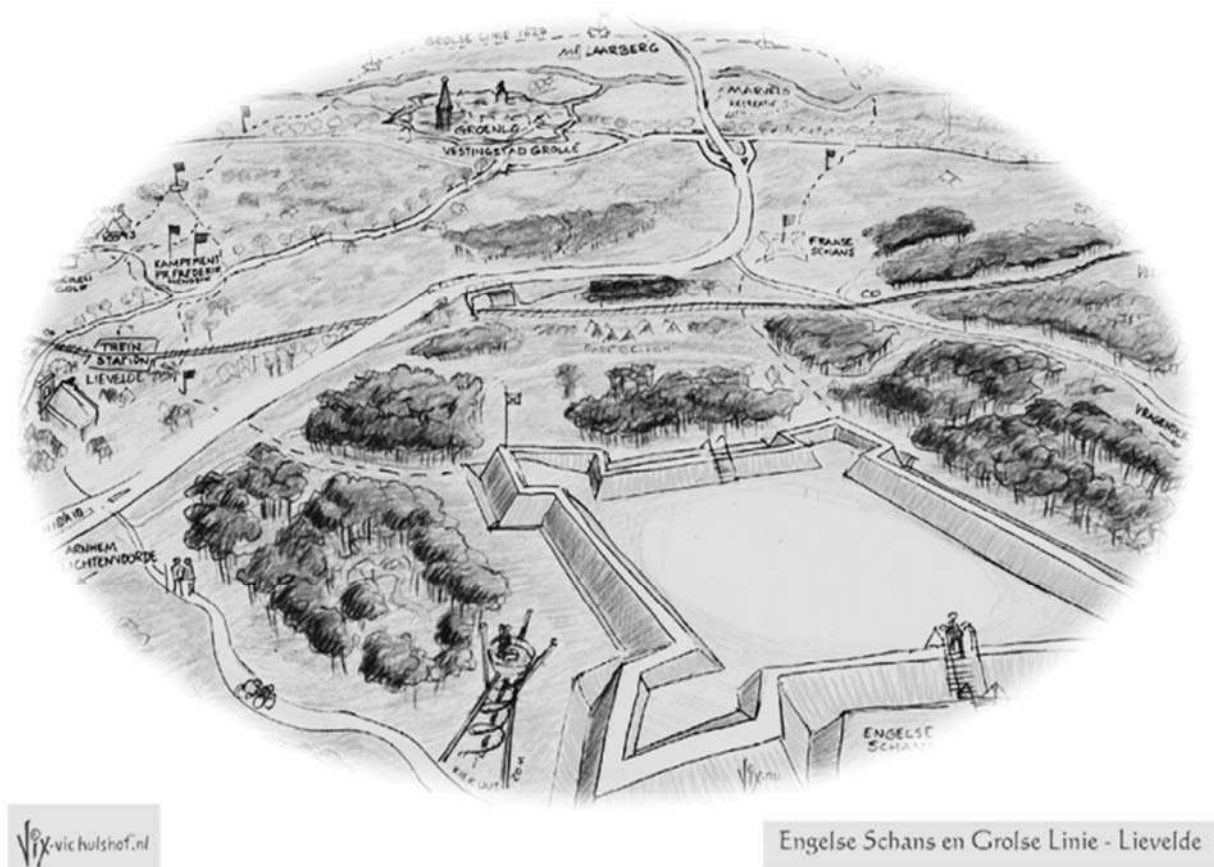


Fig. 6. The fortress as an object of attraction
in the general route of a tourist visit.
Example from the program “RUIMTELIJKE ATLAS”

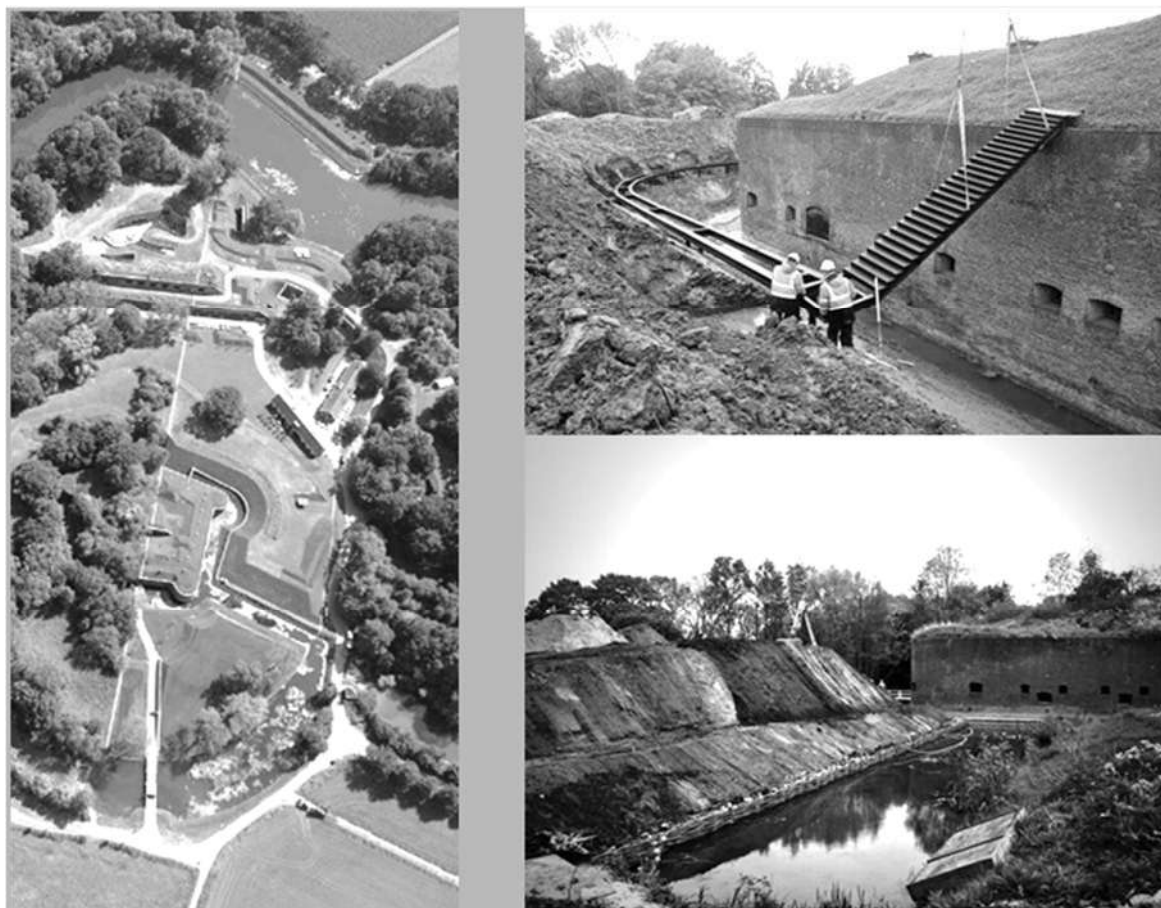


Fig. 7. Waterlinie museum. An example of tactical and environmental use of a fortification object in modern conditions of a tourist visit



Fig. 8. Restored fragment of the defensive New Waterline, Utrecht province, the Netherlands.

(available at <https://www.redscape.nl/portfolio/new-military-park-for-nature-and-recreation-2/>)

Conclusions

Strong professional work for almost fifty years has led to significant cultural changes in the way of life and politics of the Netherlands. Theoretical developments, public events and discussions, constant support at the legislative level of the process of decentralization of management and the formation of territorial communities, the formation of a common strategic vision for the development of the territory formed the foundation for the sustainable renovation of cultural heritage sites. The experience of our colleagues-specialists in conservation and tactical landscape design shows interesting results. The territories of fortifications are in long-term year-round use in everyday life and tourism. How can all of the above be useful for Ukraine now? Firstly, we understand that the country is moving on the path of development according to the European model of sustainability. We are already witnessing preliminary results of using budgets locally in communities. Secondly, the inclusion of specialists (architects, conservators, archaeologists, etc.) in the working groups of development strategy will expand and justify local features and directions of development. So cultural heritage monuments will be used not only as markers of the “attractiveness” of the strategy but will be fully integrated into budgeting and design developments in the future. The third argument in an in-depth review of international experience, in particular the Netherlands, is the common direction and transparency of the implementation algorithm. We are already aware of the need to amend the laws of Ukraine and State Building Codes, introduce a more flexible tool – architectural renovation and integral restoration – as an integral part of territorial development strategies, among quantitative economic indicators.

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ПРОГРАМИ ЗБЕРЕЖЕННЯ ТЕРЕНІВ ФОРТИФІКАЦІЙ У НІДЕРЛАНДАХ

Анотація. Стаття спрямована на ознайомлення читачів та фахівців з програмами збереження фортифікаційних теренів та методами використання історичних ландшафтів у Нідерландах, правовому аспекту збереження залишків фортифікаційних споруд і рельєфу, розглянуто проектний метод інтеграції території у туристично-оглядову мережу. Нідерланди упродовж останніх 30 років розробляють правове поле в міжгалузевому секторі охорони значущого історичного ландшафту, долучаючи до складових елементів охорони наявні або втрачені об'єкти фортифікаційного мистецтва XVIII та XX ст. (The National Project New Dutch Water Line) Прозорі критерії охорони, ґрунтовно сформована стратегія планомірного використання та підпорядкування території запобігає порушенню правового поля пам'ятки, її фізичної цілісності та пришвидшує розроблення архітектурно-проектних пропозицій. Фундаментом для стратегічного розвитку стало впровадження низки законодавчих актів: The Space for Architecture (1991); Architecture of Space (1996); Shaping the Netherlands (architecture policy 2001–2004); The Belvedere policy document (2000–2009), Protecting and Developing the Dutch Archaeological-Historical Landscape (PDL/BBO) etc., які сформували межі та сферу відповідальності кожної галузі, яка залучена у економічному розвитку держави. Виведення культурної спадщини до рівня національної ідеї, формування підходу “збереження через розвиток” дало поштовх до сталого розвитку об'єктів архітектурної та містобудівної спадщини. Проекти реновації та редевелопменту передбачають такі методи роботи: залучення громади до формування стратегії розвитку, врахування економічного та туристичного потенціалу, використання наявних архітектурно-інженерних пам'яток (фортець у частості) як ресурс для розвитку тощо. Серед поширених методів проектування, які впроваджені під час реорганізації та реконструкції фортифікаційних об'єктів, використано такі: просторового відтворення та візуального відображення. Таким чином вдалось створити простори, пристосовані під сучасні екологічні та економічні виклики, врахувати потреби громади та ідеї національного успадкування.

Для України поки є актуальним пошук гнучких та сталих моделей розвитку регіонів, враховуючи виклики економічного розвитку. Попередні моделі туристичного менеджменту та класичної консервації фортифікацій свідчать про велику соціокультурну прогалину, незацікавленість та нерозуміння важливості збереження локальними громадами. Несвоєчасні реставраційні протиаварійні роботи погіршують стан пам'яток фортифікаційного мистецтва, знижується їхня туристична привабливість та втрачається потенційна інвестиційна вартість.

Ключові слова: пам'ятко-охоронна справа, історичні ландшафти, цінні території, Нідерланди, програми збереження, фортифікації, реновація теренів.