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Circus is a performance but it is also a building—memory of circus buildings in Europe

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Abstract

Circus spectacle, its architectural concept and its content, has changed throughout the centuries, following social events and cultural frameworks of time periods. In this research paper, we investigate the history of circus in Europe which occurred in between the eighteenth century and today's twenty-first century. The evolution of circus gradually took place and could be followed through the modifications in forms of the buildings in different cities of the continent. Firstly, we research their stationary architecture which establishment is just over in this period. Even though the performance is still changing and modifying, it is questionable if the stationary circuses achieved in adjusting and transform for the purposes of modern society or, on the other hand, they are reorganized in their function and are becoming something completely different.

Keywords: History of circus, Europe, Circus buildings, Performance, Public

Introduction

The circus has been undeservedly accepted throughout history as a “lower” art, as a performance for the broad masses of all profiles (Yu 2010). That is, the circus has often been said and is still considered to be a worthless way of entertainment that does not require special knowledge, education and culture from the observer.

On the contrary, it represents a complex set of everything that is considered to be art. The circus represents an original synthesis of many kinds of art: architecture, theater, music, dance, literature, painting, applied arts and all this is accompanied by a circus challenge, as an expression of the surprising possibilities of the human body and spirit (Dedushka 2016).

When using the term circus, one first thinks of its performing form, which we could describe as a stage form of an art spectacle. There are various writings about the spectacle itself and its performances. Much less consideration is given to the interpretation of the term circus as a space, namely, as a place for a performance. Circus

space can be described by a concrete physical space, i.e. it can be a stationary facility built of solid material, which will be mostly discussed in this paper. On the other hand, circus space can be of a transitional shape, a prefabricated building, better known as a circus tent. The third form of circus space is of the outdoor, least specified type, and today these performances are popularly called street performances (although most of them are actually circus performances). This space shape can be existing as an urban tissue, respectively, squares or streets.

If we want to understand the architecture through history we would come to those artifacts which are saved and which resisted the ravages of time—architectural creations made of solid material. Worldwide, nomadic people, like Mongols, Indians, Bedouins, created their mobile space structures (yurts, wigwams). Today, tent constructions are covered with tarpaulin and are used for the purpose of temporary camping in the nature, for having grand manifestation in the open but also for performing circus acrobatics.

The complexity of research of circus facilities include the circus tents, too, but this paper will focus on stationary facilities because the mobile architecture of tents demands different approach, other methods of researches

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and different comparisons which would exceed the frames of one paper only.

A circus building should have a circular stage for the performing of acrobats, surrounded by grandstands for the audience situated circularly, bordering the scene from all sides. This is the main difference comparing to other cultural buildings where the stage space is mostly rectangular and placed at one end, not in the central place of the hall. For staging circus disciplines, the space should have width and height. Accordingly, the specific objects have been built for this kind of artistic spectacle in Europe throughout the history.

Research methodology

The complexity of researching circus buildings throughout history requires the application of different research methods. The development of the circus, both performance and its building architecture, was influenced by historical and political changes. To study these influences, which were present within the construction of circus facilities, the method of researching historical material was applied. The chronological monitoring of these events observes the topicality of the circus spectacle in different periods and the changes that had an impact on the current state of the circus.

A chronological and comprehensive view of the development of the circus, from its inception to the present day, has been presented through periods that have been mostly researched separately by certain authors.

Dominique Jando dealt with the history of circuses the most. In his book he described the most famous circuses in the eighteenth, nineteenth and twentieth centuries, with a greater emphasis on the western part of Europe. He is also the founder of the Circopedia website—The Free Encyclopedia of the International Circus, which contains parts from this book, but is constantly updated with new information from the history of circus art, performance, but also architecture.

The history of circuses in the eastern part of Europe has been largely researched by Russian authors. As the expansion of this art here took place with the emergence of the Soviet Union, so many books on this topic have been written since then. A small number of books for this paper were taken from the Russian Center of Science and Culture in Belgrade, but they can probably be found in certain libraries in the countries that were part of the USSR (primarily in Russia). In this research, the book "Soviet Circus on Five Continents" ("Sovetsky cirk na piati kontinentah") by Bardian Feodosiy Georgievich was used the most. In Russia, there are also sites that follow the history, but also contemporary events

on the circus scene, and one of them is "In the world of circus and stage" ("V mire cirka i estrady", <http://www.ruscircus.ru/history/history>).

In recent history, in the twenty-first century, despite the declining popularity of the circus spectacle, doctoral dissertations are still being written that follow the circus, mainly from the aspect of its performance. In the doctoral dissertation "Why circus works: how the values and structures of the circus make it a significant developmental experience for young people" by Bolton Reginald, a detailed description of the performance and role of the modern circus can be found. In their scientific researches, Mariana Sorvina and Olga Pataeva observed a traditional circus in Russia and, in fact, they were engaged in describing the performance that is still shown in the eastern part of Europe.

Throughout the relevant literature, most information about circus performance could be found in previous researches, and architecture is mostly an accompanying segment to which not enough attention is paid. The main problem is the connection of the eastern and western part of Europe into one whole e.g. interactive relation between traditional and modern, because the circus performance and, therefore, its architecture, differ to a certain extent.

By chronological monitoring of literature and previously described events, the topicality and changes of the circus performance and the circus building in different time periods are observed. This method results in the establishment of a new set of criteria used for comparative analysis, expressed through a tabular presentation.

The research methodology was based on the following steps:

- **Territorial distribution**—determining the territorial distribution of manifestations on the map of Europe;
- **Performance manifestation**—it is given through a historical presentation of the social environment in which the circus spectacle takes place with the analyses of the performance, depending on the manifestation in given period;
- **Stationary buildings**—description and analysis of characteristic structures;
- **Comparison**—comparison of characteristic attributes, given in tabular form.

In this paper we will analyze in details the criteria and the sub-criteria which are separated as the most important for observing the changes arose on circus buildings and performances.

Territorial distribution

As the space frame of the research in this paper is European continent, we must take in consideration the widespread of stationary circus buildings on its territory. On the Fig. 1 we can see the maps of Europe during four different centuries and the existence of these buildings in that time frame.

In the eighteenth century, there were only two cities on the whole continent where the buildings for the circus purpose were formed. These, at the beginning, only enclosed parts of plots which became buildings later, existed only in London and Paris.

This spectacle was just appearing and there is no information in the literature if the government in power had any influence on it. No matter that the circus grew from military circles, the assumption is that the circus itself still had not attracted special attention. The first spaces and buildings for circus performance were private property.

In the following nineteenth century, stationary circuses continued to be built. During that period, the buildings slowly started to be built across the whole continent (Sitte 1889). Their number was becoming bigger and bigger, specially spreading towards the Imperial Russia.

This was the century when in some countries in Europe some regimes, the structures of power, started to partially influence the work of circus. In the western part of Europe, especially in France, some rulers participated by financial supporting for creating circus facilities. The example of such building, for instance, was the *Cirque Olympique* in Paris, which was destroyed in fire in 1826 but it was rebuilt the following year due to the money for reconstruction given by King *Charles X* (Jando 1977). The relation between circus and political regimes in France is shown through the fact that, because of the restoration of French Empire in the fifties of the nineteenth century, the name of one of the circuses was changed in honor the ruler of that time, *Napoleon III Bonaparte—Cirque Napoléon* (Jando 1977).

In the Imperial Russia, the first wooden circus facilities were shown during the unstable regime of *Nicholas I (Nikoláy I Pávlovich)* (Markschiess-Van and Nowak 1976). In Petersburg, during the construction of the imperial lodge, the circus received the brilliant ring from the car himself (Circus History 2019).

The map of Europe with the display of stationary circuses in the twentieth century changed drastically. In the countries of origin (England, France, Germany...)

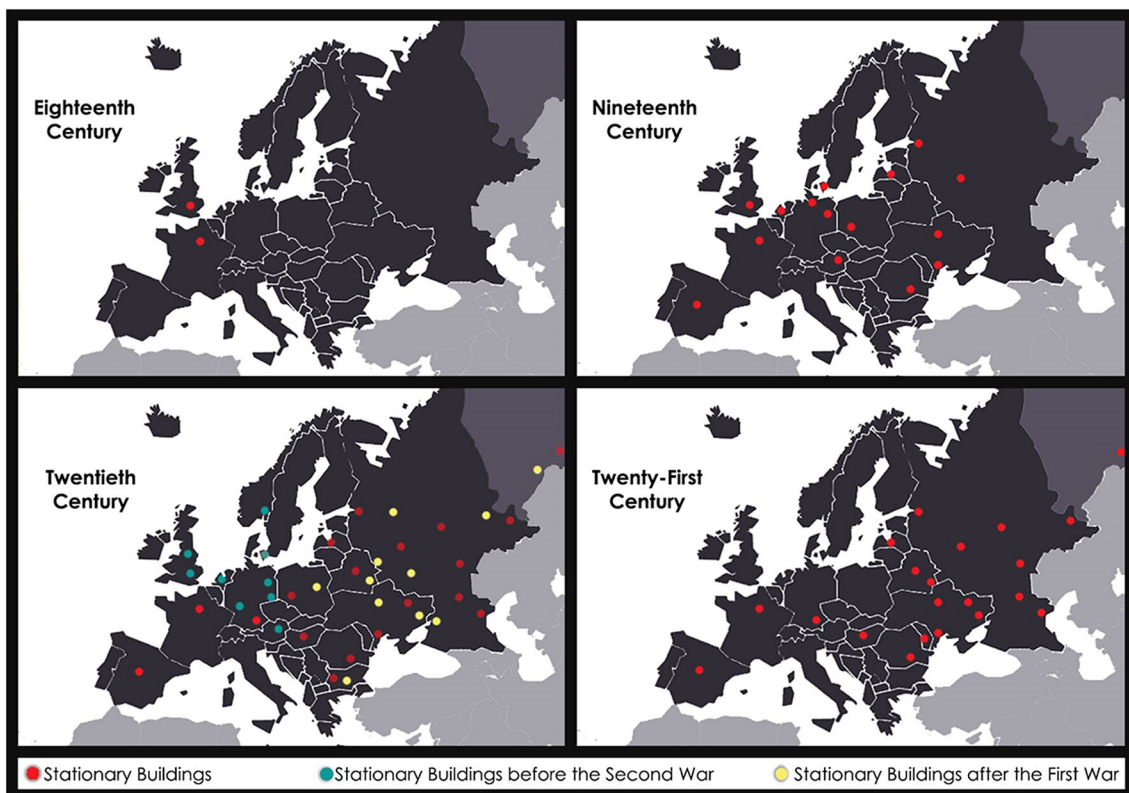


Fig. 1 Territorial distribution of the circus facilities through centuries. Source: Maps with circus facilities through centuries—the work of authors

the number of stationary buildings decreased, especially after the Second World War, when the focus was on total rebuilding and not that much on the reconstruction of the circus architecture.

By the arrival of the communists to the throne in the eastern part of Europe, circus facilities were built en masse. They had an influence on all spheres of art and culture. During the Second World War, regardless of all demolishing and suffer, circus buildings remained (Kolo-miyts 2017). At the end of war, USSR started to donate significant financial resources for creating financial base for the survival and development of circus, especially in architecture (Bardian 1977). The spacious areas for building circuses were marked off but they did not interfere with the plan of the cities, moreover they matched and, at the same time, they stood out.

In the twenty-first century, new buildings have not been built, only the circuses from previous century remained. In the western part of Europe there were only three popular stationary circuses: in France, Germany and Spain. On the other part of the continent, the circus buildings remained in bigger number and they continued to work. There are stationary circuses in Hungary, Romania, Ukraine, Belarus and Latvia and in Russia where is the biggest number of them (over thirty).

The buildings remained on the same places in the cities but the cities themselves continued to expand. The disposition of circus stationary buildings is in the city centers now.

Nowadays, there is not a developed policy of development of circus on the territory of Germany. Circus communities are left behind to the private management which distances them from the state system of financing and, in that way, it leads the circus art into the struggle for survival (Schneider 2016). The long-standing, as well as, current lack of state involvement has negative manifestation, firstly on art and performance of circus shows and, at the same time, on circus architecture which barely exists in this country.

The French government had no interest in circus spectacle in the previous century—the circus's public—sphere issues were being primarily handled by the Ministry of Agriculture due to their use of animals. Nevertheless, the establishment of national circus school in 1974 changed the situation. Since 2000's the state support has drastically increased in this country and the political model has spread over the territory of European Union and the circus is currently in the process of becoming acknowledged as a legally—recognized art form, a status that the other art forms have enjoyed for years and years some for centuries. The circus has to become equal to other branches of art. Unfortunately, the story about the circus stationary

architecture has remained without any changes but brighter future can be expected. (Guy 2021).

In the eastern part of Europe, there has been, and still is, a satisfying situation. Today's government of Russia supports the circus art as well as the other forms of art such as opera and ballet but restricts financial means and gives opportunities for several annual reconstructions of circus facilities. There are a lot of these gigantic buildings in the country but, as the time passes, it is obvious that their maintaining is more complex and demanding and there is a need for big financial support (Rosgoscirk 2019).

Circus architecture began on the far west of Europe and gradually spread towards the eastern part of the continent; during time, it stayed based in the east while in the western part it began to disappear. Looking at these four maps we can notice the distribution of circus facilities in different time periods.

These changes in the history of circus spectacle and, at the same time in architecture can be treated as a turbulent curve, too. The changes of the developing types of circus facilities between eastern and western parts of Europe could be followed on the Fig. 2. These two attachments show the different treating towards the importance of circus spectacle and its architecture in these parts of Europe through the centuries. The turn-over happened in the twentieth century after which it could be noticed that in the eastern part of Europe there were still circus buildings in great number while in the western part that number was decreasing.

On the Fig. 3, it could be noticed, through centuries, the influence of ruling systems on circus. That influence is mostly based on their financial support for maintaining of the circus architecture. When these two Curves are compared, it is noticeable that in the eastern part of Europe the state authorities influenced on the existence of circus stationary buildings e.g. their directing of economy created the rules of developing of circus architecture. The situation in the western part of Europe is different—there is the influence of the authorities in certain countries but not as much as in the east. Hitler used the circus spectacle as mean of propaganda but he did not do much for creating stationary circus architecture. According to Debord: "The language of the spectacle consists of the signs of the organization in power ..." (Debord 2003) and, without no doubt, the circus was used for political purposes in whole Europe but not everywhere did the state authority influenced on beginning and development of circus architecture.

At first, kings and tsars in the nineteenth century tried, through financial support to circus facilities, to enable more frequent circus performances which turn

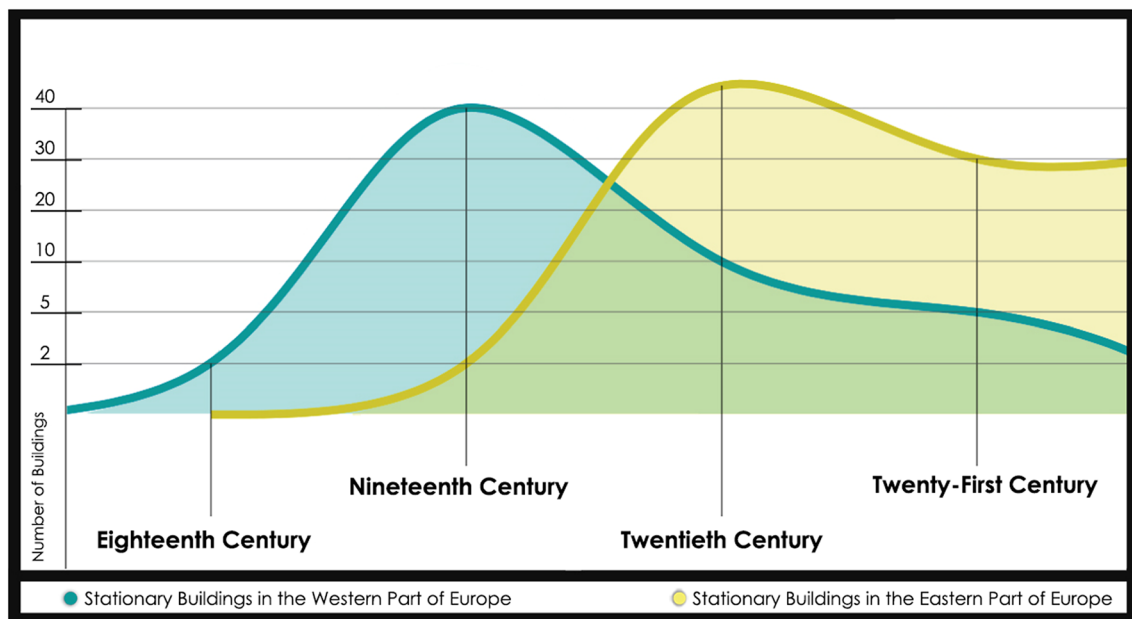


Fig. 2 Development of Circus Buildings in Western and Eastern Part of Europe through Centuries. Source: Curves with circus facilities through centuries—the work of authors

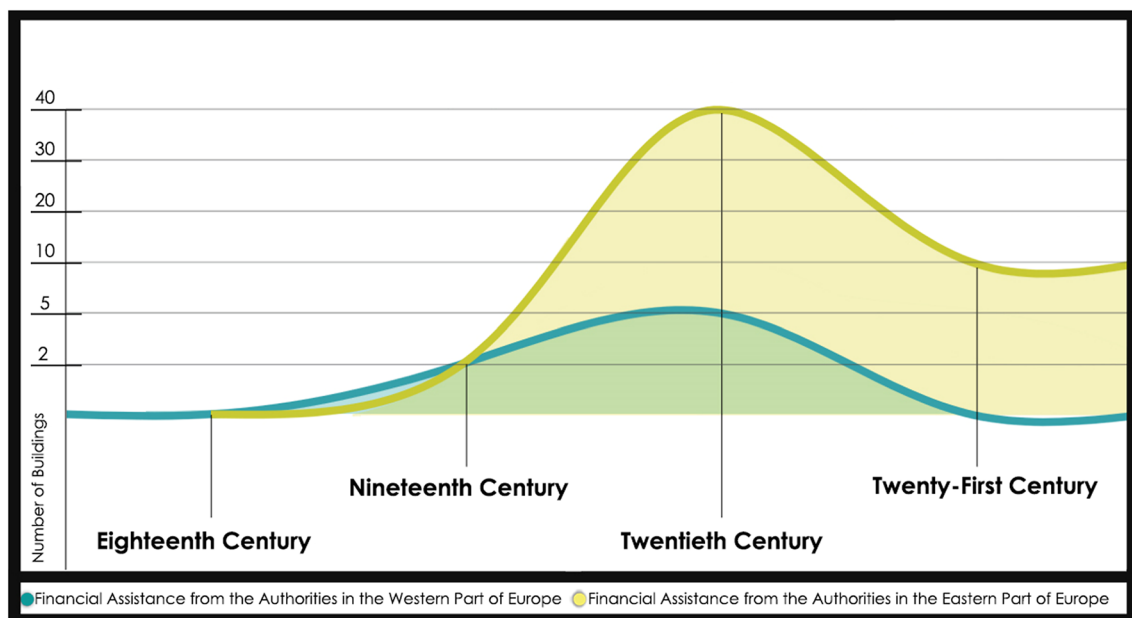


Fig. 3 Political influence and financial support for circus facilities. Source: Political influence and financial support for circus facilities—the work of authors

public attention from state's problems but, in fact, there were little success in realization of these ideas.

In the twentieth century the influences of this kind was significantly bigger, especially in the countries where the state authority was in extreme boom, not only on the

level of one country but in the whole Europe. Circus performances manifested, to large degree, the ideas of ruling structures in the period of the Second World War.

In the twenty-first century, the political situation in Europe is much calmer. There is no need for expanding

and propaganda of new ideas through this spectacle by the ruling structures. State financial help in the western part of Europe is still insufficient but it exists. It is directed to preserving the spectacle but not to creating stationary architecture. In the eastern part of Europe there is a great number of circus facilities from the previous century but in Russia it is possible to reconstruct only few circuses annually. In other, previously socialistic countries, it is also less favorable situation for circus architecture but with minimum investing, it survives (Fig. 4).

Circus performance manifestation

In this chapter, the circus performances are analyzed in the last four centuries. Having in mind that a circus show is mostly determined by the participants and the performance manifestation, they are considered as criteria for the analyses in this paper. Each show consists of certain number of circus acts which are performed by participants through different acrobatics.

The main circus participants were always people but, through history, different animals were present, too. In the Tables 1, 2, 3 and 4, all types of animals are summarized in case they participated but also the people (acrobats) were dominant in specific period and these participants were adjusting to it. Depending on them, certain circus acts started, whose role was to attract specific audience. Researching of the available literature (Dominique Jando; A. J. Shner, R. E. Slavsky; и “V mire

cirka i estrady”) it could be concluded that circus performances changed through centuries depending on circus acts. The Tables 1, 2, 3 and 4 marked off main acts characteristic for each century. Their number increased and they became more diverse and complex.

It sounds amazing, but for the emergence of a circus spectacle, war conflicts were responsible in the eighteenth century. They caused the appearance of skilled soldiers who managed to turn their physical abilities into entertainment for the public.

As shows began to be performed by military personnel, the audience consisted of an adult and mature population, fit for war, who did not take part in military conflicts, but only admired them. It is believed that members of high society and the public in general were amused in circuses in this period. Even riding schools were often organized within circus facilities for the needs of such an audience.

The beginning of the modern circus is associated with acrobatics on horses. The first performances were shown in London, in the middle of the eighteenth century, thanks to *Philip Astley*. A part of his life is related to the Anglo-French conflicts, i.e. to the Seven Years' War, in which he was proclaimed a hero. As a reward for good service, he received a horse and from that time his active circus engagement began. At first he traveled around cities and showed his riding acrobatics. Having earned the money from this, he began to form architectural spaces for his spectacle. He soon began to gather other acrobats,

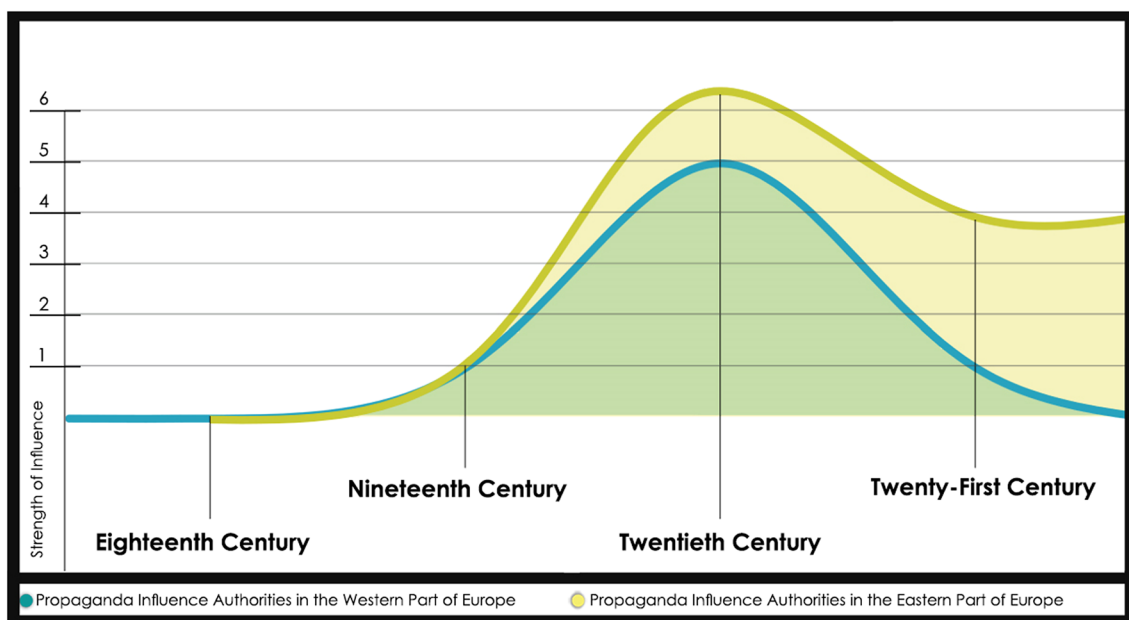


Fig. 4 Political influence through circus performance as a propaganda mean. Source: Political influence through circus performance as a propaganda mean—the work of authors

Table 1 Performance in eighteenth century

Participants		Manifest (parts of show)
Animals	People	Few circus acts
Dominant animals were horses. Acrobats performed their acts on horses' backs moving on the stage in a circle	Attractions were firstly shown by military heroes, starting from <i>Philip Astley</i> , and then, dancers and clowns gathered around them	Risky and various acrobatics on horses' backs. As the time passed, humorous scenes with clowns, pantomimes and dances, suitable for circus shows, started to be performed during the breaks

dancers and clowns, with whom he performed plays with risky and comic elements. Later, other troops began to appear, but performances were copied a lot (Jando 1977).

The nineteenth century can be called the golden age of the circus. It is associated with the emergence of a large number of circus troops in different parts of Europe. After Great Britain, the spectacle had the greatest popularity in France and Germany and later in Russia. The interest of the audience was bigger. Circus art rose to an extremely high level.

Between the usual acrobatics on horses, more and more comic scenes with pantomime and clowns appeared. In Paris, for example, the main “symbol of laughter” was the *Cirque Medrano*, which gathered the most famous clowns of that time (Jando 1977). Attractiveness increased with the introduction of a large number of exotic animals and unusual elements on the circus scene. This is the way how the menageries-circuses began. They were not a rarity and they represented mobile zoos where some animals showed various tricks (Kodrič and Mikec 1999).

Although Tsar Peter the Great was credited with the appearance of the circus in Russia, the circus became more available to the general public in the nineteenth century. In St. Petersburg, the circus was on the same level with the royal theaters while in Moscow the circus was adapted to a wider social class and performances suitable for younger generations were held (Raduskiy 1954; Shner and Slavsky 1973).

In the twentieth century the circus reached its peak in the western part of Europe, but after the Second World War the situation got worse. In capitalist countries, however, the popularity of circuses declined slightly. Performances took on an erotic character, which brought art down to a much lower level (Bardian 1977). Two world wars contributed to this, as did the emergence of film and television. On the contrary, the eastern side of Europe recognized the influential role of this art on people and they rapidly founded schools and built a large number of facilities for this purpose.

The circus was accessible to everybody, probably because the authorities wanted to spread political ideas through the circus spectacle. Circus art was widely used for propaganda purposes (Love 1922). It was at the Munich *Krone Circus* that *Adolf Hitler* gave one of

his famous speeches in 1925 (*The Rise of Adolf Hitler* 2019). Later, the German Chamber of Culture (*Reichskulturkammer*) used circus performances just to spread Nazi ideas (Fig. 5).

The special emphasis was on pointing out the Germans as a specific Aryan race which was manifested through the representation of “German beauty and strength” or in the representation of “German discipline” through the training of wild animals. (Gasche 2017; Lee 2019).

Also, after the October Revolution of 1917, great changes in the sphere of art and culture occurred in Russia. The new socialist government significantly influenced the work of circuses in Russia and later all over Eastern Europe. The circus had a role to educate the masses in the spirit of socialist ideals. After the Second World War, institutions dealing with the development of circus art expanded to other socialist countries, following the example of the USSR (Shner and Slavsky 1973).

This is the century in which the circus spectacles were used mostly for spreading political ideas and directing the society for reaching the state goals. The ruling authorities were represented through the spectacle and, in that way, it spoke about themselves and their domination over all aspects of the life of the citizens (Fig. 6).

What positively affected circus art is the development of technology and great possibilities in the use of various props. Also, all genres of circus art were enriched in various ways—e. g. instead of a wagon-cage, a circular cage which was mounted on the stage, was introduced (Shner and Slavsky 1973). A large number of circus genres have been perfected and defined in this century. According to the book “On the Genres of the Soviet Circus”, there are eight circus genres: dressage, balance, athletics, magic, acrobatics, clown performances, gymnastics and juggling and by combining these genres circus points were created in various performances (Gurevic 1984).

In the twenty-first century the publicity is drastically reduced but circus spectacle is still going on. As well as other cultural and festival events the circus has remained accessible to all. It is believed that its main audience today consists of children accompanied by their parents. It is possible that this is because children face these acrobatics for the first time and they express admiration for

Table 2 Performance in nineteenth century

Participants		Manifest (parts of show)
Animals	People	≤ 6 circus acts
Beside horses, other animals showed up, too. Some of them could be trained and perform tricks. Exotic animals were a special attraction	Already existing dynasties had ruled over the circus scene, where the business went from fathers to children	Attractions developed In the circus performances the attention was directed to creating humorous and funny scenes. Trained or unusual animals were shown more often

something new while adults are less fascinated by these performances because they have already seen something similar in their lifetime.

There is still a difference between Eastern and Western Europe. In Eastern Europe, the traditional circus has remained, while in Western Europe there have been some changes, so modern circus performances are shown there. The basic form of the traditional circus is a circus performance consisting of several parts, circus points, where acrobatics are shown (Pataeva 2009). Acrobatics are different and differ in the behavior of humans and animals. Some of the basic genres have already been mentioned when talking about the previous century and they are mostly only being upgraded now (Gurevic 1984; Our circus Acts Alphabetically 2020).

What is closely related to the traditional circus is the performance with trained animals. In modern times, laws have been passed banning the use of animals for entertainment purposes (Ujhelyi 2016). This mostly applies to the western part of Europe. The list of countries that comply with the ban expands on a daily basis (Stop circus suffering 2018). It primarily refers to wild animals so that you can still see attractions with domestic animals such as dogs, cats and horses.

The Modern circus (the New Circus) appeared at the turn of two millennia and although it relies on the traditional circus, it also includes elements of other performing arts. It was created by incorporating technical elements of the traditional circus in the segments of dance, dramatics, street performance and sports, which led to the merging of these forms into unity (Bolton 2004; Štefanová 2016). Modern circus today is a multi-genre stage performance compared to the traditional

circus (Mrđenović 2013). In the contemporary circus, the performance has a different concept—there are no artistic show acts, yet it is generally acted as one performance entity.

Worldwide, the ethical attitude towards the life of an animal is becoming the priority so, the circus animals constantly tortured and imprisoned in cages, they are now excluded from this spectacle or replaced by their holograms which was shown by the German circus *Roncalli Circus*. By the improvement of technology, this circus used to speak out about the policy for protecting animals (Designboom 2022).

Circus is no longer used as a direction for achieving political goals. In the western part of Europe they are seeking for reaching the equality of circus performance among other branches of art while in the eastern part of Europe, the circus has equality but its performances protect the patriotism inside the state.

Through the centuries, the structure of population was changed, as well as the audience watching the circus spectacle. In the eighteenth century people admired daring military skills on horses but in the meantime the main role of the circus became stimulus for having good time and fun. The historical circumstances in the twentieth century contributed to the fact that the circus developed and improved more as a mean of propaganda. The period without large-scaled wars in the twenty-first century is calming down and, therefore, decreasing the need of people for this kind of spectacle. There are limitations in the kind of participants (animals are not allowed to take part in all circus performances anymore). This is the reason for the rise of the new type of spectacle. There is a change in the number

Table 3 Performance in twentieth century

Participants		Manifest (parts of show)
Animals	People	8 circus acts
Training animals became a separated genre. Depending on the kind of animals, they distinguished different trainings (birds, exotic wild small and big animals)	Already existing dynasties had ruled over the circus scene and they adjusted to situations in this period because the circus was used in propaganda purposes	New technologies had a positive impact on and contributed to the development of the spectacle We distinguish the following circus genre: dressage, balance, athletics, magic, acrobatics, clown performances, gymnastics and juggling

Table 4 Performance in twenty-first century

Participants		Manifest (parts of show)
Animals	People	> 8 circus acts
Training animals stayed a separated genre at traditional circus. On the other hand, in modern circus it is forbidden to use animals for the purpose of fun	Circus performers are present in traditional and modern circus The acrobatics are even more complicated	The difference between the east and the west parts of Europe is even more distinguished. In one part, it is still a traditional circus, while in the other part the modern circus performance was born



Fig. 5 Hitler’s Speech in *Circus Krone* in Munich in 1925. Source: Hitler’s speech in *Circus Krone* in Munich—<https://medium.com/@marcslove/new-popular-idol-rises-in-bavaria-c62b856fd660>



Fig. 6 Circus spectacle held on the tank during the Second World War in USSR. Source: Circus spectacle held on the tank during the Second World War in USSR—Ostrovsky (2015) *Cirk vo vremia Velikoy Otečestvennoy voyni*. Ministerstvo kulturi Rossijskoy Federacii, Moscow

and type of acts which are included in the circus performances in western part of Europe.

In the previous chapter the Fig. 4 is shown in which it can be seen the impact of the authorities on circus as a type of propaganda means for fulfilling the political goals. In the

next table, the relation between performances and their differences through the centuries in which certain rulers used circus for realization of their ideas (Fig. 7).

Stationary circus buildings

In this part of the paper we research the architectural elements of stationary circus buildings from the eighteenth to twenty-first century. For each century, there are two tables with the description of criteria and sub-criteria in most circuses from that period. First table represents the performance space and its sub-criteria shows perhaps the most important parts of circus building and these are stage area and audience capacity. The stage area implies the shape and the size of the stage. The audience capacity is directly connected to the size of the building (Giedion 1954). It is important to notice what the capacities through centuries were—the stage was adjusted and enabled more spectacular circus performances and it influenced the increase or decrease of the number of audience. In the second table, the focus is on the basic elements of circus building appearance which are defined by sub-criteria: the base shape, material and roof construction. The type of constructing and forming of architectural style which was dominant in certain period for circus buildings could be recognized.

Forming the first spaces for performing circus acrobatics was connected to the end of the eighteenth century. Then there were only enclosed open spaces but, during certain time, they overcame into covered wooden buildings for the spectacle.

From his acrobatics, *Philip Astley* made money to buy a piece of land in 1769 in London, *Halfpenny Patch*, that he first used to show this spectacle. At first, the space was only fenced with rope (Table 5).

After a year, Astley’s small troop managed to buy the adjacent plot where the first riding area was built (in sources it is most commonly called *Ashley’s Amphitheater*). It was surrounded by grandstands and the stage space itself was not protected from the weather. The entrance was a wooden two-story building with drawings of acrobatic scenes on horses. There were lodges in the building for a privileged audience. Two wings were soon added, where there were stables for horses on the ground floor and additional lodges for visitors on the first floor. The stage space

was almost thirteen meters in diameter and covered with sawdust. From 1772 the building also served to organize riding classes of the first *Riding School* in the morning while the time for performances was from 5 p. m.

As the first competition to Astley, one of his acrobats, *Charles Hughes*, opened his *Riding school* nearby (*Hughes' Riding School*). In 1779 Astley's building was turned into, as it was then called, *Astley's Amphitheater Riding House*. The wooden building got a dome under which performances could take place regardless the weather. After it had been burned down in fire, it was rebuilt in 1795 and given the name *Royal Amphitheater*.

Astley's success opened up opportunities for him in France as well. In 1783 he and his son *John* opened the *Amphitheatre Anglais des Sieurs Astley, pere et fils* as the first Parisian circus. It was a wooden building lit by candelabra so that performances could take place in the later hours as well. Later *John Astley* began to run this Amphitheater on his own, but he was stopped by the war between England and France. During the war, in the Paris Amphitheater, performances were shown by the troop of *Antonio Franconi* which the Astleys had previously included in their business. The Astleys managed to run both circuses, in England and France, and also organized tours throughout England (Table 6).

In the meantime, *Charles Hughes*, together with *Charles Dibdin*, founded an institution in 1782 called the *Equestrian and Philharmonic Academy* (*Hughes' Royal Circus*). He is best known for being the first to replace Astley's term amphitheater with the word circus (Jando 1977).

Most of these circus troops toured Russia and other European countries. But the appearance of the circus in Russia is associated with the time of Tsar *Peter the Great*, when foreign, mostly smaller Italian troops visited Russia (Grigoreva 2019). However, in this century there was no circus facility in Russia until the thirties of the next century (Fig. 8).

The nineteenth century is associated with the emergence of a large number of circus troops in different parts of Europe and at the same time, with the emergence of an increasing number of buildings made of wood and later of stone. Some actors stood out; they made their own circus troops and were credited with the emergence of circus architecture.

The emergence of stationary facilities in this area speaks of the great interest of the audience in the circus spectacle.

The number of spectators increased as evidenced by the seats for the audience in the facilities—between one thousand two hundred and six thousand seats. However, traveling troops existed in many other countries (they were the most popular in Italy and the Czech Republic).

The Astleys continued to work on founding several more circuses but two consecutive fires in the building led them to build a circus facility of solid material, mostly stone, in Paris in 1803. It was called the *Royal Amphitheater of Arts*. It was a building for three thousand visitors and reminded of the theaters of that time.

After this Astley's facility, other buildings of solid material for the same purpose sprang up: the *Cirque Olympique*, its summer branch on the *Cirque des Champs—Elysees* which was later renamed the *Cirque National*, the *Cirque d'Hiver*, later renamed the *Cirque Napoleon*, the *Nouveau Cirque*, the *Cirque Fernando*, the *Cirque Medrano* (Jando 1977) and others. The names of the circuses changed with the change of owners but they were extremely famous and popular, each in its own time. In France, there were circuses, not only in Paris. Facilities were built and demolished throughout the century (Table 7).

After England and France, circus spectacles became popular in Europe due to German and Austrian artists. The first few circuses were made of wood. *Christoph de Bach* is known for opening the second stationary circus made of solid material in Europe, in 1808. It was located in Vienna and was called the *Gymnastischer Zirkel*. The building had a glass dome which was suitable for performances throughout the day and was intended for three thousand spectators.

In the middle of this century, the troop of the National Circus from Paris stayed in Berlin and due to its successful performance in the German capital, the first stationary circus was built there. After few years, *Ernst Renz* became the owner—a circus performer, who was very popular in showing different genres. During his lifetime he owned several circuses: in Wroclaw, Hamburg and Vienna and founded the first circus in Copenhagen (Table 8).

After *Ernst*, *Paul Busch* enjoyed great popularity. He built the first facility in 1884, for five thousand spectators. Later he became famous for several great stationary circuses in Hamburg, Vienna and Berlin (Jando 1977).

Influences from the west of Europe were most present in the countries that were part of the Austro-Hungarian monarchy, i.e. today's Slovenia and Croatia. For example,

(See figure on next page.)

Fig. 7 Timeline summary of relations between circus performance and political regimes. Source: ¹Astley's Amphitheatre in 1807. Aquatint print by Augustus Pugin and Thomas Rowlandson for Rudolph Ackermann's *Microcosm of London* (1807)—http://www.circopedia.org/File:Astley_ampitheatre_1807_2.jpg. ²"Circus Artists" oil on canvas by Maurice Blum. The scene shows the clown Geronimo Medrano rehearsing a dog act in the construction of the Cirque Fernando, Boulevard de Rochechouart in Paris (1875)—http://www.circopedia.org/File:Medrano_-_Maurice_Blum.jpg. ³Horse Circus—http://www.ruscircus.ru/gosti_iz_francii_798. ⁴Holographic horses in circus—<https://www.archipanic.com/roncalli-circus/>

	Circus Performance on Horses	Circus Participants	Influence of Dominant Political Regimes
EIGHTEENTH CENTURY		horses	political unconcern for spectacles
		acrobats on horses	
NINETEENTH CENTURY		horses exotic and small animals	financial support from governing structures
		acrobats animal trainers clowns	
TWENTIETH CENTURY		horses exotic, small and big animals predators birds	political domination during dictatorial regimes
		acrobats equilibrists athletes gymnasts magicians jugglers animal trainers clowns	
TWENTY-FIRST CENTURY		traditional horses exotic, small and big animals predators birds	tendence towards political correctness
		contemporary circus without animals acrobats gymnasts magicians dancers actors singers clowns	

Fig. 7 (See legend on previous page.)

Table 5 Performance space in the eighteenth century

Stage area	Capacity
Circular, diameter around thirteen meters. Dimensions adjusted to horses in movement	The buildings were upgraded (grandstands were added) depending on the needs of the performances and the interest of the audience

the first circus performers appeared in Ljubljana at the end of the eighteenth century (Kodrić and Mikec 1999) and the first troop visited Belgrade only in the middle of the nineteenth century (Djurić 1999). No existence of circus facilities made of solid material has been recorded on the Balkan Peninsula; all circus troops were foreign and plots were provided for their visits. In the beginning, prefabricated structures made of wood were set up. The tarpaulin constructions appeared only when troops began to change audiences more often than programs of performances.

In Russia, the first circus building appeared thanks to the troop of Astley's pupils, led by the Frenchman *Jacques Tourniaire*. He built the first wooden circus in St. Petersburg in 1827. In 1844 the circus troop of *Alessandro Guerra* came to this city. He built first wooden and later stone circus. Later the circus was bought by the Imperial Theater Directorate and it became a state institution, receiving the name *Imperial-Theater Circus on Teatralnaya Square*. The building was opened in 1849; it was lit and could be heated well which was very important (Medvedev 1975; Fedorov 1988).

Carl Magnus Hine was one of the persons who connected the history of Eastern and Western Europe. He came from Germany and had his own circus in Berlin but achieved the greatest success in Russia. In 1866 he managed to build a wooden building in Saint Petersburg. In 1872 his troop became the part of *Gaetano Cinielli's* troupe. He managed to make a stone construction of a circus in the former capital of Russia. The building was in a lavish style with rich decoration and its construction was completed in 1877. The building had a dome spanning fifty meters, which was a record for that time, and no bearing pillars were used. And then the circus became state property and as such it still operates today (Jando 1977).

Founders of the Russian circus were the brothers *Akim, Dmitry* and *Peter Nikitiny*. They began their careers as street circus performers and later became a famous travelling circus. They arrived in Moscow in 1886 where they bought a building on Tsvetnoy Boulevard, next to the *Salomonsky Circus*. For competitive reasons, they left Moscow and continued their work in other Russian cities. They primarily worked as a travelling circus but in some places they built wooden or stone circuses. They performed in Tbilisi, Baku, Astrakhan, Volgograd (former name Tsaritsyn), Saratov, Samara, Kazan, Nizhny Novgorod, Ivanovo, Voznesensk, Kharkov (half of these cities are no longer part of Russia) (Fig. 9).

Albert Salomonsky opened a stone circus with four thousand seats in Moscow in 1880 but before that he opened a wooden one in Odessa and was credited with opening a circus in Riga (now Lithuania).

In Russia, at the end of the nineteenth century, there were almost thirty circuses, mostly travelling, but there were also a lot of stationary circuses (Shner and Slavsky 1973).

Things got complicated at the beginning of the First World War in 1914 when all the circuses were closed but after only a year they continued to work (Bardian 1977).

The twentieth century is characterized by distinguished buildings created before and after the wars, so this period could be observed in two parts: in the first period, until 1945, circus buildings were built more in the western part of Europe while the creations of buildings in the eastern part was more modest. After the First World War e.g. after the October Socialist Revolution, in the eastern part of Europe, there was an expansion and creation of numerous circus buildings which remained during the Second World War and after it. With the end of this war, a total turnover happened due to destruction of the

Table 6 Appearance of the circus building in the eighteenth century

Base shape	Material	Roof construction
Grandstands followed the circular shape of the stage space	Firstly, the space for performing attractions was only fenced by a rope. Later on, covered grandstands around the stage appeared. During time, wooden buildings developed, completely covered	At first, the stage was without any protection from weather conditions but after some time the buildings got domes. For the first time, evening performances were organized in Paris with the help of lanterns

In the twenties of this century, the French capital had four facilities for circus performances: the *Cirque de Paris*, the *Nouveau Cirque*, the *Cirque d'Hiver* and the *Cirque Medrano*. The *Nouveau Cirque* was closed as early as 1926 and in the thirties of this century the same thing happened to the *Cirque de Paris*. The *Cirque Medrano* was run by the heirs of the previous owner until 1963, when it was taken over by the *Bouglione* brothers (*Firmin, Sampson, Emilien* and *Joseph*), and the name of the circus changed to the *Cirque de Montmartre*. Unfortunately, it

Table 8 Appearance of the circus building in the nineteenth century

Base shape	Material	Roof construction
Mostly circular grounds with pointed entrances. Spans were forty meters and over. The buildings had lodges and balconies around the stage	Wooden buildings were changed by the buildings made of solid material—stone, which was richly decorated	In the circus buildings, there were domes of great spans which became usual, sometimes even without bearing pillars. They started to heat and illuminate the circuses regularly

was demolished in 1963. From 1934, the *Cirque d'Hiver* also belonged to the *Bouglione* family. It was reconstructed several times. In the fifties, the circus facility was largely used for filming movies and series (Bardian 1977). In France, there were also travelling troops but their popularity was not great (Table 9).

In Spain, travelling troops were popular although the first stationary circus in Madrid was established as early as the previous century. Its founder was *Thomas Price* after whom it was named—*Price*. It was damaged in the Spanish Civil War. However, the idea of a circus was revived with the construction of a new stationary circus in 1840 but it lasted only thirty years (El Circo Price 2019).

A new circus was born after the victory of the great October Socialist Revolution at the end of 1917. All circuses in Russia were nationalized (Markschiess-Van and Nowak 1976).

Before the Second World War, there were about fifty stationary circus facilities. They were built mostly of wood, according to standard designs and had no heating systems. It is interesting that during the war, despite much suffering and destruction, there were ninety-one circus companies in this country, which included sixty-eight stationary and eighteen travelling circuses (Ostrovsky 2015). Circus troops worked during the war and even demolished circus buildings were rebuilt in those years (Fig. 10).

After the end of the Second World War, the emphasis was on reconstruction (Corbusier 1986), so new circus facilities of higher quality materials were built. Within twenty years about forty circuses were built, all with about two thousand seats and the most modern equipment. Each circus had a hotel for actors (Bardian 1977) (Table 10).

Due to the great need to show performances and to build quickly, appropriate projects were made (there were several standardized projects by which circuses were built in different cities).

After the end of all military conflicts, the circus began to prosper in other socialist countries as well. Stationary circuses were built in Budapest, Bucharest, Sofia, Warsaw and some other cities (Shner and Slavsky 1973).

By 1945, Hungary had one built circus and three travelling tents. During the reconstruction after the war, the circus building was restored and was active until 1966 when it was demolished. A new circus with a capacity of over one thousand eight hundred seats was founded in the same place in 1971.

Two wooden circuses were built in Bulgaria after the First World War, one in Sofia and the other in Plovdiv, and there were several travelling troops. The solid material building, the *Sofia State Circus*, was built in 1962. The facade was made of glass, as in most socialist countries, while the roof structure was made of metal. Unfortunately, it burned down in 1983.

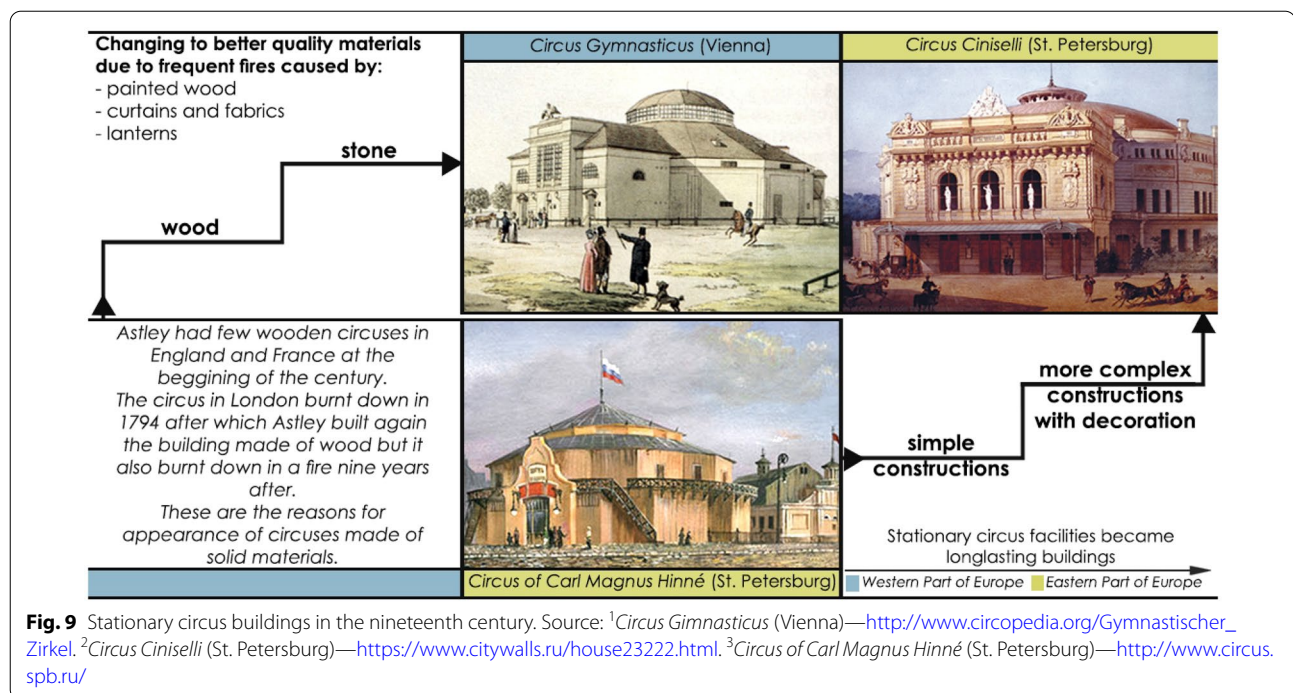
In Romania, a stone building with three thousand five hundred seats for the audience was built. During the reconstruction of the entire area where the circus was located, it was demolished in the thirties of the twentieth century. There were travelling tents in the country but a new stationary facility was built in 1960. It was original in its architecture, with a roof parabolic corrugated shell. The names changed: the *Circul de Stat*, the *Circului Globus* and now the *Circul Metropolitan Bucuresti* (Bardian 1977; Fővárosi Nagycirkusz 2019; Nemțeanu et al. 2019).

Among all socialist states, only Yugoslavia and Czechoslovakia did not have stationary circus facilities, but this did not stop the development of this art in these countries.

In the Czech Republic, the biggest and the most famous was the *Circus Humberto*, which is known for accommodating about three thousand visitors (Jando 1977).

In Yugoslavia, the *Artističko preduzeće—Cirkus* had the first performances in 1948. Its tent accommodated about two thousand spectators. It was later renamed *Adria*. (Djurić 1999) (Fig. 11).

The twenty-first century does not bring new circus architecture. Construction of new facilities has been stopped. The number of stationary circus facilities in Europe in this century has even decreased but some facilities have survived to this day. This is the century of adapting old circus buildings to the new age. Nowadays more attention is paid to the preservation, reconstruction and restoration of existing facilities, although there are still travelling tents.



In the twenty-first century, more stationary circuses were kept in the eastern part of Europe. In the western part of Europe these buildings have been given other purposes. Countries, where there are still circus facilities made of solid material, are those countries where the circus was most popular, such as France and Germany, but also Spain. In the eastern part of Europe, the situation is much more favorable. In Russia alone there is a large number of stationary circuses, as many as thirty-eight (Rosgoscirk 2019). In other neighboring countries, which used to be parts of the USSR, a slightly smaller number of stationary circuses have also survived. The situation is similar in Hungary and Romania, where the circus tradition is still partially preserved (Table 11).

However, there is a large number of facilities that have preserved the circus function but due to the need to be adapted to modern requirements, they are reconstructed and given more modern technical equipment for showing circus performances. The most important things today for the functioning of the whole circus building are the system of ventilation and the system of safety measures which include cameras, too. According to the number of

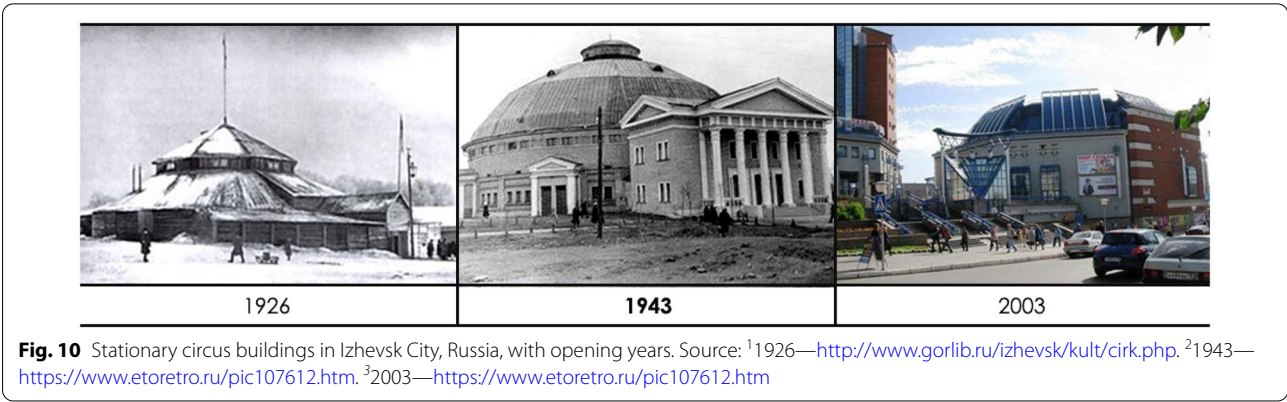
such facilities, the countries of the former Soviet Union are in the lead.

Nowadays, there are circus facilities that get new contents which make these facilities multifunctional. This is, for example, the *Teatro Circo Price* in Madrid. The old building was closed and it was planned to renovate it but it did not happen. Instead, the reconstruction of the former textile factory for circus purposes began in 1999. The circus started working only in 2007 and it contains both modern elements and those based on tradition. The building has a circular and side scene. If the show takes place on the side stage, the circular stage is filled with rows of seats. This allows the stage space to be used for different types of art. The facility also has several multi-purpose rooms that can be used for exhibitions, workshops and similar activities (Teatro Circo Price 2019). The *Krone Circus* in Germany and the *Bouglione Cirque d'Hiver* in France can also be classified as multifunctional facilities (Table 12).

A special category consists of buildings that were built as circuses and now have a different purpose. Although their purpose has been changed, the spirit of the circus

Table 9 Performance space in the twentieth century

Stage area	Capacity
Dominant circular stage stayed. More possibilities, complex additional structures, top scenic technology	In this period, the buildings for the needs of different number of spectators, from 1000 to 10,000, were built and that influenced on the size of the buildings



is still present in them. Such a facility can be found in Denmark. Copenhagen preserves a circus building, but since 2003 it has hosted entertainment programs with dinner, i.e. the building has the character of a restaurant. Grandstands have been adapted for setting tables, namely, instead of seats, wide terraces have been placed and instead of stables in the basement, kitchens have been made. The stage space has been changed, three side stages have been made and a much smaller circular stage has been set up in the central part. The main purpose of the building is to be a restaurant but an entertainment program is shown as well: cabaret, dance, comedy and sometimes even circus-like acrobatics (Circus building 2019; Wallmans 2019). The situation is similar in Amsterdam (now the *Royal Theater Carré*) and in the Hague (*Circustheater Den Haag*), where circus performances are no longer held (Figs. 12 and 13).

Results and discussion

The established methodology of research of chronological material on the territory of Europe, created a set of criteria relevant for the analysis of circus buildings and performances that, in most periods, took place in the buildings for that purpose.

The results of the research are defined criteria with sub-criteria, as well as their comparative analysis in the observed periods.

It can be concluded that the appearance of these buildings is interesting not only in terms of form, taking into account the architecture and construction of buildings,

but also in terms of changes that occurred in the manifestation of performance, which are directly related to the social and political circumstances of their time (as shown in Table 13).

The established set of criteria consists of:

Criterion 1. **Performance**—refers to the way a circus spectacle is performed.

Sub-criterion 1.1. **Participants**—differences are noticed in the presence of the artists. Although it is believed that animals are an integral part of the circus, they are still excluded in recent times in the modern circus. The question is whether the display of various human skills will prevail, while animals are already vanishing from the circus (in some places).

Sub-criterion 1.2. **Manifestations**—Circus performances consisted of several different circus acts over the centuries. Their number depended on the show itself and the time in which it was shown. The eighteenth century was the beginning of circus performances so there were only few circus acts but in the nineteenth century the number of acts gradually became bigger and more developed. In the twentieth century, eight types of acts were defined. The new age brought more diversity and combining of more artistic directions with circus acrobatics.

Criterion 2. **Stationary circus buildings**—consist of two sub-criteria which were taken in consideration under the assumption that they are the best for defining circus buildings: the first shows the space for performance and the second are basic characteristics of building appearance.

Table 10 Appearance of the circus building in the twentieth century

Base shape	Material	Roof construction
Polygonal and circular base shape. Standardized base shapes were typical for the USSR	The principals of modern architectural and up-to-date materials were important for shaping the circus buildings. Glass facades typical in socialist countries	Domes got more complex constructions and more interesting geometrical shape. Beside stationary, a great number of tents

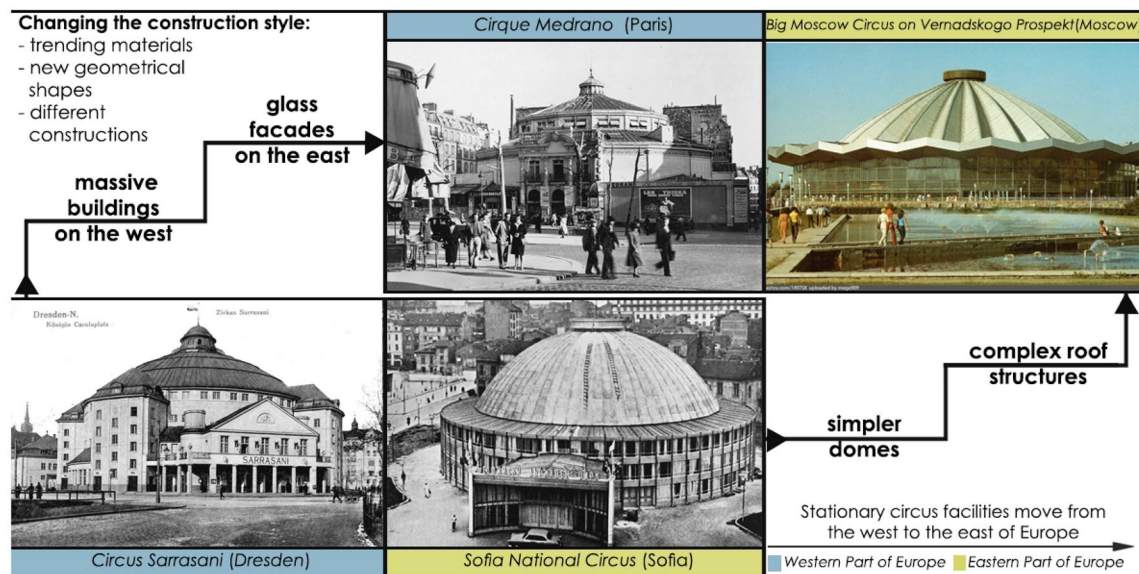


Fig. 11 Stationary circus buildings in the twentieth century. Source: ¹Cirque Medrano (Paris)—http://www.circopedia.org/File:Cirque_Medrano.jpg. ²Big Moscow Circus on Vernadskogo Prospekt (Moscow)—<https://pastvu.com/p/149758>. ³Circus Sarrasani (Dresden)—http://www.circopedia.org/File:Circus_Sarrasani_1912.jpg. ⁴Sofia National Circus (Sofia)—<https://ivibitesphotography.wordpress.com/2014/11/25/lost-bulgaria-in-photos-from-1960-1970/>

Sub-criterion 2.1. Performance space:

2.1.1. Stage space—depended on the circus performance. In the eighteenth century the size of the stage was determined by the circular moving of horses, which has stayed to the present day. It was easier for both animals and people always to come to a recognizable space, without too much need to adapt when they go on tours and change facilities. In the recent times, auxiliary side scenes have also appeared in some facilities, and the development of technology has enabled the launch of platforms.

2.1.2. Capacity—the number of seats for the audience is probably one of the most important characteristics for buildings with stage performances. Since the start, e.g. from the eighteenth century, the number has increased. Constructing new buildings had the aim to make the number of seats for audience adequate and more profitable in certain periods. Through centuries, the society present in the audience changed and that was also the reason which influenced on this parameter. In the twenty-first century there is no more increase because the interest of audience is insignificant.

Sub-criterion 2.2. Appearance of the building (the shape of the base, materialization and roof construction are observed)—it depended a lot on the period in which the building was built, but it also depended on the previous characteristics (criteria and sub-criteria). The type of performance influenced on the stage area, and the placement of the audience around it influenced the overall design of the building. The bases of the circus buildings were mostly circular, due to the centrally oriented already circular scene, even the polygonal bases were of more regular shapes with approximate same dimensions on all sides. At first, in the eighteenth century, uncovered wooden buildings were built, and over time they were replaced by solid and modern materials. The need for covering and forming the dome was also influenced by new technologies, from lighting and sound to new props in circus performances. Circus stationary buildings are all covered these days and their domes are different by appearance e.g. the geometrical complexity.

Table 11 Performance space in the twenty-first century

Stage area	Capacity
Adjusted to the elements in the show The circular stage stayed dominant	Buildings inherited from the twentieth century. The capacity mostly stayed the same or slightly changed due to adjusting to up-to-date fire protection conditions

Table 12 Appearance of the circus building in the twenty-first century

Base shape	Material	Roof construction
Inherited buildings from the twentieth century. Some circuses have been changing the purpose and also the shape of the building is becoming different	Reconstruction and adjustment of the buildings for the modern needs. There is also a transformation of the buildings into multifunctional	Inherited buildings in the twentieth century. It is becoming harder and harder to maintain the domes built in the previous century

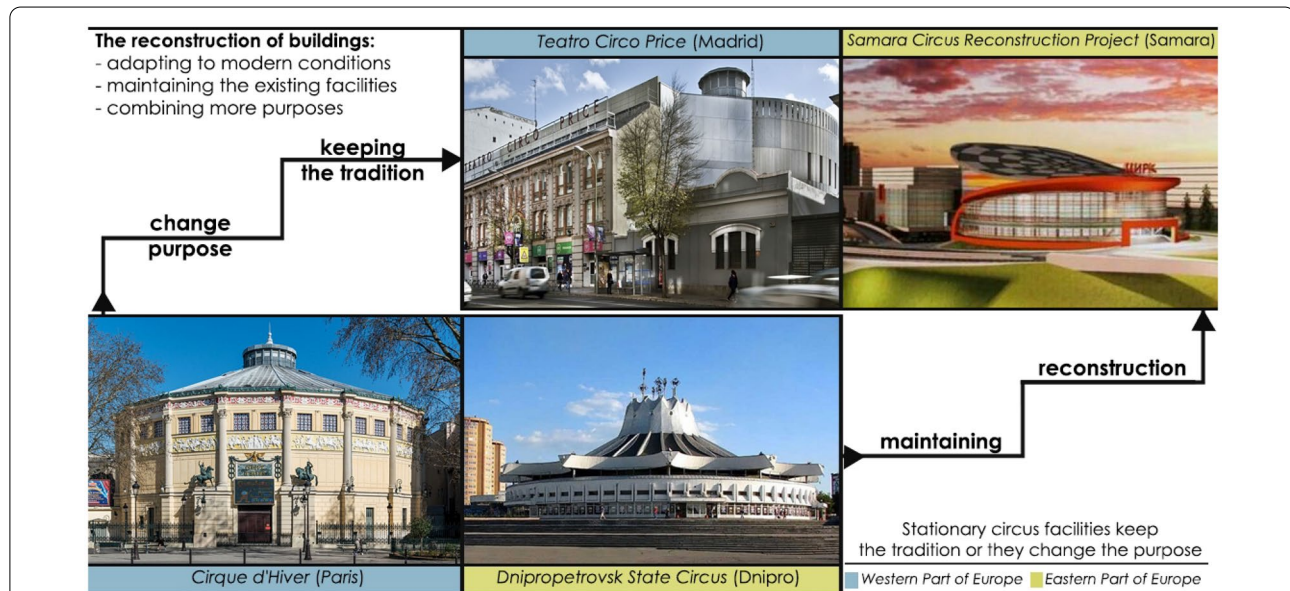


Fig. 12 Stationary circus buildings in the twenty-first century. Source: ¹*Teatro Circo Price* (Madrid)—<https://www.francescopinton.es/proyectos/teatro-circo-price/>. ²*Samara Circus Reconstruction Project* (Samara)—<https://sgpress.ru/news/124143>. ³*Cirque d'Hiver* (Paris)—https://commons.wikimedia.org/wiki/File:Cirque_d%27hiver_Paris_11e_Southwest_view_20140316_1.jpg. ⁴*Dnipropetrovsk State Circus* (Dnipro)—<https://dnipro.depo.ua/rus/dnipro/yak-u-dnipro-40-rokiv-tomu-ponad-tisyacha-lyudey-buduvali-tsirk-201909201031898>

Conclusions

- Throughout history, the circus has undergone certain changes. The prevalence of circus facilities was greatly influenced by the political system in the eastern part of Europe, where these stationary facilities have remained to the greatest extent today. In the western part of Europe, the circus spectacle was used more as a kind of propaganda against the people, but
- insufficient financial aid may have contributed to the fact that stationary circuses were not maintained and preserved here today.
- This survey started under the assumption that the chosen criteria and sub-criteria had great influence on overall shaping of circus buildings. However, even though the circus facilities were built for the performance itself, it did not impact too much on shaping of the building on the whole. The changes during

(See figure on next page.)

Fig. 13 Timeline summary of relations between stationary buildings appearance and architecture elements. Source: ¹*Astley's Amphitheatre* (London)—http://www.circopedia.org/SHORT_HISTORY_OF_THE_CIRCUS. ²*Royal Amphitheatre* (London)—<http://www.vam.ac.uk/content/articles/r/researching-theatre-and-performance/>. ³*Royal Amphitheatre of Arts* (Paris)—<https://historianet.nl/cultuur/wie-richtte-het-eerste-circus-op>. ⁴*Circus Ciniselli* (St. Petersburg)—<http://opeterburge.ru/sight/zdanie-tsirka.html>. ⁵*Cirque d'Hiver* (Paris)—[http://www.circopedia.org/File:Cirque_d%27Hiver_\(c.1925\).jpeg](http://www.circopedia.org/File:Cirque_d%27Hiver_(c.1925).jpeg). ⁶*Circul de Stat in Bucuresti* (Bucharest)—<https://arhiva.uniuneaarhitecilor.ro/a-2718/circul-de-stat-vedere-de-ansamblu>. ⁷*Teatro Circo Price* (Madrid)—<https://www.francescopinton.es/proyectos/teatro-circo-price/>. ⁸*Omsk Circus* (Omsk, Russia)—<https://ponominalu.ru/venue/omskiy-gosudarstvennyy-cirk>








Representatives of circus buildings	Key changes through the centuries
	◀ <i>Astley's Amphitheatre (London)</i>
	
	
	
	
	
	
	
	◀ <i>Teatro Circo Price (Madrid)</i>

Fig. 13 (See legend on previous page.)

Table 13 Circus performance and buildings. Review of the results of comparative analysis by criteria with sub-criteria

period	criterion																	
	PERFORMANCE					STATIONARY CIRCUS BUILDINGS												
	participants		manifest (parts of show)			performance space				building appearance								
						stage area		capacity		base shape		material		roof construction				
Eighteenth century																		
Nineteenth century																		
Twentieth century																		
Twenty first century																		
	animals		people			few circus acts	≤ 8 circus acts	8 < circus acts	circular scene r = 13 meters	+ auxiliary scenes of smaller dimensions (movable and lateral)	<1000 seats for the audience	1000 – 6000 seats for the audience	circular	polygonal	solid materials - stone, concrete, glass and other	lightweight materials - wood and other	uncovered scene	solid material dome

dominant	
present	
minimal	
none	

centuries, in the domain of manifest of performance and its participants, did not affect on different appearance and the size of main stage area.

- Nevertheless, overall building appearance depended on few researched criteria and sub-criteria. Unchangeable, circular stage area was surrounded by rows of grandstands with the increased capacity changeable through the centuries which determined the size and the base shape in the period in which the circus was built. The increase of the size of this facilities stopped, firstly, due to not building new circus facilities, and secondly, because of reconstructions of the facilities and their adjustment to the modern age. In the twenty-first century, there are new purposes of these buildings. It means that the existing base shapes and forms of circus buildings can easily be adjusted and used, not only for circus performances, but also for the new additional functions.

- The changes of material and roof construction of circus buildings depended on the century of construction and partly on the territory (region) in which these buildings were made. These two sub-criteria mostly determined the architectural style of circus buildings, which is not changing anymore, and thanks to them, these buildings represent the monuments of their time.
- The circus remained in the culture of Russia but in the western part of Europe it was gradually losing its primary importance. The number of circus facilities was more present in the eastern part of Europe where still exists the need for the stationary circuses to be preserved and stay active with the same purpose in this modern time. The greater loss was obvious in the countries in the western part of Europe where circus suffered from bigger changes in the form of performing and in architecture.

- Despite not being considered everywhere as sufficiently “high-level” enough everywhere to be ranked among other art forms, the circus proves something quite the opposite through its architecture. Circus facilities are not inconspicuous, these are large buildings and their construction and maintenance are demanding. As the circus has adapted and changed over time, so as the space for showing performances has undergone certain changes. The diversity of the development of the circus spectacle depended on the audience that watched it, but also, to a large extent, on the state organization of each country. The analysis of each century individually results in the final research where all the changes are shown, which is accompanied by the analysis of construction of facilities for its purpose. Importantly, the circus exist in the twenty-first century, but it is partly changing and adapting to the new age.
- In the areas where stationary circuses emerged in the eighteenth century, these buildings are slowly going into oblivion and becoming something else and in the areas where the first circus buildings were created in the nineteenth century, the circus performance stayed on the high level and their architecture is preserved and maintained for the generations to come.
- For the future research, it would be important to compare the existence and development of these buildings on other continents e.g. America, Australia and Asia.
- It is hard to answer to the first question, if the stationary circuses achieved in adjusting and transform for the purposes of modern society or, on the other hand, they are reorganized and are becoming something different. It depends on the part of Europe in question. In the eastern part there are still traditional circus performances and their buildings achieve to reconstruct and adapt to modern times. Oppositely, there is a fear that in the western part of Europe the need for circus performances to be held in stationary buildings is disappearing. These buildings are getting additional purposes and, together with them, circuses achieve to sustain in presence. However, there are buildings which changed the purpose and there are no circus performances in them anymore.
- When we talk about the established criteria, it would be important to implement other architectural elements in the future research, for example, tent buildings which dominate in modern times. These buildings are significant because there is a complete change in existing of circus buildings which cease to exist as stationary buildings. Furthermore, the monumental value of the buildings remaining from previous periods and the way of their revitalization e.g. their reuse, should be researched.

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Author contributions

MD conceived of the presented idea. MD wrote the manuscript with support from MK and SM, MK and SM verified the research methodology. MK encouraged MD to investigate circus performances chronologically and supervised the findings of this work. SM contributed to the design and implementation of the research and to the analysis of the results. MD originally made all diagrams and tables that this research resulted. All authors discussed the results and contributed to the final manuscript. All authors read and approved the final manuscript.

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