

BRUTALISM AND METU DEPARTMENT OF ARCHITECTURE BUILDING IN ANKARA

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Abstract

The authors of this paper present the Middle East Technical University (METU) in Ankara and especially the Department of Architecture Building. The building designed by Turkish architects Altug and Behruz Cinici is an excellent example of brutalist style, which spread all over the world in the 1960s. Additionally, brutalist aesthetics was considered to be the most proper for university buildings in those years. METU Department of Architecture was the first building in Turkey presenting such character. In its architectural form, being still almost in pristine state, there are visible many solutions typical of brutalism, such as: strong articulation of solids composed in an orthogonal geometry; the use of raw buildings materials – particularly exposed concrete with the imprint of the wooden formwork; repetitive elements creating rhythms on facades; concrete sun-breakers, gargoyles and cornices. Altug and Behruz Cinici were also inspired by local architecture and that's why the building is brutalist but also "traditional". 2011 was the 50th anniversary of the competition for the Department of Architecture Building. Furthermore the architect, the patron (rector) and the landscape designer of the campus all passed away that year. Hence this paper has a historical significance.

Streszczenie

Autorzy artykułu prezentują kompleks budynków Middle East Technical University (METU) w Ankarze, a w szczególności siedzibę Wydziału Architektury. Budynek zaprojektowany przez małżeństwo tureckich architektów Altug i Behruza Cinici jest doskonałym przykładem stylu brutalistycznego, który rozpowszechnił się na całym świecie w latach 1960. Estetyka brutalizmu była wówczas uważana za najbardziej odpowiednią dla obiektów uniwersyteckich. Wydział Architektury METU był pierwszym budynkiem w Turcji prezentującym taki właśnie charakter. Forma architektoniczna obiektu, pozostająca wciąż w oryginalnym stanie, ukazuje wiele rozwiązań właściwych dla brutalizmu, takich jak: mocna artykulacja brył zestawionych w ortogonalną kompozycję, stosowanie surowych materiałów budowlanych – przede wszystkim wyeksponowanego betonu z odciskiem drewnianych szalunków, uzyskiwanie rytmów na elewacjach przy użyciu powtarzalnych elementów, betonowe *brise-soleil*, żygacze i gzymsy. Altug i Behruz Cinici czerpali inspirację także z lokalnej architektury, dlatego budynek jest zarówno brutalistyczny jak i „tradycyjny” w wyrazie. W 2011 r. minęła 50 rocznica rozstrzygnięcia konkursu architektonicznego na projekt budynku Wydziału Architektury w Ankarze. Również w 2011 r. zmarli główny architekt, rektor, a także projektant zagospodarowania kampusu uniwersyteckiego, co sprawia, że poniższy artykuł ma dodatkowe znaczenie.

Keywords: Theory and history of architecture in the 20th century; Brutalism; University buildings; Turkish architecture; Altug and Behruz Cinici.

1. INTRODUCTION

Brutalism was the architectural style which spread all over the world after the Second World War. It reached the culminating point in the 1960s and fade away in the late 1970s. Many school, university and college buildings were often designed with a brutalist approach in those years. This aesthetics was considered to be the most proper for such type of buildings, because it emphasized durability, power and dignity – attributes connected with knowledge and science. Brutalism was appropriated in the Anglo-Saxon context rapidly. The beginnings of the brutalist style were related to a school building in the UK – the Secondary School in Hunstanton designed by Alison and Peter Smithson and built between 1949 and 1954. The style became soon popular not only in the new generation of English universities but also in the new buildings constructed in the historical ones. Collin St John Wilson and Alex Hardy proposed the extension to the School of Architecture in Cambridge (1959) representing pure brick brutalism. For an early brutalist educational structure in the US context, architectural historian Reyner Banham cites the Yale University Art Gallery designed by Louis I. Kahn and Douglas Orr and finished in 1953 [1] (Fig. 1). It is very symptomatic that the development of brutalist style all over the world is especially noticeable in buildings of architectural schools and faculties. Probably the most known is the Yale Art and Architecture Building in New Haven (Fig. 2). Paul Rudolph's masterpiece was built between 1958 and 1964. In the very same years Ankara, the capital of Turkey, attested the construction of the first brutalist building in the country – Department of Architecture of the Middle East Technical University. Its highly interesting form, spatial and structural solutions as well as history and present state are the subject of this paper.

2. CAMPUS OF THE MIDDLE EAST TECHNICAL UNIVERSITY IN ANKARA

Interestingly buildings which utilize raw building materials such as exposed concrete and brick are usually referred as METU style, at least in Ankara if not all around Turkey. The university campus has a wide acclaim in the architectural agenda in Turkey. Especially the Department of Architecture Building is nominated amongst the best 20 buildings in the country. While most of the other brutalist buildings are deformed in their further lives, such as painted or covered with metals, these campus buildings are still almost in their pristine state, still surprising many peo-



Figure 1.
Yale University Art Gallery in New Haven, Louis I. Kahn and Douglas Orr, 1953 [photo: W. Niebrzydowski]



Figure 2.
Yale Art and Architecture Building in New Haven, Paul Rudolph, 1958-1964 [photo: W. Niebrzydowski]

ple with the palette of materials as well as their spaciousness. It is interesting that, the students of architecture in their freshman years, asking if the buildings are “unfinished” and to be painted become fans of METU style in their further lives. Especially the Department of Architecture, for being an important institution in the education of architects has a wider impact, on the present and future architects. It is also

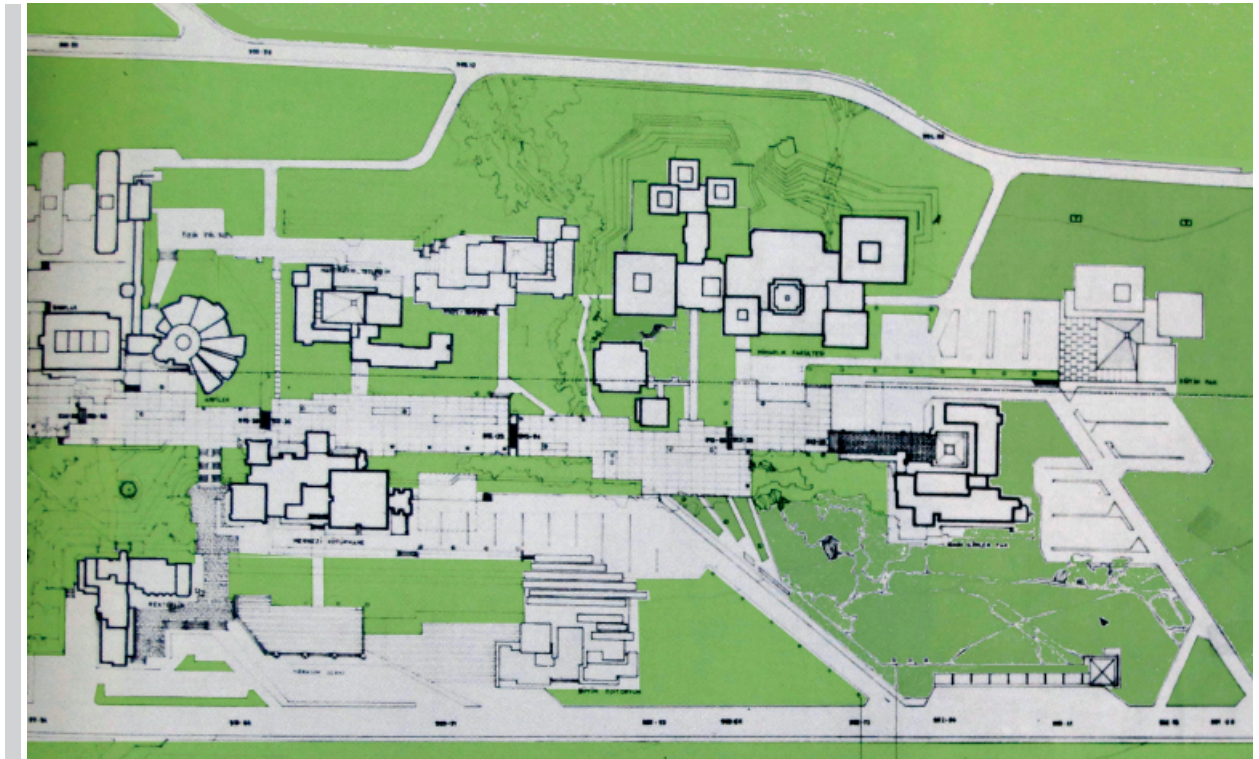


Figure 3.
Plan of METU Campus, Altug and Behruz Cinici, 1961

a building which impresses architects coming from abroad to meet with their Turkish counterparts [2].

The university was founded initially as the Middle East High Institute of Technology in 1956. The first group of academics, most of whom are Americans, were involved in the planning the university premises. Jaakko Kaikkonen, assistant of Alvar Aalto, developed a campus plan at a rather location in the campus grounds in 1957 [3]. Later on idea of an architectural competition was favored. The first competition of the campus organized in 1959, was an international one and won by the Turkish architect Turgut Cansever. Two years later a controversial second competition, was held and this time Behruz and Altug Cinici were the winners. It is possible to observe similarities between the winners of both competitions in terms of their pavilion organizations (Fig. 3).

METU Campus is located in a land of total 4500 hectares. The construction site was about 800 hectares in the early days. As the plan indicates there is a ring road for cars around the academic and administrative units. The pedestrian movement is on a linear alley totally detached from this ring vehicular road. Dormitories and sports facilities are next to this academic part.

Consistency of the architectural language of the university was open to debate. Although brutalist aesthetics of the Department of Architecture Building is usually appreciated, some critics stated that diversity is displayed rather than homogeneity when the totality of the campus is considered. For example The Central Lecture Halls Complex was influenced by Alvar Aalto with its curves. Enis Kortan noted that such mannerist formal experiments of architects were beyond the “objectivity” criteria of brutalism[4]. Compared to the Department of Architecture Building, the material palette was extended, exposed concrete recede to a minor role. Another commentator, Atilla Yücel also pointed to the variety of forms borrowed from different sources such as Japan, Aalto, Bakema, Rudolph, Gowan and Stirling [5]. Architectural critic Ugur Tanyeli was positive about this polyphonic nature of the total campus, saying that this variety underlined the central role of the subjectivity of the architect, rather than any rigid architectural ideology [6]. Behruz Cinici defined his pluralist approach with an interesting motto – “form follows intuition” [7] – which tolerates such covert allusions to these international figures.

3. METU DEPARTMENT OF ARCHITECTURE BUILDING

The Department of Architecture Building is the opus magnum of the campus. Construction of the building was finished in September 1963, and considered as the first building in Turkey built with reinforced concrete in brutalist aesthetics. The 13000 m² building was a very important enterprise at that time (Fig. 4). The construction process was a race against time and financial limitations. The Department of Architecture Building would serve as the total university for a while, where different administrative units, other departments and the library were allocated to different quarters of the building. The rector was surveying the construction process himself [8].

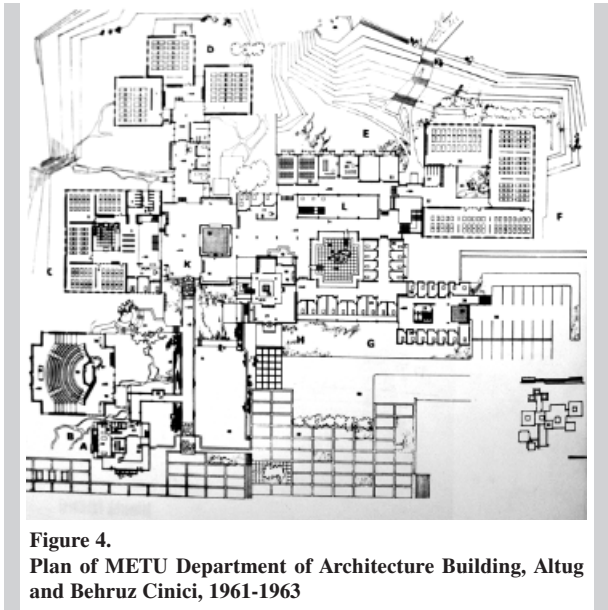


Figure 4.
Plan of METU Department of Architecture Building, Altug and Behruz Cinici, 1961-1963

The Department of Architecture Building presents many solutions typical of brutalist architecture. In some aspects its aesthetic qualities are comparable to the best buildings of that time. The building is very big and its plan is complex. It consists of several parts composed in an orthogonal geometry (Fig. 5). Two of these units are pavilions separated from the main

structure – one houses the auditorium and the other museum presenting the archaeological artefacts found in excavations realized in the METU lands. The form of the Department of Architecture Building looks like smaller version of huge brutalist mega-structures. Despite its impressive value of floorage, its visual effect is much more intimate and overall character is horizontal – the building actually is only 2 storeys high. On the sketch of the south elevation made by the architect one can see the horizontal layout and the three dominant solids (Fig. 6). On the other hand, the division of facades is vertical. Sun-breakers shading balconies, narrow windows (Fig. 7), *brise-soleil* elements and even the imprint of boarding on concrete texture are all vertical.

The form of the building is massive and heavy. There is visible strong articulation of solids (cuboids) forming the architectural composition. Unlike many brutalist architects Cinicis didn't use cantilevers, what makes the building rather static and calm. However, they use another solution popular in brutalism. Courtyards were typical of many brutalist complexes – both Le Corbusier's Convent of La Tourette and Paul Rudolph's Government Service Center in Boston were planned around spacious courtyards. Cinicis proposed a couple of smaller open courtyards



Figure 5.
Model of METU Department of Architecture Building, Altug and Behruz Cinici [photo: H. Zelef]



Figure 6.
Sketch of the south elevation of METU Department of Architecture Building, Behruz Cinici



Figure 7.
METU Department of Architecture Building – fragment of the north elevation [photo: W. Niebrzydowski]



Figure 8.
METU Department of Architecture Building – one of the courtyards [photo: H. Zelef]



Figure 9.
METU Department of Architecture Building – pedestrian colonnade to the main entrance [photo: W. Niebrzydowski]

with greenery and water fountains (Fig. 8). These courtyards humanize massive appearance of the building. Accentuation of internal pedestrian streets was also typical of brutalist projects (Fig. 9).

Altug and Behruz Cinici used repetitive elements on the facades to create strong rhythms – the best example of such design is the north elevation with balconies covered by sun-breakers (Fig. 10). They didn't hesitate to expose rough texture of brick, wood and first of all concrete (Fig. 11). Some parts of the exterior walls are of red brick. All concrete surfaces, both inside and outside the building, have the imprint of the wooden formwork (Fig. 12). What's surprising about the texture is its precision in contradiction to the unrefined concrete surfaces of many well known brutalist buildings. For instance Le Corbusier, the pioneer of brutalism in architecture, preferred rough, carelessly made textures and compared them to human faces with wrinkles and scars. As some commentators highlight, it is possible to mention an underlying tension within 1960s regarding the role of formworks: “the confrontation of the handcrafted and the industrial” [9]. Although METU bears the traces of the handcrafted wooden formwork, it is neither an artificially textured *brut-beton* (hammered, sandblasted, chiselled etc.) nor as smooth as the fine textures of industrial formworks that even utilize fibre-glass moulds.



Figure 10.
METU Department of Architecture Building – balconies covered by sun-breakers [photo: W. Niebrzydowski]



Figure 11.
METU Department of Architecture Building – different textures on elevation [photo: W. Niebrzydowski]



Figure 12.
METU Department of Architecture Building – concrete texture with the imprint of the wooden formwork [photo: H. Zelef]

High quality of concrete surfaces could also be the result of cooperation with the German consultant Erwin Heinle who was invited to Ankara in 1962, for his articles appeared in “Bauwelt” magazine about exposed concrete. Rector Kurdaş notes that Heinle’s advise to the architects and to the building workforce to prepare the appropriate aggregate, formwork and

vibration methods were very beneficial [8]. Heinle himself also mentioned that reinforced concrete was economic in METU case, since aggregate could be found on site and inexperienced workers could be trained in a short period of time [10]. Behruz Cinici stated that the only raw concrete structure he had seen till that time was a cement factory on the road between Istanbul and Ankara. The architects noted that after getting acquaintance with this technology, they also did some experiments and tried to utilize white concrete as well. Today it is possible to observe such prefabricated white concrete units in the sun-breakers, some window frames, gargoyles and cornices of the Department of Architecture Building. Very interesting texture is also visible on fragments of the floor in the building – small round stones were embedded in concrete (Fig. 13). It should be emphasized that all of the interior details were carefully designed by the architects – concrete plant pots, balustrades and the symbolic wooden entrance door (Fig. 14). Grid structure of the two way rib system of the slab plays important spatial and aesthetic role. While it sets the size and location of the door and window openings, this square pattern of the exposed reinforced concrete ceiling also gives strong light and shadow effect (Fig. 15).



Figure 13.
METU Department of Architecture Building – texture of the floor and wall [photo: W. Niebrzydowski]



Figure 14.
METU Department of Architecture Building – symbolic door
“han kapisı” (door of travelers’ lodges) [photo: H. Zelef]

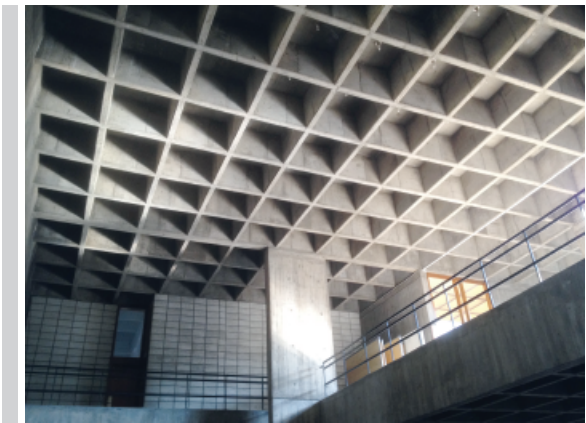


Figure 15.
METU Department of Architecture Building – exposed rein-
forced concrete two way rib slab structure [photo: H. Zelef]

It is obvious that brutalist idea “the unique solution in an unique situation” (emphasized by Reyner Banham) was realized in the Department of Architecture Building. This is particularly evident in references to the local architectural tradition. Altug and Behruz Cinici considered that the first building of the biggest Turkish university located in the capital city should present an indigenous character.

This building also appeared in the international media one of which is Jurgen Joedicke’s article [11]. Although consultant and the first reviewer of the campus in the international agenda are German, Behruz Cinici visited Israel, USA and India to open his horizons. Possibly due to the American support in the foundation of the campus, instead of Europe he visited US in 1966. This 45 days long visit covered many campuses and libraries in the east coast. He contacted with Louis Kahn and observed some brutalist structures such as, Paul Rudolph’s Art and Architecture Building at Yale and Le Corbusier’s Carpenter Center at Harvard. He wrote that he became more tolerant to the Turkish entrepreneurs after seeing the quality of concrete there. He adds that after seeing Chandigarh, he got even more conscientious [12]. Architect also points to the Indian president Zakir Hussein’s comments to METU Department of Architecture Building during his visit to Ankara in this context: “an architecture which is not ashamed of being naked”. Similarly first rector Kemal Kurdaş notes that against all the critics against *beton brut*, he himself raised the same choice: “I like nakedness” [13].

When considered in the context of an international and national architectural agenda, the aesthetic language of the building has different connotations. 1960s is the decade where Japanese architects appear in the international agenda with a modernist but also with a distinctive language with references to local architecture. Turkey had also been trying to solve the dilemma of being modern but also “traditional”. Hence texts refer to both international and local sources to evaluate the building. In this respect Behruz Cinici mentions that after a decade of “international style modernism” with large glass surfaces, negating the climate, topography, cultural and natural resources this building is a milestone for Turkish architecture. Architectural critique Tanyeli regards this as a proto sample of “counter modern” attitudes developing in 1960s.

The former Head of the State Cemal Gürsel referred to an indigenous source in describing beton brut of the building. This was the adobe village houses of Anatolia with their, monochromatic cubic masses and flat roofs. Rather than an alien building, Gürsel saw something familiar [14]. This familiarity can even be stretched back to the Neolithic town of Çatalhöyük in Anatolia. In the same vein, although technologically advanced, the building is “traditional” form wise, for example there is no daring cantilevers in the whole structure. There are also interesting ref-

erences to tradition or history, such as the huge wooden door, named as “Door of a travelers’ lodges” in Anatolia, or the lighting equipment influenced from the chandeliers of the past. Additionally to the intentions of the architects, the spaces have acquired similar references in the later life of the building. Currently main spaces have nicknames emanating from historical bath structures (hammams), such as “göbek taşı” or “kubbe altı” (Fig. 16).



Figure 16.
METU Department of Architecture Building – one of main interior spaces (artwork “Torus” by G. Kinayoglu) [photo: H. Zelef]

However, interior spaces are “modern”, long spans characterize the building. Not only the structure and spaces but also window systems or heating systems are quite novel in 1960s. Fan coil units, with the exposed piping supports the brutalist aesthetics of the building. Ordinary bulbs without any armature were utilized for lighting. Windows of the studios, placed high above the floors have interesting mechanical arms for opening. The architect also states that this building is the cradle of usage of Plexiglas and polyester in buildings as exemplified in the skylights. His preface to his “oeuvre” starts with the complaints from the insufficiency of the building industry in

Turkey in those times and the importance of this building to challenge with this backwardness [15]. Actually in those times brutalist use of raw concrete was also adopted in the industrially less developed countries such as Bangladesh – as the parliament in Dhaka (1961) by Louis Kahn attests – and India – Chandigarh project (1956) of Le Corbusier.

Architecture of the building was also criticized by the architects living in the building. For example Dr. Enis Kortan was summarizing the problems as follows [4]:

- The size of the circulation areas is more than the sum of the offices, classes and studios in square meters. This is very uneconomical considering the country in the 1960s.
- In total the building is 140 meters long and reaching from one place to another is time consuming. He adds that the level differences (5-6 steps) create further problems in walking. Bauhaus graduate Fritz Janeba teaching at the department in 1960s was also critical about this multi-level pavilion type planning. Although ramps for the handicapped have been built in the recent years for these small level differences, there is no elevator to reach the basement and the first floor.
- Architectural studios are anonymous places without much character. In order to place different studios in a square block for formal reasons, some of them face west, which is an undesirable orientation in Ankara.

However, positive aspects of the building were emphasized as well:

- Composition of square prisms to form a low rise, horizontal faculty, adapting to differences in the topography is “sensitive” and nature friendly.
- Natural light is masterfully used in some places, interior open air courts are surprising and interesting with water elements
- Minimalist number of materials i.e. reinforced concrete, glass, brick and building blocks. Exposed reinforced concrete as a finishing material is advantageous. Plaster, which cracks in the cold climate, is eliminated. Low maintenance is a real advance in a school which is not a well financed institution. However, reinforced concrete walls were without insulation. This makes the building very poor in terms of energy conservation

Today students can still experience both of these positive and negative aspects, learn lessons of architecture from the building itself, with its modular space organization, and its rich spatial composition, with multi storey volumes inside. The circulation spaces,

although quite large, display the concept of “event architecture”. Many ephemeral, unspecified functions take place in these, such as term juries, exhibitions etc. Extra-curricular activities, parties, cocktails, music performances, indoor sports are also organized spontaneously in these areas (Fig. 17).



Figure 17.
METU Department of Architecture Building – party in the hall [photo: H. Zelef]

4. CONCLUSION

In the recent years an annex to the Department of Architecture Building has been designed by the same architects for copyright reasons. Unfortunately this addition is a poorly designed and constructed structure, lacking many of the qualities of the original. Although it resembles the brutalist aesthetics, the exposed concrete appearance of the new is a fake one created with a silicon formwork to imitate wood texture. The interior walls were all painted white and undersides of the floors were concealed with suspended ceilings.

Although Behruz Cinici was regarded as an eclectic [16], pluralist [5] and master of improvisation [6] by many commentators, exposed concrete appeared in many of the later buildings of the architect. The architect adopted the brutalist use of raw concrete as a personal style and used it as an indispensable part of an aesthetic language even if he went beyond the ethical and aesthetical limits of modern architecture.

In this regard architectural historian and critique Reyner Banham’s title of the book dated 1966 seem still valid for this case as well: “The New Brutalism: Ethic or Aesthetic?”.

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