# CATEGORIZING THE CAUSES OF OCCURRENCE OF CHATEAU BROWNFIELDS: A CASE STUDY ON THE CZECH REPUBLIC

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#### **ABSTRACT:**

In the European space, chateau buildings and sites represent an important historical, urban and social element of the cultural landscape, which refers to the continuity of the present and the past in the space of urban and rural settlements. However, it is a sad fact that many of these buildings are now abandoned and dilapidated. The aim of this paper is to identify, against the background of a synthesis of both theoretical and actual knowledge, a group of reasons why this is the case, using the example of the Czech Republic. Due to the political and property changes implemented in the first half of the 20th century, two original groups of market and non-market causes and four categories of causal factors have been determined (inappropriate purpose; ownership problem; operational (investment) inefficiency and extraordinary events), which have their parallel in the analysis of the causes of occurrence specific chateau brownfields in the Moravian-Silesian Region.

Key-words: Brownfield, Chateau, Cause of origin, Czech Republic, Categorization.

## 1. INTRODUCTION

Chateaux, or aristocratic manors, manorial courts or manorial residences represent an important architectural and historical monument that have been an integral part of the predominantly European rural, and later urban landscape since the early modern period, and refer to their administrative, economic, representative and residential function (Turečková et al., 2022a, Pluskowski et. al., 2019 or Magnussen, 2018). Chateau buildings, like other real estate, are subject to processes of renewal, development, decline or extinction after their creation and may also be for a certain period of time a brownfield, which refers to the status of a building or premises that is without any use, is empty and structurally and technically desolate, dilapidated and decaying.

The intention of this paper is to try to identify the causes of occurrence of chateau brownfields on a pilot basis and to categorize them against the background of an inductive approach resulting from the analysis of the actual causes of abandonment of chateau sites in the Moravian-Silesian Region. Considering the historical milestones of the last century in the Czech Republic, especially the formation of an independent republic after the First World War, the forced administration of the territory by fascist Germany during 1938-1945, the Benes Decrees and the onset of communism after the end of the Second World War, it is necessary to look for potential causes of the subsequent non-use of chateau buildings here as well. The above also applies to the recovery of family property after 1989, especially in the form of restitution. Other countries of the so-called Visegrad Four, or other Eastern Bloc countries, have undergone similar processes of forced (political) interruption (abolition) of property rights to their (chateau) property in the form of seizure, nationalisation or confiscation. From this point of view, the presented classification of the causes of occurrence of chateau brownfields is also applicable to countries other than the Czech Republic, and as a result it is generalized to such an extent that it can be used universally.

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The issue of chateau brownfields has not yet been directly addressed scientifically, and therefore it is impossible to conduct a relevant literature search and critical discussion on the topic. The majority of the text is based on the author's synthesis of information from brownfield theory, history, social geography and urbanism, her own experience and factual findings obtained from the analysis of identified chateau brownfields in the Moravian-Silesian Region.

The basic definition of a chateau brownfield was elaborated in Turečková et al. (2022a) and Turečková et al. (2022b), and a chateau brownfield is defined here as a specific type of brownfield that represents a completely or partially abandoned dilapidated property originally serving as a chateau residence (an originally permanently inhabited feudal residence of the modern period, typical of its representative, residential, economic and/or administrative function) for which no meaningful functional use has been found within the specified period (**Fig. 1**).



Fig. 1. Example of chateau brownfield (Chateau Dolní Lutyně, region Karviná), (Source: own).

In the context of the general definitions of brownfield sites (see for example Kunc et al., 2014; Turečková & Duda, 2020; Alker et al., 2000; Ferber et al., 2006; Yount; 2003; Krzystofik et al., 2013; Thomas, 2003; Tang & Nathanail, 2012; Greenberg et al., 2000, De Sousa, 2003 or Martinát et al., 2016), where contamination and regeneration potential are emphasized, we should add that in this case the restoration of chateaux is more time-consuming and economically demanding due to their architectural specifics, whereas the probability of contamination is quite low to none. The status of cultural monument assigned to the building may also be a constraint on regeneration plans. The chateau brownfield can be perceived in both narrower and broader terms, with the narrower term referring only to the main building of the chateau itself, which forms the very core of the entire chateau complex, while the broader definition reflects the chateau's hinterland, i.e. the entire chateau complex including outbuildings, park, utility and ornamental gardens, physical infrastructure, greenhouses, etc. (Turečková et al., 2022b).

# 2. METHODOLOGY AND DATA

Determination of the causes of occurrence of chateau brownfields and their subsequent categorization is based on the analysis of actual and objectively identifiable reasons for the abandonment of chateau settlements found in a pilot sample of 32 brownfields identified among physically existing 52 chateau buildings in the Moravian-Silesian Region (without region Nový Jičín) what is more then 61%.

Table 1.

Relevant information was traced and verified from several possible publicly available sources as National monument institute, official pages of individual chateaus, websites of municipalities and "freely" on the Internet. A number of relevant data were difficult to find, or the data differed between partial sources. There is also possible future additions of other chateau objects or specify present information. The spatial specification of their location within the Moravian-Silesian Region is shown in **Figure 2** and **Figure 3**.

For the purpose of fulfilling the objective defined in this paper, the specific causes behind the loss of functionality and abandonment of the identified chateau brownfields were traced. The individual reasons have been generalised into four broad categories, so as to reflect the very cause of the brownfields on the one hand, and at the same time to generalise them as far as possible.

Selected regions of the Moravian-Silesian Region	Chateau in total	of which chateau brownfields	
Karviná	11	7	& Sharm
Ostrava City	7	7	Opava Opava Karvina
Frýdek Místek	12	5	Nový Jičín
Bruntál	10	7	Frydek-Mistek
Opava	12	6	

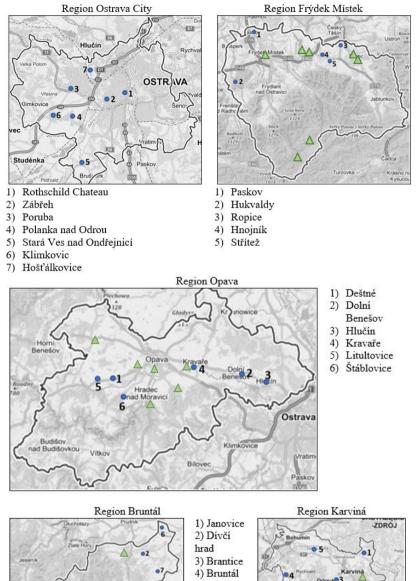
**Fig. 2.** Identified chateau and chateau brownfields in Moravian-Silesian Region (*Source: data own and map: www.czso.cz*).

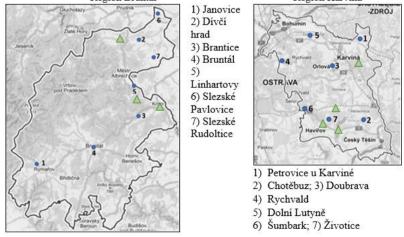
Note: Region Nový Jičín is missing due to missing information at the time of article preparation.

**Table 1** lists the names of the chateaux that have had the status of chateau brownfield for some time and which have been the subject of research. The information in the table is supplemented by castle buildings without brownfield status and which were the objects of our research. **Figure 3** shows the geographical distribution of all identified chateaux and chateau brownfields in individual regions of the Moravian-Silesian Region.

Chateau in Moravian-Silesian Region.

Region	Ostrava City	Karviná	Frýdek Místek	Opava	Bruntál
Chateau Browfnields	Rothschild Chateau, Zábřeh, Poruba, Polanka nad Odrou, Stará Ves nad Ondřejnicí, Klimkovice, Hošťálkovice	Petrovice u Karviné, Chotěbuz, Doubrava, Rychvald, Dolní Lutyně, Šumbark, Životice	Paskov, Hukvaldy, Ropice, Hnojník, Střítež	Deštné, Dolní Benešov, Hlučín, Kravaře, Litultovice, Štáblovice	Janovice, Dívčí hrad, Brantice, Bruntál, Linhartovy, Slezské Pavlovice, Slezské Rudoltice
Chateau without statut Browfnield		Fryštát, Larisch Chateau Těrlicko, New Chateau Horní Suchá, Dolní Bludovice	Frýdek, Konská, Třinec, Horní Tošanovice, Dolní Tošanovice, Bílá, Hartisov	Stěbořice, Hradec nad Moravicí, Opava, Raduň, Velké Heraltice, Velké Hoštice	Jindřichov, Hošťálkovy, Krnov





**Fig. 3.** Identified chateau and chateau brownfields in Moravian-Silesian Region and their localization in regions (*Source: own, www.mapy.cz*).

Note: ● chateau brownfields and its name; ▲ chateaux without statut brownfield

From their localization and knowledge of the spatial characteristics of places, a logical conclusion can be drawn that chateau brownfields reflect the density of population in the given territory and, with reference to the distribution of all chateau objects, they do not tend to be specifically concentrated, i.e. their distribution within the network of chateaux is completely random (from the point of view of spatial phenomena, the localization of chateau brownfields among all identified chateaux is accidental).

#### 3. CATEGORIZING THE CAUSES OF OCCURRENCE OF CHATEAU BROWNFIELDS

In the context of the historical events of the first half of the 20th century associated with the aforementioned forced changes of ownership rights to chateau residences in the Czech Republic, we can also indirectly refer to the original (hidden) causes of occurrence of chateau brownfields, which have a parallel in these political decisions.

The chateaux were then usually (on the basis of a directive) used for purposes for which they were not suitable at all in terms of the layout and character of the building, their operation was underfinanced, especially due to the increased demands on the operation (e.g. this concerned the heating of the chateau buildings) and therefore they were abandoned after a while and the activities carried out were relocated to completely different buildings (Poruba Chateau, Zábřeh Chateau, Ropice Chateau, etc.). Non-market causes can also include extraordinary events such as the devastation of the building by fire or war conflict (Chateau Chotěbuz, Chateau Klimkovice or Chateau Zámek Stará Ves nad Ondřejnicí), etc. Apart from these non-market causes, which are characteristic of Central and Eastern European countries in varying degrees and manifestations, it is logical to identify market causes that refer to the natural processes of the creation of chateau brownfields associated with changes in the functional use of real estate in general.

By analysing the specific causes of occurrence of 32 chateau brownfields in the Moravian-Silesian Region, four categories were explicitly formulated, which are general enough to both capture the essence of the abandonment of the objects and at the same time encompass all the identified reasons. These are causes having an analogy in (1) inappropriate purpose; (2) ownership problem; (3) operational (investment) inefficiency; and (4) extraordinary events.

The combinations of the original causal factors with the four specific categories of causes of occurrence are elaborated in **Table 2** for better visualization and briefly introduced and described later in the text of the paper.

The extraordinary causes of occurrence of chateau brownfields are related to unusual events of a one-off but fundamental nature originating outside the chateau building itself. These are exogenous phenomena (explosion, war conflict, fire, flood, mining tremors, earthquakes, sabotage, other natural disasters, etc.) that led to the unplanned and sudden abandonment of the chateau site, the potential restoration of which is financially and temporally very demanding.

The abandonment of a chateau for an inappropriate purpose is the most common reason for the creation of a brownfield in the Czech Republic. By this we mean that activities were inappropriately (decided without proper knowledge of the issue) placed in the chateau's buildings that were not suitable for the chateau at all due to its architecture, layout, orientation and accessibility of rooms, size of rooms, basic technical infrastructure (heat, water, electricity, sanitation). The accumulation of problems associated with inappropriately implemented activities (purpose) together with the unwillingness to invest in these buildings gradually led to their devastation and dilapidation, which resulted in their final abandonment. This reason for the creation of chateau brownfields is related to the property-ownership changes of the first half of the 20th century mentioned earlier.

The third identified reason behind the emergence of chateau brownfields is related to ownership problems and property disputes, which include the so-called "post-Soviet" restitution processes. In a number of cases when the chateau belonged to more than one owner, there was no agreement between them on the future fate of the building, and often the buildings change ownership because they are the subject of speculation and financial intrigue. We can also include here the problem of determining the inheritance, finding the rightful heir, or the owners' lack of interest in their property.

Table 2. Categorizing the causes of occurrence of chateau brownfields.

Original causative	Specific categories of	Explanation	
factors	causes		
Non-market character	exceptional	one-off harmful effects of forces and phenomena caused by human activity, natural influences, as well as accidents that significantly limit the use of the chateau object and its existence	
	inappropriate purpose	the useful function implemented in the chateau building is not compatible with its urban design and the location of the chateau in the longer term (the useful function of the chateau does not reflects its nature and is determined "from above, by a directive decision from the table")	
Market character	problem with ownership	from a legal point of view, the concrete owner is not clear, there is a dispute over ownership or the owner does not show interest in the chateau property	
	operational (investment) inefficiency	the functional use of the chateau is not effective in the long term (economic costs exceed the economic benefits), or the return on investment is not attractive for investors and/or the use of the chateau is not profitable	

Operational or investment inefficiency is behind the creation of brownfields at the moment when the economic costs exceed the economic benefits and the operation of the chateau itself is not financeable in terms of resources and their return. In other words, from the point of view of cost-benefit analysis, the solution in question, whatever it is in the context of the use of the chateau, is inefficient, uneconomic and not meaningful. Let us add that in such a case it is not only the direct, implicit effects that are assessed, but also the indirect costs and benefits, which are explicit and not always concrete, must be taken into account.

In some cases, it is not easy to determine whether the occurrence of chateau brownfield was caused by the inappropriate use of the building or by operational inefficiency, or it is problematic to establish the mutual causality between these two categories of causes and to determine which preceded the other. It is then necessary to use one's own experience, analogy with a similar chateau brownfield site or additional information retrieval. In a number of cases, in our set of chateau brownfields in the Moravian-Silesian region, it was possible to use the logic that it is obvious that using a chateau building as a healthcare facility is not a happy solution (inappropriate purpose). It was only ex post that the problems of financing the operation and the necessary investments related to the care of the property itself emerged.

The identification and classification of the causes of the formation of chateau brownfields, it can be added that, logically, it will also apply in the context of the causative factors of the formation of brownfields in general, i.e. also for other types of abandoned and unused buildings and areas.

#### 4. CONCLUSION

Chateau settlements have been, are, and will certainly continue to be an important historical, urban and social element of the European territory and our cultural landscape. It is therefore socially desirable to support in every possible way the restoration of such buildings which are empty, dilapidated and without use, not only because they are places associated with a concentration of negative externalities (Turečková and Chmielová, 2018), but also because they represent untapped

and often hidden potential for the development of the area. This is not only manifested on the economic level (positive impact on regional economic growth, employment, the amount of investment, etc.), but especially in the deepening of general prosperity and stability, in the improvement of living conditions and its quality, safety and aesthetics of places, cleanliness, the availability of places for recreational and leisure activities, the diversity of landscape use and environmental protection.

The aim of this paper was to pilot the causes of occurrence of the 32 identified chateau brownfields on the basis of the induction of the identified facts and then to categorize them. Such a categorization of the causes of occurrence of brownfields is completely new and has no parallel in any other scientific work. Due to the historical realities resulting from the forced ownership and property changes in the first half of the last century, it was necessary to objectively search for the subsequent causes of occurrence of chateau brownfields here as well. Therefore, two groups of initial causal factors, specifically market and non-market factors, and four specific category groups relating directly to the identified cause of the abandonment of the chateau site were determined (Figure 3). These sub-causes can be logically linked to the loss of the use of the chateau in question, to problems related to the determination of ownership, to economic reasons related to operational (and/or investment) efficiency and to causes of an exceptional nature.

Given that this is a pilot finding and the categorization of the causes of occurrence of brownfields is based on the knowledge from the Czech Republic only, it is possible that in the future the categorization will have to be modified to take into account the need for generalization within a wider spatial dispersion. In the next step of the scientific research work we will try to determine and quantify the importance of individual causal factors and complement this with appropriate regeneration solutions based on good practice examples. This synthesis of the understanding of the causes and condition that followed the chateau's overcoming of its brownfield status can help to potentially restore existing unused chateau buildings as well as those that may be abandoned in the future. It would also seem highly desirable, as part of further research, to identify the tangible and intangible benefits of regenerated chateau buildings and sites to regional development and society as a whole. Finally, it should be added that the presented categorisation scheme is so universal that it is very likely to be transferable and applicable to other types of brownfield sites than the chateau ones. From this point of view, this paper may also contribute to deepening the theoretical concept of brownfields in general terms, or enrich the scientific discussion with substantive criticism.

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