# Features of the Activities of Military Theme Parks in a Pandemic

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Abstract:

The features of sustainable activity of military theme parks in the conditions of a pandemic are revealed on the example of the Kulikovo Field Museum-Reserve, Tula Region, Russia. Similar foreign parks, their sizes and attendance data are considered. Russian thematic objects were highlighted, a sociological survey of students of the National Research University of the Moscow State Construction University was carried out to identify the recognition and attendance of these public areas in the period 2020-2021. The reason for considering this object was the results of a comprehensive analysis of military theme parks, among which Kulikovo Field stood out for its innovative approaches to museum activities. The author's material clearly demonstrates the transformation of the historical territory and its filling with new museum objects in a short time. A diagram of the location of the main objects in the territory of the museum-reserve is presented and their description is given. In the discussion of the results, it is offered to consider the use of virtual technologies in the Kulikovo Field Museum. By the time the pandemic began, VR technologies had already been introduced, which made it possible to continue the work of the museum-reserve in remote mode, providing an opportunity to get acquainted with the exposition remotely. It is offered to consider the park attendance schedules obtained as a result of online monitoring of Yandex electronic resources, carried out from the end of 2020 to the present. As a result of the study, it was determined that the system has not yet been worked out: the information does not reflect an objective picture in the form of numerical values, it is updated without specifying the frequency of updates and is only informational in nature. The park administration facilitated the work and provided official data, which helped to establish a significant difference between the sources of information. As expected, there is seasonality and unevenness in visiting the territory, which is associated with national holidays, vacations and weather conditions. This confirmed the need for material selection and careful verification. Therefore, the study showed that, despite the difficult epidemiological situation, there is an interest in visiting a military theme park, and hence the social demand for the complex. This feature develops the tourist potential of the territory during the period of lifting of restrictive measures.

## 1 INTRODUCTION

The most important part of the state system of the country is the armed forces, therefore the history of military events, their objective presentation and maintaining the interest of the country's citizens is one of the most important tasks of any modern society. The most effective way to solve this problem is to create special exhibitions, museums, parks where history can be presented with a memorial, historical, military-applied, sports-training and other purposes.

For many years in different countries of the world, specialized theme parks dedicated to military operations have been created, which allows you to visually understand specific facts, demonstrate military equipment, weapons or conduct theatrical thematic performances of a certain historical event. A large number of museum complexes have been created, funded by the state, military, military-historical organizations and even private individuals. There are special ratings of such museums and tourist

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routes and electronic resources pay sufficient attention to military-historical sights.

The aim of the study is to determine the features of the activities and prospects for the development of military theme parks in a pandemic using the example of the Kulikovo Field Museum-Reserve.

To achieve this goal, the following tasks were solved:

- the analysis of foreign and Russian military theme parks was carried out;
- identified the most significant Russian parks and their features:
- a sociological survey was conducted among students to identify the social relevance of the objects under study:
- the data received from the museum administration of the park Kulikovo Field was analyzed, graphs, diagrams and comparative maps of a specific area were compiled;
- the real conditions for the active activity of parks in a pandemic have been determined.

# 2 METHODS

The development of military-themed memorial parks in different countries develops on an individual basis, this is due to the peculiarity of the interpretation of military events and history. To understand the general picture and prospects for the development of objects, as large public areas used to demonstrate the events of military history, it is necessary to consider the experience of many countries, which the authors of this work are trying to do.

The development of military-patriotic and theme parks within cities has been studied for a long time and fruitfully. Each specialist examines this from different points of view.

The inclusion of military theme parks in tourist routes allows you to better know the history of the country, a specific place, as well as immerse yourself in the atmosphere of a specific historical time. However, the definition of the relationship between social demand and the architectural and planning component is still little studied, the difficulty is to determine the relationship between the activities of objects, taking into account the pandemic.

There are illustrative examples of the most famous national military theme parks in the world, Table 1 shows the most famous and their brief characteristics.

Table 1: Military theme parks.

No.	Name / country	Territory size, ha (m2) /opening, year	Attendance million people /year
1	Gettysburg National Military Park / USA	1600 (16000000)/ 1895	1.0/2010
2	Pivka Park of Military History /Slovenia	5.9 (5900) /2006	0.9/2017
3	Horseshoe Bend National Military Park/USA	825(8250000/ 1923	4.2/2018
4	Royal Museum of the Thai Army	7.3(73217)/ 1996	1.4/2017
5	Victory Park Moscow	135(1350000) /1995	5.8/2019
6	Patriot MO *	5414(541400 0)/2015	7.3/2019

<sup>\*</sup> partially put into operation

In Russia, the theme of military history and the memory of the war are reflected in memorable objects: museums related to military events have been created: Museum of Defense and Siege of Leningrad, St. Petersburg; Central Museum of the Air Force, Shchelkovo, Moscow region; Memorial complex Sapun Mountain, Sevastopol; Mamaev Kurgan, Volgograd; Museum reserve Kulikovo Field, Tula region.

To understand the general demand for military theme parks in the period 2020-2021 (during the period of distance learning Covid-19), a survey was conducted among students of the Moscow State Construction University (MGSU) using the electronic system Google Forms.

# 3 RESULTS

Let us consider the results of a sociological survey that was conducted in 2020-2021, 169 people took part in it. Most of the respondents are persons from 18 to 25 years old. During the survey, we identified the following military theme parks: Memorial complex Sapun-Mountain in Sevastopol, Mamaev Kurgan in Volgograd, Museum-Reserve Borodino Field of the Moscow Region, Museum-Reserve Breaking the Siege of Leningrad, Museum-Reserve Kulikovo Field, VPPKiO of the Armed Forces of the Russian Federation Patriot Moscow Region, PKiO Victory Park in Moscow.

An analysis of the recognition of military theme parks showed that the most popular among young people are the Park of Victory in Moscow and the Borodinskoye Field Museum-Reserve in the Moscow Region. This is easily explained by the fact that these territories are located within the city limits, which is convenient for visiting them. The students visited the parks of the Park of Victory and the VPPKiO Patriot (Fig. 1) (the respondents live in Moscow and the Moscow Region).

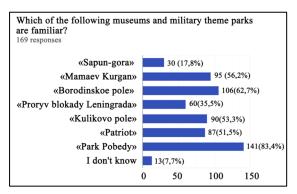


Figure 1: Question No. 3. Recognition of objects (results of a survey of students of NRU MGSU).

When analyzing the listed military theme parks, it was possible to single out the Kulikovo Field Museum-Reserve, which significantly differs from other studied territories in the following parameters:

- considerable remoteness from big cities;
- lack of organization of public transport and commercial routes within its location;
- the possibility of visiting the complex only by private car or with organized excursions;

Despite its remoteness from the capital, the park is popular among Moscow students. According to the survey, the park's popularity is ahead of the Patriot VPPKiO in the Moscow Region, the Leningrad Blockade Breakthrough Museum in the Leningrad Region, and the Sapun-Mountain Museum-Reserve in Sevastopol. Among the respondents, 18.9 % visited the territory of Kulikovo Field (Fig. 2). In terms of

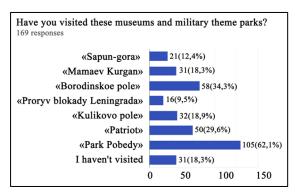


Figure 2: Question No. 4. Attendance (results of a survey of students of NRU MGSU).

attendance, it is only overtaken by the Patriot (29.6 %), Borodinskoe Field (34.4 %) and Victory Park (62.1 %).

The Kulikovo Field Museum-Reserve is located in the Tula Region, Kurkinsky District, village Mokhovoye (Fig. 3 A).

Creation of the State Museum-Reserve Kulikovo Field is determined by the scale of the historical event and the preservation of the memory of the Russian people.





Figure 3: The location of the complex (A) – on the map of the Russian Federation, (B) – on the plan of the General land survey of the Tula province in 1790 (1 – Red Hill, 2 – the village of Monastyrshchino).

Memories of the great Battle of Kulikovo in 1380. Back in the 19th century, the question of perpetuating the memory of the heroes of Mamaev's massacre, initiated by the Tula landowners, was raised. Monument to Dmitry Donskoy, designed by architect A.P. Bryullov, was installed on Red Hill in 1849. Celebrations on this occasion were held in 1850 and became the first festive events dedicated to the anniversary of the Battle of Kulikovo. In 1865-1896, on the site of a wooden church in the village of Monastyrshchino, a stone church of the Nativity of the Virgin is being built.

By the end of the XX century, the objects of the museum are falling into decay, the temples are being closed, the obelisk on Red Hill is decaying. A brief history of the museum-reserve is presented in Table 2.

Table 2: The history of the creation of the museum Kulikovo Field in the XX-XXI centuries.

Date	Historical event		
1965	Opening of a branch of the Tula Regional		
	Museum of Local Lore.		
	Transfer to the museum-reserve of the		
1997	building of the church and the former		
1001	parish school in the village of		
	Monastyrshchino.		
	Transfer to the Museum-Reserve of the		
1998	Church of St. Sergius of Radonezh and the		
	monument in honor of Dmitry Donskoy.		
September	Opening the museum and memorial		
19, 2000	complex in the village. Monastyrshchino.		
	Transfer of the Church of St. Sergius of		
2010	Radonezh into the possession of the Holy		
2010	Trinity St. Sergius Lavra. Closing of the		
	museum on Red Hill.		
2011	The beginning of works on creation of a		
2011	modern museum complex.		
December	Completion of the construction of the		
of 2015	museum buildings.		
May of	Opening the first exhibition Artists of		
2016	Victory.		
October 25,	Opening the exposition The Legend of the		
2016	Mamaev Massacre. New Reading.		
August 03, 2017	Opening of the Don exposition.		

A new life to the historical site was given by the decision of the government of the Russian Federation to build a new generation museum on the Kulikovo Field in the immediate vicinity of the place of the legendary battle.

The territory of historical and cultural purposes consists of a protected area of 3825 hectares. and directly to the museum and park part of 48.6 hectares. Average attendance is more than 97 thousand people / year.

A distinctive feature of the Museum-Reserve Kulikovo Field from the fields of the great battles of subsequent eras is the importance of the historical natural landscape as the main and unique military-historical and memorial monument.



Figure 4: Analysis of use of the territory of the museum and park part - satellite image of the territory of 2019 (1. Museum Kulikovo Field, 2 - Museum-quest, 3 - Observation deck, 4 - Big pond, 5 - Lower pond, 6 - Guest houses, 7 - Kitchen, 8 - Arboretum, 9 - Bicycle rental, 10 - Sports ground, 11 - Museum Garden; 12 - Village cellar, 13 - Parking, B - Museum exposition).

Figure 4 clearly demonstrates the transformation of the museum territory filled with objects. The territory of the museum-reserve contains 13 objects for various purposes:

- 1. Museum Kulikovo Field (Fig. 5A): the exhibits tell about the principality of the XIV century. Visitors will be able to learn the true story of how the capital of the Golden Horde, the city of Saray, looked like, what forces collided on the Field. In the hall of relics, tourists will get acquainted with archaeological finds that determine the site of the battle. The main exhibit of the museum is a model of the Battle of Kulikovo, which reflects all the locations and movements of the sides (Fig. 5B). The underground floor is devoted to information about modern sciences, which contribute to a deeper study of the events of past years.
- 2. The quest museum allows children to get acquainted with the events of the Battle of Kulikovo through play. They have the opportunity to decipher the predictions of Sergius of Radonezh, solve riddles dedicated to the actions of Dmitry Donskoy and visit the monastic cell.
- 3. The observation deck allows to see the panorama of the Kulikov field from a height. It is equipped with ramps for people with limited mobility and equipped with safe fences.
- 4. The large pond has been cleared and deepened, equipped with a modern drainage system and convenient fishing grounds. It is created with the aim of providing people with places of recreation and quiet rest.





Figure 5: The main objects of the park (A) – general view. 1. Museum Kulikovo Field, (B) – Museum exposition.

- 5. The lower pond, with an area of 0.7 hectares, is located to the west of the large one and is also adapted to provide comfortable conditions for the recreation of visitors.
- 6. One-story and two-story Guest houses are located directly on the territory under consideration. There is an option with increased comfort a two-storey house with a private terrace. Guest houses are in great demand in all seasons.
- 7. The cuisine of the Kulikovo Field military theme park invites visitors to taste a huge number of dishes, including historical ones.
- 8. Plants of most regions and climatic zones of Russia grow in the arboretum. Oak alleys, cherry and apple orchards were created here.
- 9. Bicycle rental allows tourists to travel around the entire territory of the museum in a short period of time.
- 10. The sports ground is located not far from the guest houses and invites tourists to lead an active lifestyle on the territory of the museum-reserve.
- 11. The Museum Garden is an area of planted trees, where tourists can immerse themselves in silence in an atmosphere of tranquility.
- 12. The village cellar above the Lower Pond was rebuilt according to the fragments of the surviving walls after the residents left Mokhovoye.

13. The parking lot is located at the entrance to the territory, it can accommodate more than 100 cars, and is designed taking into account the traffic load.

## 4 DISCUSSION OF RESULTS

Development of virtual technologies in the Museum-Reserve Kulikovo Field

In modern conditions, it is already accepted to use new techniques in the museum sphere. In a pandemic, when many public places are closed, it becomes necessary to find an alternative to face-to-face visits.

An actual and distinctive feature of the Museum-Reserve Kulikovo Field is the widespread use of VR technologies. In the context of a pandemic (2020) caused by a coronavirus infection (COVID-19), the park administration decided to arrange free virtual tours around the museum, using the latest equipment for panoramic photography. This helped everyone, being at home, to visit the temporarily closed exhibition centers and create the illusion of a face-to-face visit.

According to the results of a sociological survey, it turned out that the majority of students (75.1 %) are aware of the possibilities of virtual visits to museums, parks and historical sites. More than half of the survey participants (53.3 %) have not yet used virtual museums, respondents believe that it is almost impossible to replace face-to-face visits with virtual ones (66.3 %).

On the official website of the Museum-Reserve Kulikovo Field, guests have the opportunity to take a virtual tour, get acquainted with the exhibits and learn the history of past events. The database of free VR excursions contains about 169 exhibits, many of which have a guided tour. You can get acquainted with the complex using any electronic device with Internet access (Fig. 6 A and B).

The study showed that only 20 % of respondents knew about the possibility of a virtual visit to the Museum Kulikovo Field and only 6.5% used it. Having learned about such an opportunity, 13 % of respondents decided to visit the museum remotely, which indicates a high potential for the development of VR excursions and not only among young people.

The next stage of our research was the search for up-to-date data on the attendance of the Kulikovo Field park.



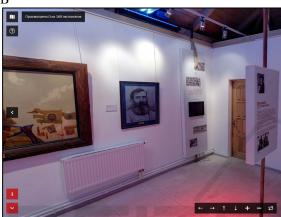


Figure 6: Virtual tour. A – screensaver. B – demonstration of exhibition exhibits.

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Electronic monitoring of the facility began at the end of 2020 and continues at the present time. We analyzed and processed data in the form of graphs from open electronic sources (Fig. 7). On the basis of the received graphic materials, it is possible to determine the dynamics of visits to the territory (time) and approximate characteristics.

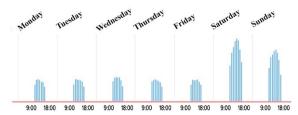
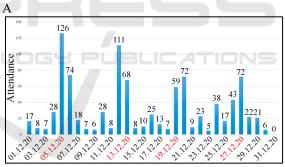


Figure 7: Schedules of attendance of the Museum-Reserve Kulikovo Field, which are freely available

However, the system has not yet been worked out: the information does not reflect an objective picture in the form of numerical values and is updated without specifying the frequency of updates and is only informational in nature. Therefore, use of these sources does not satisfy the task at hand.

The authors turned to the management of the museum-reserve for help in our research work. The administration of Kulikovo Field, which provided internal data on the attendance of the museum-reserve for 2020 and 2021.

Comparing the official data presented in Figure 8 with publicly available, it was concluded that open sources differ significantly from internal ones. This confirmed the need for material selection and careful verification.



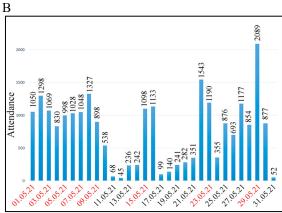


Figure 8: Analysis of attendance. A – December of 2020 B – May of 2021 [from the archive of the Museum Kulikovo Field].

In the period from March 30, 2020 to July 2, 2020, face-to-face visits to the park were prohibited. With the lifting of quarantine and a gradual return to the usual active life, the attendance of the museum increased sharply (Fig. 9) and already in July of 2020 the number of visitors per month exceeded the number of tourists before the pandemic.

In the reports received, as expected, there is seasonality in visiting the territory, which is associated with national holidays, vacations and weather conditions. However, despite the difficult epidemiological situation, the figures indicate the interest in visiting, and, therefore, the social demand for the complex.

The lack of convenient transport accessibility with large settlements with a developed infrastructure, as it seemed to us, was the reason for a decrease in interest in visiting such a remote object.

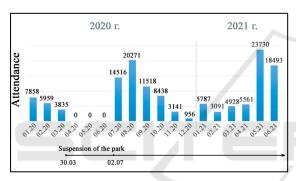


Figure 9: The total attendance of the Museum-Reserve for 2020 and 2021 [from the archive of the Museum Kulikovo Field].

However, after working through the materials, it became clear that the facility was functioning successfully and the erected low-floor guest houses were booked six months in advance.

### 5 CONCLUSIONS

As a result of the study, the following conclusions are offered:

- the combined mode of activity under quarantine conditions using the example of the military theme park Kulikovo Field showed the possibility of sustainable operation of the facility during a pandemic;
- the geographical location of public areas (remoteness from big cities), makes us look for new forms of "self-presentation" and namely the development of Internet and VR technologies, including online excursions;

- use of innovative technologies makes it possible, in a pandemic, to visit museums remotely, which develops the tourist potential in full-time visits during the period of lifting restrictive measures.

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