

CONVERSION: ONE SPACE, MULTIPLE FUNCTIONS

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ABSTRACT: Changing the function gives the existing architecture a chance to be reborn and integrated. The paper extends the knowledge of approaches to conversions, which are primarily understood as changes to functions in perpetuity. The paper focuses on a specific type of conversions characterized by their temporary duration and minimal or no structural intervention. Using case studies, we analyze and explain the phenomenon of multiple conversions of a single space over time. One of the case studies of such a space is the boiler room at the Faculty of Architecture and Design of the Slovak Technical University in Bratislava. The boiler room in the basement of the building has lost its original function as a result of the modernization of technologies and has remained empty. In time, various forms of artistic and cultural activities began to take place in it on the initiative of artists, lecturers and faculty. Such forms of conversions incorporate the existing space into their concept, and the architecture is not only a framework but also a real stage for various site-specific artistic and cultural projects.

KEYWORDS: architecture; conversion; temporality; unused boiler room; theatre scene; scenography; experimental space; FAD STU Bratislava; Bratislava; Slovakia

INTRODUCTION

Architectural reuse, architectural recycling, is a fundamental theme of our time on the way to sustainability in our lives. In this process, one of the key concepts in thinking about architecture alongside its revitalization is a more fundamental change of content in the form of conversion. It represents a chance to reborn the building, to integrate it into the neighbourhood and to reuse it.

In a broader context, conversion can be understood as the act or process of changing an object from one form, use or system to another [1]. It is therefore a type of change that respects the existing condition and conversion brings to it the possibility of change. This change will ideally improve the quality of the overall result. The term conversion is used in many areas and in each of them it is strongly adapted to a specific sphere.

ARCHITECTURE AND CONVERSION

In urban structures we often find places, objects or areas that have lost their function in time and are waiting for their next fate. "The reasons for the existence of empty places are manifold, probably mainly related to their function and type of ownership." [2] Such buildings require some form of revitalisation or they will disappear in time. One of the principles of revitalising and reusing vacant buildings is conversion.

In relation to architecture, conversion is a typological or functional change in which the original character of the building must be preserved. The form should remain largely unchanged and the content changes during conversion. Despite the frequent use of the term conversion in both theory and practice, the explanation of this phenomenon in architecture is somewhat relative and abstract, not describing any concrete conditions or parameters that define what is and what is not a conversion. The definitions do not speak of a specific possible minimum or maximum level of interventions and modifications that define conversion.

H. Zemánková characterizes conversion¹ as "a set of processes by which, after the extinction of the original purpose of a building or a set of buildings, their spatial structures are preserved and adapted for new use in an appropriate manner." [3] From the above it follows that the degree and manner of intervention is individual for each building and depends on the authorial approach of the particular architect.

On the basis of the analysis of the current realisations

of conversions¹ it can be stated that the conversion is mainly carried out on the buildings which, by their design, allow for a spatially non-conflicting location of the newly required function. This condition is sufficiently fulfilled to a large extent, especially by industrial buildings due to the application of large-span load-bearing structures and the use of large structural or clear heights. The frequent conversions of industrial buildings also imply the phenomenon that the term conversion is often associated primarily with industrial building types. In our paper, we are concerned with the marginal positions of conversions, to which the conversion procedures as for industrial buildings cannot be applied, because by their specific nature they also require the need for a specific, individual approach.

Conversion has potentials and risks based on the nature of the process. Risk factors for conversions include ignorance of the technical condition of the hidden structures and the difficulty of predicting the need for the level of intervention. Existing spatial structures also have their layout and operational limits which must be accepted during conversion. Strengths may be ecology in terms of reuse of the existing physical building stock, less need for new materials and minimisation of logistical flows. Conversion also enters the consciousness of the general public and subconsciously builds their attachment to architecture and its values. From the point of view of the circular economy², conversion is also an appropriate solution. Local governments are sometimes inclined to sell off properties to investors who are not interested in bringing a quality environment to the site for its inhabitants, in pursuit of a vision of profit, relieving themselves of the responsibility of managing or restoring the property. Filling a vacant building may bring more benefit to the locality in the long run than a one-off financial gain - a sale [2]. Conversion, especially to a cultural function, also generates community benefits and has the ability to activate the zone in which it is located. The aesthetic aspect of conversion is a subjective variable, but according to current trends, it seems to be attractive to admit and reveal old support systems and other technical and structural specificities of buildings.

CATEGORIZATION OF CONVERSIONS

Due to the ambiguous definition of conversions, it is currently difficult to grasp certain types of approaches to conversions terminologically and to name them. Therefore, for the purpose of our paper, we categorize conversions as follows:

1. By the expected duration of the newly proposed feature:

¹ The representative sample included conversions that have been nominated or won an award from the Slovak Chamber of Architects CEZAAR in recent years.

² The circular economy (circular economy) is based on the efficient use of natural resources through effective recovery. The circular economy has been a key theme in the EU since 2015.

- Conversions temporary (planned for a fixed period of time),

- Permanent conversions (planned for an indefinite period).

2. According to the size of the building intervention for the needs of the newly proposed function:

- Conversions without the need for structural intervention,

- conversions with the need for minimal structural intervention,

- conversions with the need for structural intervention.

Temporary / fixed-term conversion

Temporary conversions are already planned for a specific operating period at their inception. A specific duration is foreseen in advance, or only an assumed duration for conversions for functions where a specific duration cannot be determined. As S. Kolimarova explains, temporary structures are usually of the nature of buildings for crisis management or buildings for temporary events such as festivals...[4] For the purposes of this thesis, it is the temporary functions related to art and culture that are of interest to us. The period covered by the conversion can vary in duration from a happening³ of a few minutes to a duration of several months.

Permanent / Indefinite conversion

In this thesis, permanent or indefinite conversions are those conversions whose occurrence does not consider a bounding frame for their duration. Spaces are made ready for long-term use with a new functional content without a planned end by means of a conversion. This approach to conversions is the most common, it can be said to be the traditional case.

Conversion without need structural intervention

A conversion that occurs without structural changes to the space. The newly proposed functions draw on the condition and character of the space as it is at the time they enter it. The new function may bring small, independent structures and built-ins into the space, but these are not fixed to the building. The conversion can draw on the space and, as a result, site-specific projects can emerge within it. Conversion without structural intervention is therefore a conversion of feeling, programmatic, not structural.

Conversion with minimal construction intervention required

We consider that minimal construction intervention is necessary. A minimum intervention conversion uses structural alterations only as a necessary component without which the space would not function, be safe or suitable for human occupancy. Examples of minimal structural intervention are: safety measures, rehabilitation of parts of the space, repair of structural complications, etc.

Conversion with the need for structural intervention

A conversion during which physical changes are made to the building structure in order to alter the layout or change the quality of the environment. Such conversions are usually conversions planned for an indefinite period of time. One of the reasons for this may be the higher cost and time spent making the structural changes. A building change is implemented because of the specific requirements of a new, proposed function.

Temporary conversion without structural intervention

From the previous categorization of conversions, we next describe a combination of two less frequent approaches. Combining them results in the type of conversion we discuss next. The combination of temporariness and no need for structural intervention

creates a distinct group of conversions that are numerous, especially abroad. They represent the entry of an activity, process, action or element into an existing space. Since it is a temporary infill - planned for a definite period of time, the conversion is also temporary. Temporality allows for the penetration of disciplines, the infiltration of ideas and the experimental testing of new concepts [4]. Most often, we might characterize this form of conversion as an event⁴ or happening. A short-term filling requires fewer demands, so it largely dispenses with structural intervention. Actors interested in short-term use of space are often attracted by the character and condition of the space and use it as part of an architectural, artistic look or part of an artistic intention, as a setting to a temporary function that reflects or harmoniously follows the temporary function. Because of the specifics of temporary conversion without structural intervention, it appears to be an ideal function of culture and art that can temporarily enter the space and function symbiotically with it. This relationship of space as a site-specific scene is described by theatre artist and architect P. Mazalán "Stage design has a license to work with place in an unpredictable way. It can help to anticipate new ways of using a space given the motivations of its users and can become a critical architectural project." [5]

ONE SPACE, MULTIPLE CONVERSIONS

The building of the Faculty of Architecture and Design of STU at 19 Námestie Slobody was built in 1947-1950 according to the design of architect Emil Belluš. The building originally served as the Pavilion of Theoretical Institutes with rooms for teaching physics, mathematics and architecture. It is considered one of the author's masterpieces, as it stands out for its artistic, material and technical design. The building also includes a large underground part, which contained mainly spaces for technical equipment. One of the largest spaces in the basement was the coal boiler room. This space is specific in its shape, scale, proportions and details that relate to its original function. Over time, technologies were replaced with more progressive ones and rooms in the underground parts of the building were vacated. The faculty thus acquired specific windowless spaces that had been empty for several years. Gradually, ideas for a new functional filling of the boiler room started to come and this made it accessible. The space was cleared of machinery, a new double lightweight floor, a connecting walkway, new wiring and lighting were added. A lift was also built to this basement area to en-



Fig. 1.: Boiler room space at FAD STU BA. (Source: author)

³ event - planned event

⁴ happening - noun happening, event; something that happens, often something unusual. A performance or similar event that takes place without preparation. More at: oxford learners dictionaries. website. 2023 [online]. [cited 2023-03-25] available at: https://www.oxfordlearnersdictionaries.com/definition/english/happening_1?q=happening

sure the space is accessible to wheelchair users. In this way, the space meets the basic conditions of usability.

The boiler room is located in the university building, which means that it falls into the group of buildings that must meet the barrier-free conditions based on the applicable legislation. The whole building has been retrofitted to make it suitable for use by all groups of people. The entrance to the building is also wheelchair accessible. In addition to easy accessibility for all, the building also has wheelchair-accessible sanitary facilities. The premises of the Faculty of Architecture are welcoming to all groups of people, as indicated by the long-standing presence of a small café staffed by people with disabilities. All the integrated changes to the building have been incorporated in a very sensitive way to the character of the building and the value of the building.

The former boiler room has become an attractive space for culture and art creators. The use of the space has never been defined, which has shown that one space can function differently over time and can be filled with different functions. One of the larger temporary projects was the theatre play *Electric Angel*, which turned the boiler room into a site-specific experimental theatre for about a year (February 2022-June 2023). In the final design of the temporary theatre, the stage is located along one of the longer walls of the boiler room.

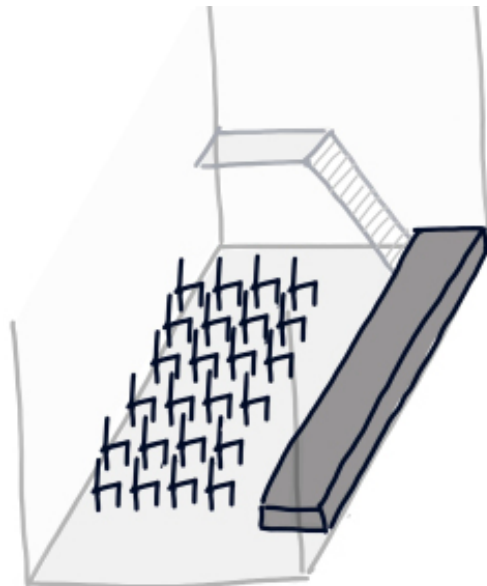


Fig. 2.: Schematic of the spatial design of the *Electric Angel* theatre in the boiler room of FAD STU BA. (Source: author)

The stage is relatively shallow and long. The shallowness ensures a closer relationship to the spectator, the length in turn the possibility to divide the stage into different functional parts side by side. Placing the stage in this location allowed the existing staircase and platform structure to be used and incorporated into the design, which increases the playing area and does not take up space for the audience. The auditorium is rectangular in shape, with a longer side adjacent to the stage. This unconventional principle of turning the auditorium towards the stage ensures the proximity of the spectator to the action. The audience is seated only four rows back, more immersed in the action, and the actors are only inches to metres away from each other. The two largest specific elements of the boiler room, the old brick furnaces, are integrated into the play in their current state. One furnace is the structure of the bed on which the mattress is laid, the other furnace is part of the bathroom. The photo 3 shows the position and relationship between the auditorium and the stage and the character of the spatial and visual design. All parts of the boiler room are left untouched. They are acknowledged. They are unrepaired, uncleaned, unmasked. "The boiler room completely represents the



Fig. 3.: Photograph from the premiere of the theatre play *Electric Angel* in the boiler room of FAD STU BA. (Photo: R. Tappert)

chosen play, it is raw, true and cold..." [6]

A different spatial arrangement was chosen by P. Mazalán, when his music-dramatic work *Decameron* (2021) was performed in the same space on one occasion. The spatial arrangement was rotated 90 degrees compared to the play *Electric Angel*. The stage and auditorium were on a single line in the longitudinal direction of the longitudinal space of the boiler room. The audience was seated in several short rows behind each other.

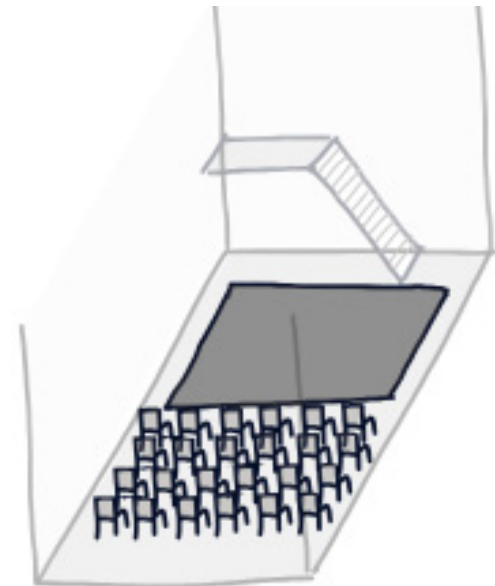


Fig. 4.: Schematic of the spatial design of the musical theatre *Decameron* in the boiler room of the FAD STU BA. (Source: author)

The strength of the space for this performance was the excellent acoustics of the tall, non-compact, perforated space of the boiler room. In this case, the landing with the staircase remained clear and was used in the piece for small interventions during which the actors appeared on it. The wall behind the staircase and landing was used to project the texts for the work. Its imperfection and current state stood out during the projection.

In addition to external projects, the faculty also uses the space for its own events. An exhibition of semester student works from the field of design was organised in the former boiler room on the occasion of the regular event *Night of Architecture and Design*. The works were installed around the perimeter of the longer walls of the boiler room, the centre of the space was left free as a manipulation area. The different nature of the works required different forms of presentations and exhibitions, for which the most specific elements of the boiler room - old furnaces - were used.

The space of the former boiler room was also used for musical accompaniments to faculty events. The spatial arrangement at that time consisted of a completely



Fig. 5.: Photo from the preparation of the exhibition of student works in the boiler room of FAD STU BA. (Photo: author)

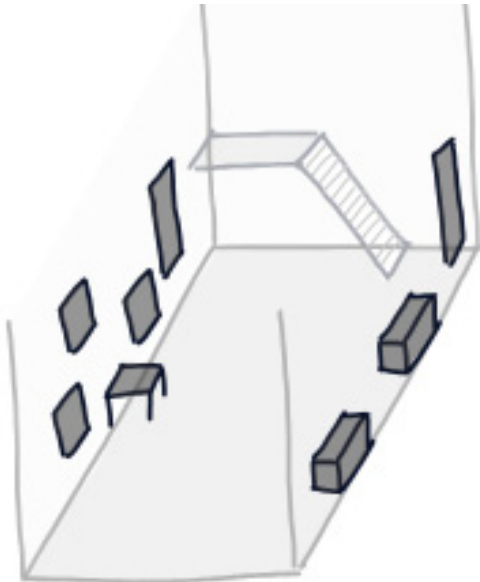


Fig. 6.: Schematic of the spatial design of the exhibition in the boiler room of FAD STU BA. (Source: author)

open space of the boiler room in the lower part and situating the musical artist on a raised platform. The entire space was open, designed for passage and entertainment. The placement of the musical artist on the raised platform provided better visibility of the visitors to the artist, but also vice versa.

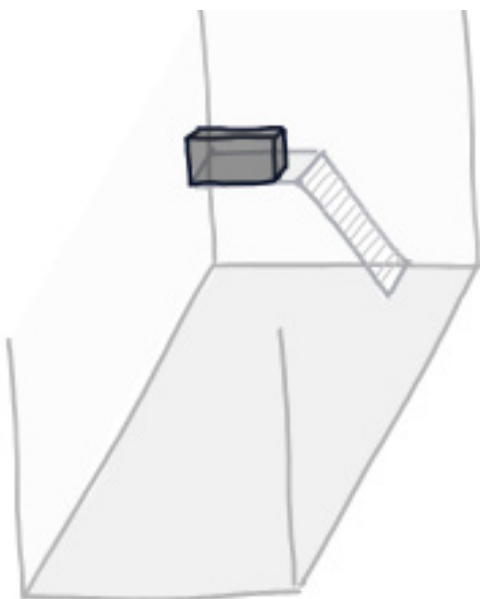


Fig. 7: Schematic of the spatial design of the musical event in the boiler room of FAD STU BA. (Source: author)

This experimental space at the Faculty of Architecture and Design is always open to other temporary uses that

bring new forms of arrangement and programming to this specific space. In the last period of its more active functioning, the space has been, for example, a theatre, a gallery, a space for discussions and talks, a music theatre or a space for musical performances.

CONCLUSION

The freedom in thinking about conversion allows for the emergence of different authorial views and approaches to the reuse of empty spaces. Specifically defining the function or mode of operation of a vacant space may not be the only solution when considering its reuse. Different spaces have their limits and these can serve as boundary locations for entry points. The possibility of thinking freely about the functioning of a space tests its possibilities of variability. Revisiting one space in a short period of time brings different experiences. In contrast to a multifunctional hall, where the filling or layout is to some extent predefined, for example by the location of the stage, technical equipment or the stage, a temporary conversion is more open to an authorial approach. Nor does it attempt to predefine the basic framework of use, such as the entrance to the space or its division into public, semi-public and private zones. Each temporary function thus creates an original temporary access to spatial, functional and layout possibilities.

Temporary conversion is one possible form of enriching cultural life and activating empty objects. When the absence of structural intervention is added to temporary conversion, it becomes an ecological and economic option that can contribute to the preservation and necessary maintenance of empty spaces, as well as raise awareness of the potentials and possibilities of disposing of unused spaces.

SOURCES

- [1] OXFORD LEARNERS DICTIONARIES. website. 2023 [online]. [cit. 2023-03-25] available at: <https://www.oxfordlearnersdictionaries.com/definition/english/conversion?q=conversion>
- [2] ŽURKINOVÁ, Z., SIDOROVÁ, M. Et.al. : NEPREDAŤ! ZVELADIŤ! Niekoľko postupov ako revitalizovať nevyužívané budovy a areály vo verejnom vlastníctve, Bratislava, Nadácia Cvernovka v spolupráci s Banskobystrický samosprávnym krajom (DO NOT SELL! ENHANCE! Some Practices for Revitalizing Unused Buildings and Areas in Public Ownership, Bratislava, Cvernovka Foundation in cooperation with the Banská Bystrica Self-Governing Region), 2020, s. 21-22, ISBN 978-80-973690-0-2
- [3] ZEMÁNKOVÁ H. : Tvořit ve vytvořeném, Nové funkční využívání uvolněných objektů, Brno, Vysoké učení technické v Brne (Creating in the Created, New Functional Use of Vacant Objects, Brno, Brno University of Technology), 2003, s. 47, ISBN 80-214-2365-X
- [4] KOLIMÁROVÁ, S. Fenomén dočasnej architektúry – východiská a potenciál (The phenomenon of temporary architecture - starting points and potential). In: ALFA, 2020, roč. 25, č. 3, s. 36-42. ISSN 2729-7640
- [5] MAZALÁN, P. Architektúra ako scénografia. Vplyvy architektonickej symboliky a formy na scénografické koncepty (Architecture as scenography. Influences of architectural symbolism and form on scenographic concepts). In ALFA, 2017, 22/3, s. 42-51.

- [6] ULČIANSKA, Z. FAKULTA ARCHITEKTÚRY A DIZAJNU In: Spektrum, 2022-2023, roč. 28, č. 3-4, s. 75. ISSN 1336-2593 (BUJDÁKOVÁ, K. author's statement in an interview on the design of a temporary theatre space in the former boiler room and theatre stage for the play Electric Angel)

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