

A Fiction of Refunctioning: Analysis of a Late Modern Industrial Facility in Sivas with Studio Experience

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ABSTRACT

While cities expand their borders with new development areas; the urban space is gradually positioning in hybrid zoning, and thus, the collapse zones between new constructions are emerging in the urban space. These collapse zones are being restructured with important showcase projects in the future of cities under the name of gentrification. This text deals with the re-functionalization of a small local industrial production facility located in the Sahtaboğan locality of Sivas Kılavuz District and surrounded by new buildings such as health facilities and housing today. In the architectural design studio, the transformation and re-functionalization proposals prepared by the 4th-grade students for the re-functionalization of the facility, which is not functioning today, presented an experimental field for both the diversification of design research in architectural education and the creation of potential design outputs for the future of the city. Three kinds of tendencies were observed in the outputs of the design research, which was based on a real transformation in a problematic area of the city. The first concept of re-functionalization is to analyze the structures in singular relations by staying within a rational planning mechanism and in the second design approach, a more intrusive attitude has been exhibited in terms of understanding of the field and planning principles. Finally, cross-sectional examples that intervene in the area have emerged. As a result, the industrial production facility, which was located in the industrial zone of the city until the 1980s, was comprehended both in the modern architectural culture of the city and the possible roles that the city could play in the future with the design proposals for the re-functionalization of the inactive construction group.

Keywords: Architectural Studio, Spatial Transformation, Re-Functionalization, Sivas Province, Late Modern Building.

INTRODUCTION

While the renewal works with the aims of creating the city of the 21st century in the city centers is brought to agenda, the fact that it crossed the natural boundaries of the city in line with the factors such as the vision of economic development and branding became the harbinger of a kind of housing and construction activities for the areas remaining in the periphery of the city center. Therefore, while cities expand their borders with new development areas; urban space gradually stays in hybrid zoning. These areas remaining in the periphery of the center are gradually opened to construction; as we move away from the walls of the center, other vessels are feeding the city such as industrial plants and industrial production areas in the areas where new resettlement activities are carried out. It should be stated by opening parenthesis that during this process the subjective examples that make up the modern architectural memory of cities have lost their value; moreover, many of them have been destroyed, and the rest has been provided

protection depending on their location. It will not be exaggerated to say that the sections on the continuity of modern architecture in Sivas have lost their legibility. Moreover, with the disappearance of examples having a characteristic character in the spatial layer of the city, the urban test field of modernity has turned into a problematic production environment in terms of architectural scale. This text, which examines the structures of a small local production facility of a late modern nature located in the periphery of Sivas, considered as a small-scale city of Anatolia and located in the periphery of the center, carries out the spatial analysis of the buildings before they disappear and yet carries the intention of a documentation/promotion to develop design proposals.

Naturally, such a goal has a content of modern architectural culture and the re-functionalization of industrial heritage and its handling in architectural design studios. This task can be considered as a natural tendency of the architectural education. According to Uz (2013) the most important focal point in architectural education is the discussion of the contemporary urban issues and, parallel to the new conceptualizations, studio should be evolved because of the complex structures in city. In the context of Sivas, although the urban scale value of the structures in the production facility is considered at first glance, it is considered to be left at the very edge of the coast; it is subjective in terms of being in the new development area of the city and reflecting the architectural understanding of the 1980s, and the lack of examples produced with similar architectural programs at the time of construction reveals the difference of the building complex. In summary, this text focuses on an area that was called the most extreme point of the city until the 1980s and which was surrounded by small industrial facilities for construction as a result of urban development, and which was first triggered by housing practices and then the construction of large-scale public buildings. Today, this region, where hybridization takes place within the context of urban space organization, has become a kind of urban transformation area. Although it was able to maintain a certain construction boundary between the houses built up to the 1980s and the industrial and residential areas, the area underwent rapid renovation with the opening of the new Numune Hospital. Thus, the coexistence of health facility-housing areas and small industrial facilities created an intertwined urban context.

The functionally complex arrangement of the field remains a potential to be extracted over time. The building, which is located in such an urban dynamism and is the subject of architectural studio work, is a small local production facility and defines a small urban scale together with the building groups. Research on this small local production facility shows that the building group will probably be demolished over time. The fact that the existing area has become an urban development zone, and especially large-scale constructions such as hospitals, have completely changed the future of the region leaves this small local production facility idle. When evaluated in terms of both architectural character and lifetime; instead of describing the area of the structure and the service units around it as a collapse area, considering it as an existing building stock and researching the reuse methods will also contribute to the preservation of the context. For this purpose, the building group is scheduled as a sketch exam for the 4th-grade students of the 2018-2019 academic year at the Department of Architecture of the Faculty of Architecture at Sivas Cumhuriyet University. This is a form of production, both in terms of the architectural studio and re-functionalization. Also, this sketch exam can be considered as a hidden curriculum within the design studio. According to Dutton (1987) hidden curriculum in architectural education increases the examination of the design studio as an experimental milieu. By this way, different dynamics congruent with the main topic of the studio can be assessed from the different viewpoints and thus, it contributes to the development of the main studio content.

As it is considered in terms of re-functionalization, such a process, namely the process of transformation of urban space defined by a group of buildings that remained as a collapse zone in the development area of the city, indicates that the context has changed, the economic dynamics have been shifted and the orientation of social needs

has changed. It is an important approach in terms of conservation to ensure continuity of reading spatial memory through indicators without a loss (Çakır & Gönül, 2015). In buildings with functional aging but not physically expiring, the re-functionalization of the existing shell from collapse is an alternative building production technique (Büyükarıslan & Güney, 2013). It also offers a sustainability understanding in terms of the use of stock (Tanrısever, Saraç, & Aydoğdu, 2016). The resultant product resulting from the re-functionalization of the structure is not only for the protection of the structure but also for the recycling of the material and energy investment made in the past and creating resources for urban development (Alagöz, 2015).

This feature of re-functionalization in terms of urban transformation is also valuable in terms of its contribution to the diversification of design research in the architectural studio environment, which is the basic mechanism of architectural education. This basic mechanism of architectural education, namely studio can be identified as a learning milieu. According to Lawson (2005) studio is an environment where students are set a series of design problems to solve and also, it contributes to the learning mechanism by doing rather than studying or analyzing. Thus, testing the design-oriented approach to architecture and the methods of acquiring design knowledge opens up new experimental areas that feed the architectural project-oriented design research with different dynamics. Dinç Kalaycı (2016) states that the architectural phenomenon cannot be learned only from design studios and that the application and intellectual field of architecture include theoretical knowledge and methods of obtaining it. The design outputs for the re-functionalization obtained within the scope of this text are the results of a parallel experiment, which is added to the architectural project studio on the main axis with a small sketch work, namely the hidden curriculum. Oxman (2004) states that experimental approaches in design education include theoretical foundations for modeling based on cognitive theories of thinking, creativity, and learning and that cognitive process in design is obtained through modeling, and moreover, the student learns about design in addition to how to design will work as a design researcher. Therefore, it is aimed to bring the architectural student group face to face with different design research in an ongoing architectural studio environment and to carry the design sensitivity of the student group to a different stage in a short time in the long-term architectural studio environment. It is also aimed to increase the ability to comprehend a problematic area of the city with the orientation of a different design exercise and it is aimed to experience the students to produce a realistic architectural product with real design research in the exploration journey in which scenarios for the future of the city are accumulated. Galle (2011) emphasizes that there should be criteria such as public acceptability, appropriate scope, and exploratory potential in the definition of design and asserts that it is not possible to teach design without mentioning creativity, ideas, and goals.

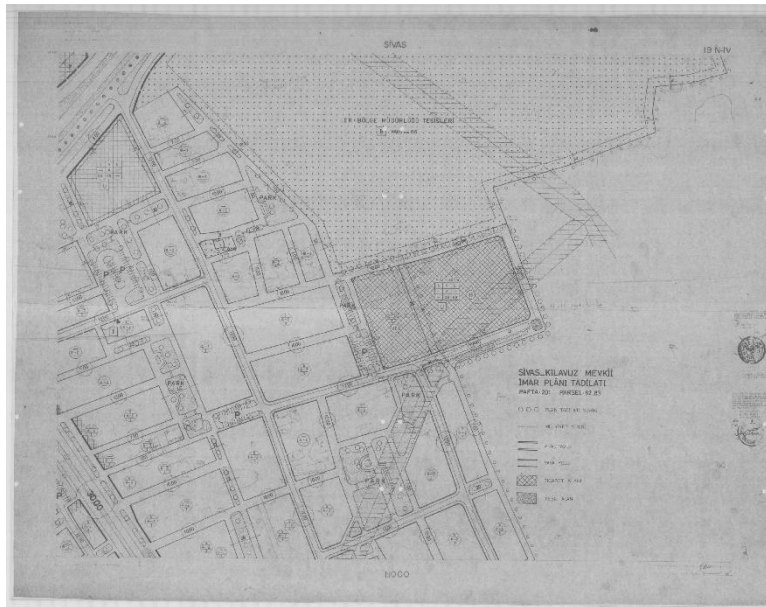
ARCHITECTURAL ANALYSIS OF SLAUGHTERHOUSE AND SERVICE UNITS

Located in Sahtaboğan locality of Sivas Kılavuz District, the building is private property and built to be used as a slaughterhouse (Picture 1). The slaughterhouse is located in a garden with service buildings around the building. The slaughterhouse, located in 201 section, 880 city blocks, and 82 parcels, living on a total area of 6648.70 m² and also, in the garden housing, barn, haystack and storage units such as service units are available. As a result of the researches carried out in the Sivas Municipality, the building, which is intended to be used as meat and meat products manufacturing facility, has a usage area of 1344 m². The land registration was formed in 1987, it was planned as the municipal study area in 1988 with resolution number 7, its construction was started with a construction license dated 1989, and the construction was completed in 1992 and permission to use the building was requested in the same year (Sivas Belediyesi, 2018). However, the service units in the slaughterhouse building and garden were never opened for use and today, a part of the garden area has been expropriated in accordance with the renewed zoning plan decisions of the city; Facing many problems, the structure became increasingly idle and its destruction came to the agenda (Picture 2). Designed by

architect Erkan Karagülle and dated from the late 1980s to the early 1990s, what makes it so interesting is the architectural images it contains about modernist aesthetics.



Picture 1. The location of the building relative to the city square and an overview of the building.



Picture 2. Status of the building according to reconstruction plan (Sivas Belediyesi, 2018).

The building, which was intended to be used as a workshop, was placed on the northwest-southeast axis and according to the plan decisions dated 1988, the rectangular mass was surrounded by two 10 and 12 meters roads from the north and south, and the area to the northwest of the structure was divided into a park and parking area (Picture 3). Today, the road passes only the northwest of the building and its immediate surroundings are equipped with new construction areas such as hospitals and residences.



Picture 3. Plan decisions dated 1988 (Sivas Belediyesi, 2018).

From the architectural scale; in the area, there are a slaughterhouse building, a residence, a haystack, an open barn, and a closed barn; and this complex is a small local production facility. The workshop building, which is reached via the road, does not have a direct connection with the service units to the east, and the transitions between the workshop and other buildings take place via the garden. With this location, the workshop and service units offer a distinct image; On the other hand, the service units consisting of dwellings, haystacks, and open and closed stables are located to form a courtyard with each other and have more distinct connections (Picture 4).



Picture 4. Current location and views of the workshop and service units.

Although the slaughterhouse was planned and built in the late 1980s; the square barn structure was foreseen to be a closed barn and the rectangular barn structure was built in 1972 (Picture 5). Thus, the closed barn, which was built in 1972 and consisted of a long rectangular mass, is the first structure of this local enterprise and it determines the boundary of the facility along with the square barn that was built in 1975. This boundary area was completed with a second-long rectangular mass of housing, haystack, and storage so that all service units outside the workshop were surrounded by some kind of

courtyard; the area surrounded by these structures is so prominent that an open barn was built in this space (Picture 6).



Picture 5. Service units of the workshop.



Picture 6. Open area of the service units.

All service units are designed to meet their functional requirements and equipped with the tools required by the architectural program. Especially the building dated 1975, was constructed by articulating 3 rectangular shapes and the window openings and roof ends reflecting the original architectural language on the facade were arranged in a very rational way. Another feature what makes these structures interesting is that the structural elements are designed by the non-architect owner; it was also learned that the details of the composition of the steel structure elements carrying the top cover, which also provided the formation of the large span of the square structure, were designed by the owner (Picture 7).



Picture 7. Interior of the square service unit and details from the structural system.

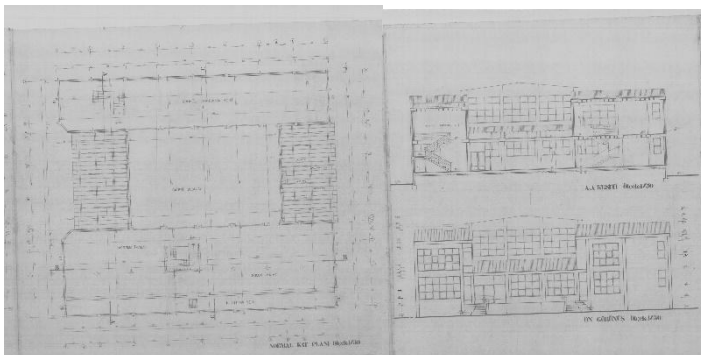
The main building of this small local production facility, the workshop or slaughterhouse, is more characteristic than other structures. The main production facility structure is a rectangular mass and the entrance facade of the mass is pulled out from the central axis and the gallery hollow area forming the body of the building and the service units surrounding the gallery have been exposed expressively. While the service units surrounding the gallery in the interior extend forward from the building body, the body with the entrance axis opening to the gallery is pulled inward and a semi-open space is formed on the entrance facade. The fact that the masses of the service units extending

from the building body to the front completes the entrance niche is a symbol of the transition between modernist aesthetics and postmodern. This entrance niche was also completed by a type of eaves designed by the non-architect owner. The central body of the building is completed with the strip window opening behind, while the effect indicates that the local enterprise is a small factory (Picture 8).



Picture 8. Entrance axis of the building and fringed entrance niche details designed by non-architect owner (author archive, 2018).

After the entrance axis of the building, gallery hollow area constitutes the biggest effect in the interior space. After the entrance axle has been replaced by a small sales unit, the gallery hollow space behind this area has been designed as the main functional unit. While sales unit of the ground floor consists of wet areas consisting of cutting place, drying place, meat dismantling, meat products production place, refectory and shower-wc; upper floor consists of meat products production area, drying area and storage areas. On the ground floor there is a direct transition from the meat removal section to the backyard. The gallery hollow space, which functions as a cutting place, is an area dominating the whole mass and is organized with a wide span system. It was learned that the entire structural system of this main space in the mass was also designed by the non-architect owner. In this way, the service units such as storage, drying and production sites located around the gallery space, that is, the hollow space, are solved in a long-thin rectangular mass. Transitions to the upper floor are provided by two separate staircases located within these long-thin rectangular masses. The facades of the building are handled with an expressionist attitude and the first striking is the axial emphasis of the facade surfaces of the structural skeleton; such that the surfaces between the axle arrangement formed by this structural system are completely braided on the upper floor by a wide span window system. The facade layout of the building resembles an industrial production facility that has faded between modern and postmodern (Figure 9).





Picture 9. Plan, section, facades and interior views of the building according to the original project
(Sivas Belediyesi, 2018; author archive, 2018).

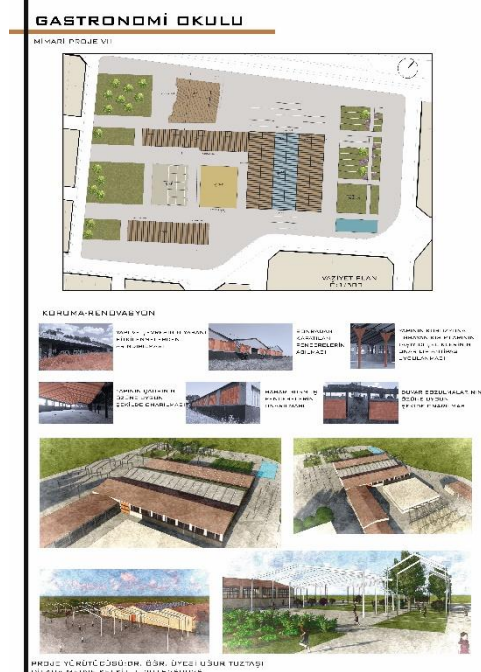
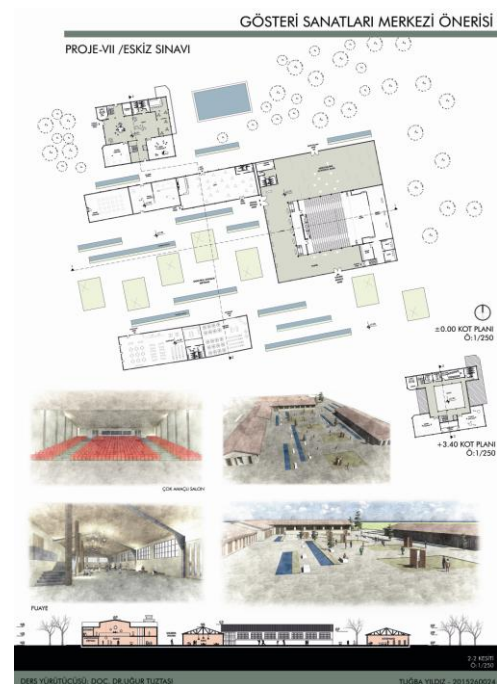
REFUNCTIONING SUGGESTIONS AND CLASSIFICATION OF DESIGN APPROACHES

Today, this production facility, which has remained idle and unfortunately never opened for use, has become increasingly lonely and abandoned to its fate as a result of new constructions around it. As mentioned above, the structure, which is important in terms of being a small industrial structure belonging to a local business, also has a structure designed with ambiguous contents between modern and postmodern. Still, some architectural elements such as the structural details of the roof opening being designed by the non-architect owner also makes difference. Considering these features, a studio study was carried out to re-functionalize the structure and the results were tried to be evaluated.

The studio work aimed at re-functionalization was planned as a design research within the scope of the sketch exam of the 4th grade students of the Department of Architecture, Faculty of Architecture, Sivas Cumhuriyet University, 2018-2019 academic year. The student group, which issued a comprehensive survey of the slaughterhouse and other service units, was expected to propose a re-functionalization program, including all service units in the building and garden. The main objective here is not only the inclusion of a dormant building in the reuse area within the existing building stock, but also as a result of the intense construction pressure of the area that holds a part of the urban space as an industrial zone in the 1980s; it is the accumulation of outputs for design researches about the future role of the building upon its transformation from an industrial zone to a residential area. More specifically, the main design fiction of the study is based on a thematic approach to the development of a function program that will constitute a resource for the reproduction of the environment, and to reconstruct spatial potentials and to design a city and locus of interest (Uğursal, 2011). Still, it is one of the basic expectations that the functionalization program should be dealt with first of all with the aim of transforming the space into a habitable space and developing design proposals

that provide access to a holistic composition in spatial organizations. In the context of close environment; consistency in site plan decisions; original spatial context and relevance in new design decisions; accuracy of tectonic fiction; continuity in indoor organization; holistic stability in landscape construction; front-gabarite relations with existing fabric in new mass organizations; public activity, priority of public functionality; it is aimed to draw conclusions that take into account design parameters such as original idea effort in design decisions. In summary, it is aimed to highlight the potentials of the location of the facility with the expectation that the elements that will contribute to the quality of the spatial context in the design proposals will be prioritized, and the rehabilitation of the area is aimed. In the meantime, in the new function program, where the facility structures will be adapted with minimum interference to the original architectural identity and production traces; The legibility of spatial monitoring was also considered as an important design stakeholder and the design problem was asked to be addressed in anticipation of the goal of transferring the production culture of the structure to future generations. In terms of spatial fiction; correlations such as adaptation to new function, spatial fiction, the suitability of the circulation scheme and the suitability of the accessories to the new function (İslamoğlu, 2018) were questioned at every stage from the beginning of the design to the final product. Still, in the evaluation of the additional building design principles in the old-new space constructions of the students; it was emphasized that the criteria such as harmony - contrast, proportion - ratio - scale, contemporary structure and material usage, lightness, transparency - facade-gabarite relation, non-concealer, easy assembly (Karakök& Gökarslan, 2017) will be effective.

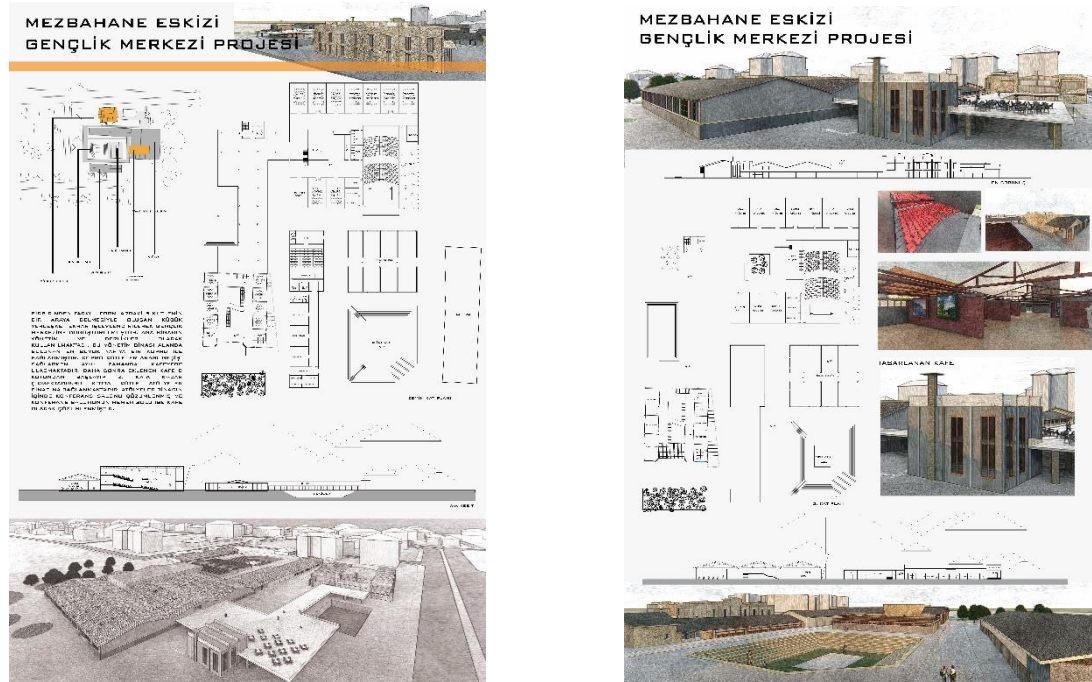
The sources and expectations of the design process have been tried to be expressed above. If the design results are evaluated; when the suggestions were analyzed in the context of design approaches, it was found that there were three main orientations. The first of these is and to analyze the structures in singular relations by developing a rational understanding of planning. The intervention method focused on the transformation of individual units. In the studies that collect all the building masses under the umbrella titles such as "traditional folk arts center", "plant museum", "performing arts center", and "art school". The open areas between the buildings were considered passive green areas and transition zones (Picture 10). For example, in the design research shown in Figure 10, it is seen that only the building masses are re-functionalized separately, the necessary spatial units and reinforcements are added and the interior organization is reconsidered. In fact, even the gallery space in the main mass of the slaughterhouse was left with the same linear lines and only the new function definition was made in the wide span area. Moreover, both projects did not find it appropriate to use the original constructions designed by the non-architect property owner, and instead brought a structure suitable for the functional organization of the interior; this structural scheme is the most commonly used steel shear systems today. A common orientation is noted in both project proposals, which eliminate the original construction layout, and both proposals did not engage in an intrusive attitude towards the design of urban space use. The L-shaped open space, which consists of a residence-open barn-haystack-warehouse and a closed barn, is equipped with vague arrangements such as a fairground area or artistic activity square and weak architectural constructions that organize these arrangements.



Picture 10. Examples of the design approach developed within individual relations.

In the second approach, umbrella titles such as “public activity campus” or “gastronomy school” were found, but the manner of understanding of the field and planning principles were handled in a more intrusive manner. For example, while the structures were re-functionalized in a single context, the relations between the structures were not forgotten, and transitions and bridges were formed. Furthermore, relationships that redefine the area, such as additional structure proposals, have been constructed. All gaps between the building groups were subjected to sharp transformations in accordance with the new building program with the same intervention method (Figure 11). For example, the project presented in picture 11 envisages the transformation of the area into a youth center, and a bridged system was designed to establish a real transition between the slaughterhouse and the closed barn of 1975. This system brought a strong definition of semi-open space to the northern area between the slaughterhouse and the closed barn,

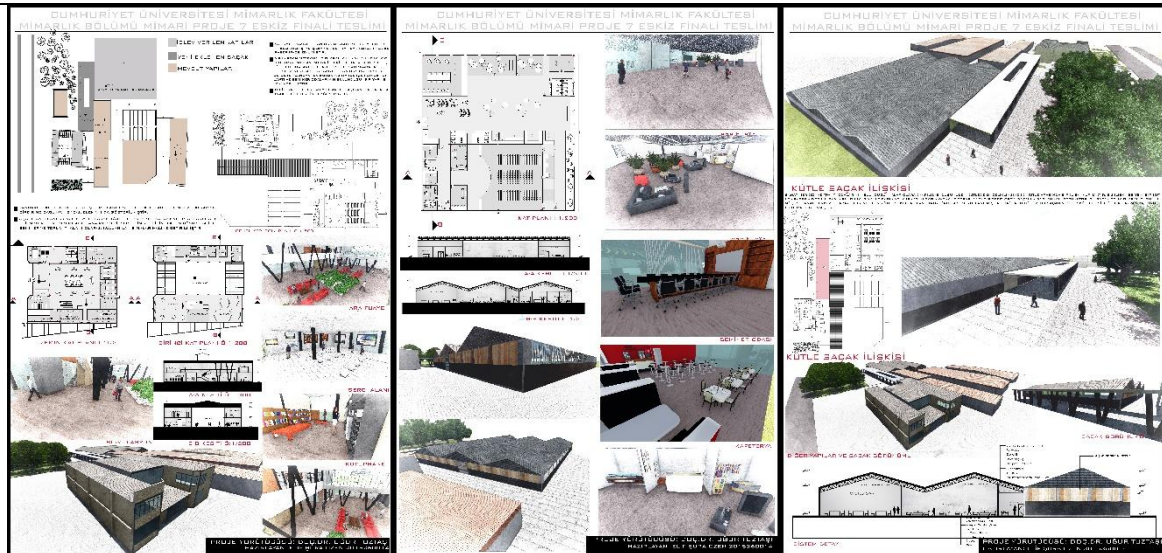
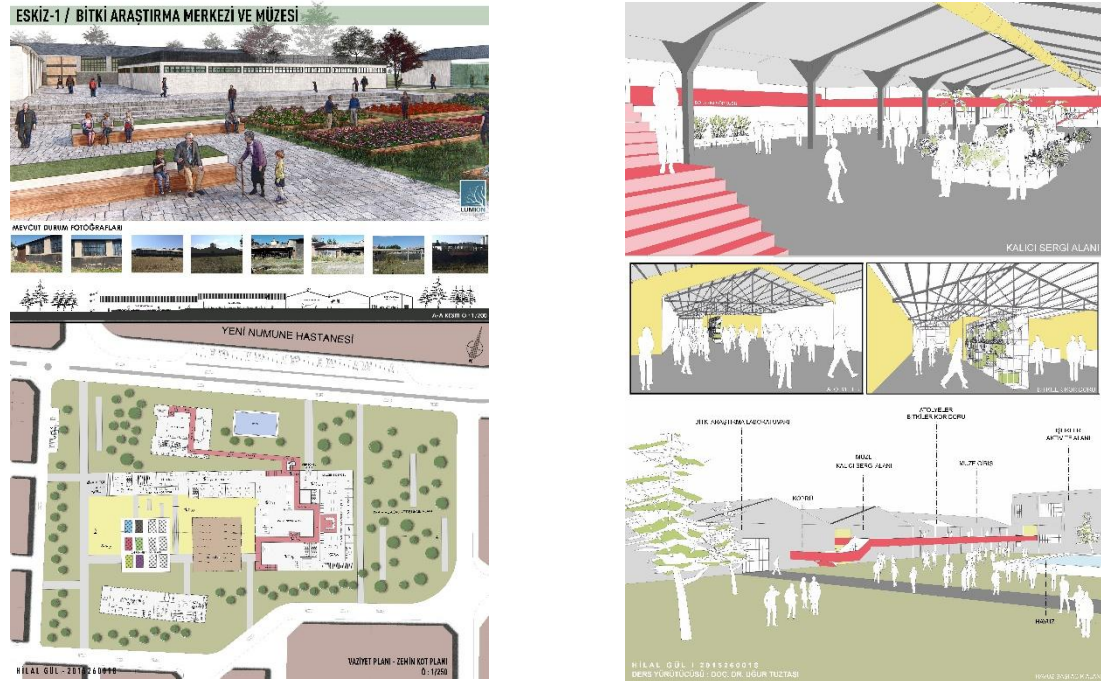
thus making the pool space in the existing settlement functional. The slaughterhouse, equipped with classrooms, has also undergone a comprehensive change in the interior; the large gallery space in the area was re-designed while the divisions between the units were structured according to the new function. In accordance with this arrangement, an exit was given to the north and a transition to a strong bridge system was provided. In addition, this bridge line, which has wide viewing areas, is reinforced with a small additional structure in the direction of the closed barn. and thereby providing access to the closed barn. As a result of all the functionalities consisting of art workshops and conference halls, a comprehensive renovation of the existing mass stock in terms of structural elements was envisaged. However, this also affected the structural arrangement, thus eliminating the construction designed by the non-architect owner.



Picture 11. Examples of design approach developed with an intrusive understanding in the field.

In addition to these two basic orientations, there are also cross-sectional examples that intervene in the area. The method used to uncover the relationship and relationship levels between the structures is to establish semi-open spatial relations between the structures by means of covering elements such as eaves and to form a binding structural element starting from a point and continuing with a certain axial system throughout the design area (Picture 12). For example, in the first design research with the theme of plant museum in picture 12; all structures were functionalized as individual independent units. While the slaughterhouse building is evaluated as an activity and workshop space, the long rectangular mass consisting of housing-open barn-haystack-warehouse constitutes the main entrance of the plant museum. All the exhibition units belonging to the museum, digital presentation areas, workshops and research laboratories of the museum were placed in this mass apparatus and the long rectangular unit was expanded into the closed barn in 1975 and the area was re-functionalized. In the design study, the surface areas between these three masses were partially intervened and a circulation line was established starting from the staircase that provides vertical circulation of the slaughterhouse in order to establish a more permeable relationship between the building bodies. This fiction passes over the main space of the slaughterhouse with a gallery space towards the pool-garden area on the back and connects the slaughterhouse building, which is organized by workshops, into the museum mass. In other words, the closed barn of 1975 was encircled by a bridge from the north and turned into a

circulating area inside. Since the building height is suitable, a partial gallery space was obtained in the closed barn area. The open spaces in the project are designed as botanical garden and learning-hobby areas. In the second example, which adopted partial intervention as a method, the northern area between the slaughterhouse and the closed barn of 1975 was completed with an eave that served as a gathering passage. However, the eave surface, which in fact had no other role than defining a semi-open space, remained only a symbolic structural element.



Picture 12. Examples of partial intervention in the field.

Finally, a comparison will be made between the project that develops a rational planning comprehension and the project that develops an interventionist attitude. The purpose of this comparison is not only to reveal the difference between the design principles adopted, but also to determine whether there are similarities despite differences in the final product. For example, the study in Picture 13 has a basic content that consists of repairs on a single structure scale developed through a rational understanding (Picture 13).



Picture 13. Proposal for re-functionalization in rational planning approach.

The proposal in Picture 13 is based on a re-functionalization with the theme of "Sivas Traditional Folk-Art Center". The slaughterhouse building was functionalized as an administrative building and handicraft workshop, the closed barn structure built in 1972 as a carpet workshop, a long rectangular mass consisting of an open barn-haystack-warehouse and residence as a local kitchen workshop and restaurant, and the closed barn built in 1975 was made of copper. - as a relief workshop. In this program, no radical approach was taken in the shaping of structural elements; rather, the existing structural reinforcements being repaired and renewed were envisaged, and partial additions to the existing building stock were proposed by using materials such as steel and glass. In particular, a new steel shear system is envisaged to be added to the bearing system and the details designed by the non-architect owner are once still ignored. There is no fundamental change in the facade arrangement in all buildings; even the openings in the facade lattice remain the same. On the other hand, although the open space between the building masses is generally left as a passive green space, an open exhibition and sales area proposal with a steel carrier system has been developed. However, this developed attitude could not bring about a radical change that contributed to the whole field.

Picture 14 shows the design proposal that treats the area with an intrusive attitude. The program, which is defined as "Sivas Public Activity Campus", adopts an approach in which the individual building masses are functioned independently of each other and in this respect, the study shows a similar attitude with the re-functionalization approach in the project seen in picture 13. Accordingly, the slaughterhouse building was functionalized as a library; long rectangular mass consisting of haystack-warehouse and residence as administrative unit; outdoor barn as exhibition hall; the closed barn of 1975 as a cinema and theater, and the closed barn of 1972 was used as a children's center. However, these individual relations are directed towards a more characteristic content with the classrooms proposed to the north of the slaughterhouse building. The northern area, defined by a pool between the slaughterhouse and the closed barn of 1975, has been given a new appearance with the suggestion of mass consisting of open-semi-open-closed spaces where horizontal and vertical lines are distributed in a balanced rhythm. In fact, a design character that spans the entire area has emerged.



Picture 14. Design proposal developed with an intrusive attitude in the field.

The structural and structural components remained constant and all the structures in the area were reconstructed with similar materials and textural properties. For example, a relationship was established between the additional mass added to the area to the north of the slaughterhouse building and the existing structures in terms of structural features as well as rhythm and balance. Even the large span terrace surface, which grasped the area with a better view, was solved by two opposing steps in the horizontal plane and a closer connection was established with the existing pool in the garden. In addition, the additional mass, in which the classrooms are located, was enclosed in a plain white sheath, indicating that it was built at a different time interval from the existing building stock. The northernmost end of the class is interpreted with an expression that refers to the expressionist facade of the slaughterhouse building, creating the perception that the area is the product of a similar architectural language along the northern facade line. Thus, this project proposal, which exemplifies the approach that intervenes in the field, has followed a different route in terms of design decisions despite the similar functionalization approach developed by the rational understanding in picture 13. Moreover, the proposal presented in Picture 14 includes arrangements that allow sharp interventions in the interior of the slaughterhouse and other building masses. The gallery space in the slaughterhouse building was reorganized and by dividing into smaller areas, which were connected to the bridge providing the transition to the additional mass in the north and the gallery space was redefined with new vertical circulation elements. In the space organization of all other building masses, the partitionings of the interior were arranged in accordance with the new functions, but a new structural arrangement which was carried out by steel scissors system was envisaged by removing the original top cover carrier system designed by the non-architect owner. In this context, the project proposal showed a similar understanding to the proposal in picture 13.

DISCUSSION AND RESULT

This study, which has been developed by re-functionalization by making architectural analyzes of a small-scale industrial facility which does not function today, has provided an environment that enables the diversification of design research within architectural education. Still, the re-use projects of historical / old buildings, which are often experienced in today's architectural studios, remain an effective category, especially in the context of the re-use of industrial facilities. In this context, it is also a positive

process for our 4th grade students to propose functionalization suggestions for a late modern production facility in terms of exploring the different orientations of the design resources. The production plant, which is the subject of the study, contains characteristic architectural elements with unique architectural components, although it is idle. For this reason, the process of exploring the original architectural elements of the structure through analysis is based on an important design process. Such that this process, which is based on experiencing the architectural style and subjective space findings of the 1980s, constitutes a basis for a correct functionalization program. It has been observed that programming the urban experience through a building complex that has lost its function, moreover, the urban scale strategy has been determined to intervene in the structures prior to going to a spatial organization by establishing a relationship with the traces of the past, the present situation and the newly added annexes. The students were freed in the selection of function proposals, but the integration of the proposed functions with a correct approach to structures and the design problems of the interventions were tried to be solved with critics in the process. In particular, the design inputs to ensure the legibility of the tectonic context and spatial layers are constantly questioned in the new-old contrast. In this context, all suggestions have tried to incorporate an attitude that is careful to understand the difference between the original material and the new material added. Once again, sensitive approaches have been tried to be obtained in order to achieve a mechanism that will not adversely affect the sink in the facade-gabari relations of the original building masses and additional buildings. Design approaches based on realistic transformation in a problematic area of the city are categorized. As a result, the recommendations were studied in terms of differences in design approaches and three types of approaches were observed. The first of these approaches is a type of approach in which each of the buildings is handled with an independent spatial organization with a rational approach, and in this direction, more intervention is aimed at architectural scale. The way in which this group of suggestions interferes with the landscape weave has not developed a holistic design approach. In functional programs, open spaces remaining among buildings as passive green spaces and transition zones in approaches developing suggestions such as "traditional folk arts center", "plant museum", "show arts center", and "art school". In the second approach, spatial function suggestions such as "public activity campus" or "gastronomy school" were brought forward. In contrast to the first group, the intervention style and planning principles towards the area were more determined. The relations of open-semi-open-closed spaces have been handled with a holistic fiction and efforts have been made to reach a significant unity of language. A flexible-permeable design fiction that complements the third-dimension effects within the landscape pattern has been tried to be developed. In a design fiction that refers to the old-new contrast, the intersection of the material-tectonic legibility of the new is presented. Accessories such as crossings and bridges showing the spatial connections between the structures are indicative of this. Again, in this approach, all gaps between the building groups were subjected to sharp transformations in accordance with the new building program by the same interventionist method.

In addition to these two basic orientations, the third approach is the intersection of the first suggestion group that develops a rational planning understanding and some approaches of the second suggestion which develops an understanding of an interventionist attitude. More specifically, suggestions were tried to be developed with a fiction that includes the orientations in the two groups. Covering elements such as eaves are used to reveal the spatial correlation and relationship levels between the structures within the area, thus it is aimed to form a binding structural element that continues with a certain axial system throughout the design area. It was also observed that the semi-open spaces were exhibited in a manner that enhances the functionality of the third dimension. As a result, students' suggestions for an idle production facility with this experimental studio, development of an accurate functional program by reading original spatial and structural relations in design fiction, questioning the usage level of material-tectonic components in old-new contrast has contributed to an instructional studio

environment concerning how the holistic understanding of urban design scale will be provided with legible urban accessories. More importantly, the intention to develop awareness of a late production facility awaiting the silent destruction of the city within the modern architectural culture at the point of producing urban reading and architectural scenarios related to the city is important for the students to comprehend the subject, with spatial reading practice and design approach realized through the re-functionalization. The use of existing building stock in the space has been experienced with the sustainability phenomenon. The resulting product, which is the result of the re-functionalization of the structure, has a function not only for the protection of the structures but also for the discovery of the sustainable accessories of spatial identity; With this kind of inquiry practice which constitutes a source for urban development, the possible roles that the city can play in the future have been accumulated.

REFERENCES

- Alagöz, M. (2015). Sanayi yapılarını yeniden işlevlendirme ve sürdürülebilirlik. *2nd International Sustainable Buildings Symposium Proceedings* (pp. 607-611). Ankara, Turkey: Gazi University. Retrieved from: <http://www.isbs2015.gazi.edu.tr/belgeler/bildiriler/607-611.pdf>
- Büyükarıslan, B., & Güney, E. D. (2013). Endüstriyel miras yapılarının yeniden işlevlendirilme süreci ve İstanbul tuz ambarı örneği. *Beykent Üniversitesi Fen ve Mühendislik Bilimleri Dergisi*, 6 (2), 31-58.
- Çakır, H., & Gönül Yıldırım, B. (2015). Tarihi yapılarda mekansal belleğin korunması: İzmit seka selüloz ve kağıt fabrikasının dönüşümü. *Beykent Üniversitesi Fen ve Mühendislik Bilimleri Dergisi*, 8 (2), 85-110.
- Dinç Kalaycı, P. (2016). *Etkileşimden bütünleşmeye bir mimari tasarım stüdyosu pratiğinin anatomisi*. Ankara: Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic. Ltd. Şt.
- Dutton, T. A. (1987). Design and studio pedagogy. *Journal of Architectural Education*, 41 (1), 16-25.
- Galle, P. (2011). Foundational and instrumental design theory. *Design Issues*, 27 (4), 81-94.
- İslamoğlu, Ö. (2018). Tarihi yapıların yeniden kullanılmasında yapı-işlev uyumu: Rize müzesi örneği. *Journal of History Culture and Art Research*, 7 (5), 510-523.
- Karakök, Ç.E.M, & Gökarslan, B.A. (2017). Tarihi dokuda "çağdaş ek" kavramının atölye ortamında deneyimlenmesi: Mass' workshop 2015. *Tasarım Kuram Dergisi*, 24, 54-78.
- Lawson, B. (2005). *How designers think the design process demystified*. Fourth Edition. London and New York: Routledge Taylor & Francis Group, Architectural Press.
- Oxman, R. (2004). Think-maps: Teaching design thinking in design education. *Design Studies*, 25, 63-91.
- Sivas Belediyesi. (2018). Sivas Belediyesi Plan ve Proje Müdürlüğü Arşivi.
- Tanrısever, C., Saraç, Ö., & Aydoğdu, A. (2016). Yeniden işlevlendirilen tarihi yapıların sürdürülebilirliği. *Akademik Bakış Dergisi (Uluslararası Hakemli Sosyal Bilimler E-Dergisi)*, 54, 1068-1082.
- Uğursal, S. (2011). *Tarihi yapıların yeniden işlevlendirmesi: İzmir sümerbank basma sanayi yerleşkesi örneği* (Yayınlanmamış Yüksek Lisans Tezi), Dokuz Eylül Üniversitesi, Türkiye.
- Uz, F. (2013). An architectural design studio experience: Research "publicity" by designing an urban-spatial niche in İstanbul. In E. De Vos, J. De Walsche, M. Michels, & S. Verbruggen (Eds.), *Proceedings of the Conference Theory by Design Architectural Research Made Explicit in the Design Studio* (pp. 239-248). Antwerp/Belgium: Faculty of Design Sciences, Artesis University College.