

chapternine

Conclusion

The relationship between architectural theory and practice is a widely debated and intricate subject, with many viable arguments and managerial challenges. This dissertation aimed to discover what the possibilities are in addressing the matter through the design of a facility that would accommodate the development of a sustainable relationship between the two aspects of architecture.

The main reasons for the problematic relationship between theory and practice are that the industry believes that universities are not producing students ready for practice; research performed at the university does not coincide with the relevant issues experienced in practice; and the industry does not effectively influence the educational

system. The author is of the opinion that the current relationship between theory and practice is in dire need of an intervention that will improve the relationship between the two entities, to create an environment that is beneficial to the education and practice of architecture.

The architectural concept focused on the development of a series of foyers that can facilitate a series of spatial and functional relationships.

The different relationships are in reality inseparable, but in order to create interdependency between theory and practice the ideal circumstances had to be identified. This knowledge, regarding the ideal circumstances, is used to create right environment for all aspects of a mutually beneficial relationship to develop.

As illustrated in Figures 9.1 - 9.9 the foyers can be divided into a series of layers, but as they overlap new foyers are created, until ultimately the entire structure becomes one large urban foyer consisting of many smaller foyers. Each of these foyers are designed to serve a different aspect, social intellectual or practical, of a more interdependent relationship between theory and practice.

The specific site was chosen due to the fact that it has similar segregation issues that also need to be addressed. The segregation of the two campuses is addressed through the design of an inviting and accessible inhabited, pedestrian bridge, also allowing the local community into both campuses. The specific programme of the

building, including workshop spaces, studios, a restaurant and exhibition spaces, aids in the re-establishment of the relationship between the different departments within the Built Environment. The public open spaces around the structure serve the programmatic function, aiding in the development of social, intellectual and practical relationships.

The large billboards on the eastern and western facades assisted in the development of the University's new interface to the public and the community, establishing better relationships between segregated entities.

The architectural language of the building succeeds in being a landmark building within the urban

context, while still respecting its direct context, adding value to the spaces around it.

The project is not designed as one finished intervention, but rather as the first step in a series of events and interventions. The influence the BESC has in architectural circles and the rest of the community should be re-evaluated as often as possible, and additions and alterations to the structure should be made as relationships require it.

The desired legacy of the project is to create a platform for interaction between members of the industry and students, in order to make the transition from theory to practice easier and more effective.

“If the next generation of architects cannot define some new relationship between the public and the process of building, they will lose that special sense of identity which the profession has treasured for so long... it is in this context that the most significant changes in methods of getting work are to be found” (Golzen: 1984, 9).

Foyer Interaction: Key

■ Social
 ■ Intellectual
 ■ Practical

■ Entrances

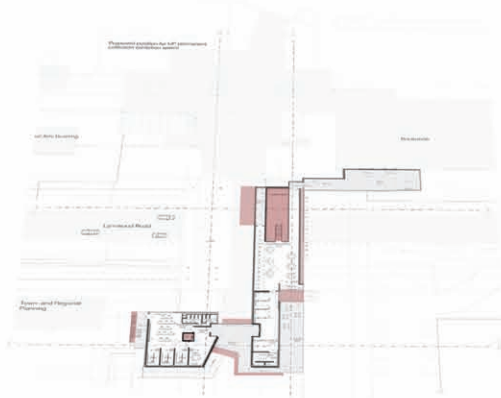


Figure 9.1 Top level interaction with lower levels

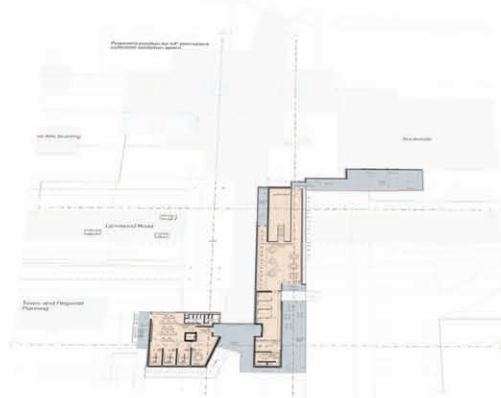


Figure 9.4 Top level - social, practical and intellectual foyers

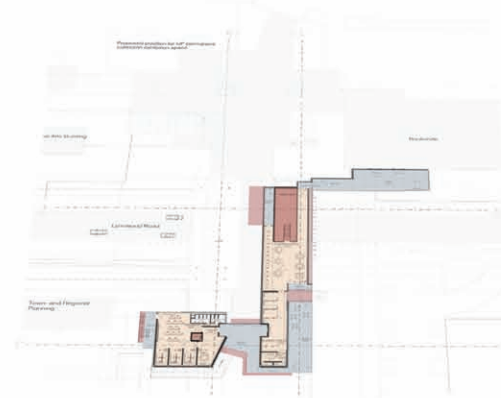


Figure 9.7 Top level - all foyers

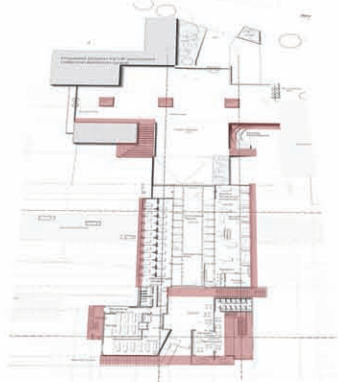


Figure 9.2 Bridge level interaction with other levels

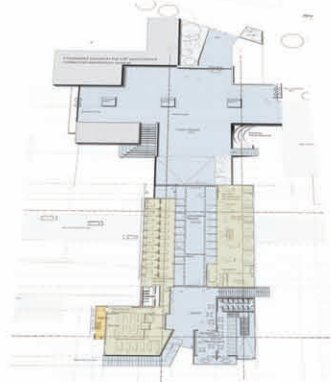


Figure 9.5 Bridge level - social, practical and intellectual foyers

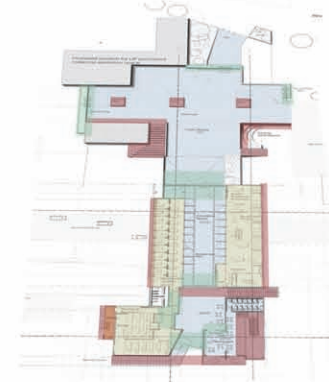


Figure 9.8 Bridge level - all foyers



Figure 9.3 Ground level interaction with other levels

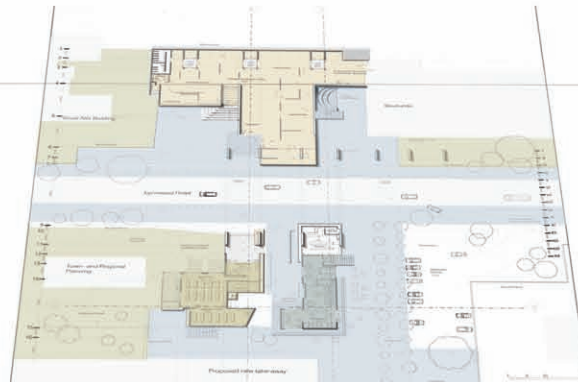


Figure 9.6 Ground level - social, practical and intellectual foyers

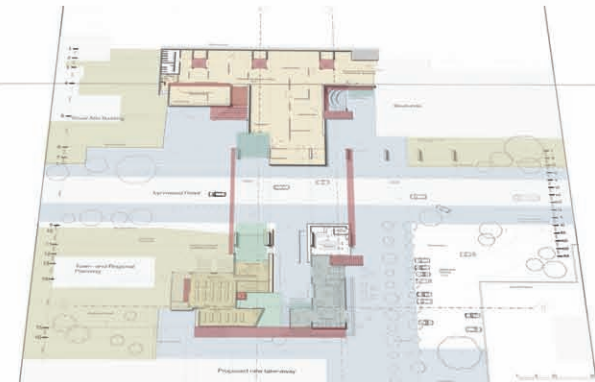


Figure 9.9 Ground level - all foyers

■ appendix a

Bauhaus, Dessau, Germany

Introduction

The way the Bauhaus approached and publicised design changed the world's perception regarding design and architecture. The school's structure and methods of education created a revolution in architecture that has not yet been equalled.

This precedent study aims to identify what it was that made the Bauhaus so influential and timeless. The events that occurred at the Bauhaus have been summarised and opportunities (in terms of events,

management and practical organisation) have been identified in order to establish a well-rounded programme for the proposed BESC.

The practical principles that were applied at the Bauhaus, in terms of organisation and management, have been identified in order to structure the programme for the BESC around these principles. These principles are not necessarily architectural principles, but will determine the architectural

solution or approach to a building that aims to restore the relationship between theory and practice.

The physical Bauhaus building in Dessau, Germany, is evaluated to establish how the building, that facilitated the identified principles, serves its functions. The study is concluded with the identification of principles that would ideally be implemented in a building that serves architectural education.



bauhaus

opportunities

timeline of events at the bauhaus

The events that took place at the Bauhaus are listed in chronological order on the right hand side and the opportunities that have been identified from these events on the left. The opportunities identified range from managerial logistical arrangements, such as the creation of a constitution, to more practical opportunities like workshops and guest lecturing.

dream of a new facility	1915	develops a view to set up an artistic advice centre for industry, crafts and manual trades
restructuring of educational structures	1919	walter gropius replaces henry van de velde as headmaster of school of arts and crafts weimar, germany - restructures it into bauhaus school of design
establish a manifesto unity between departments		the bauhaus manifesto commits it to forging all forms of art into a single whole, to bringing back together all artistic disciplines – sculpture, painting, arts and crafts, and manual trades – and making them integral components of a new art of building
workshops		the bauhaus brings together workshops and classes in stone sculpture, painting, graphics and printing, drawing, anatomy, bookbinding and weaving. also a gold, silver and coppersmith's workshop
events organised by school	1920	first bauhaus evenings for a short while the bauhaus has its own department of architecture
physical skill development	1921	woodcarving and bookbinding departments started
establish a constitution for the school		the weimar bauhaus publishes its constitution. the teachers are called masters, the students apprentices and journeymen
workshops		the bauhaus now incorporates workshops in stone sculpture, woodcarving, furniture, pottery, gold, silver and coppersmithery, mural painting and stained-glass painting, weaving, graphic printing, bookbinding
debating the value of accepting private commissions		the conflict between gropius – who believes the bauhaus should accept outside commissions – and itten – who is opposed to this on principle – comes to a head.
developing a community at the school - social	1922	institution of the bauhaus housing cooperative, designed to forge a single community of everyone at the bauhaus. exhibition of works by bauhaus apprentices and journeymen
exhibitions held at school - social, intellectual, practical relationship development		architecture exhibition at the bauhaus, with works by walter gropius and adolf meyer (and architecture office). gropius's architecture office enters the chicago tribune competition. their design marks a break with the expressionist phase and wins acclaim from the proponents of "neues bauen", who see it as a transition to objectivity
the reality of politics at school		a group of bauhaus students join together to form kuri (german acronym for constructive, utilitarian, rational and international)
public presentation of papers - making research done more accessible to the industry	1923	walter gropius delivers a paper on the unity of art, technology and science in hanover
taking work done at the institute to be exhibited elsewhere		bauhaus exhibition in weimar with several displays (including international architecture, with works by le corbusier, ludwig mies van der rohe, j. j. p. oud and others), publications and special events. walter gropius opens the exhibition with a paper entitled "art and technology – a new unity"
managing the school as a company	1924	plans to establish a bauhaus limited company with the involvement of the state of thuringia are discussed at the ministry of education
formation of a supporting group opportunity for industry to give back to the school		hendrik p. berlage, peter behrens, marc chagall, albert einstein, oskar kokoschka, arnold schönberg and others join together to form the society of friends of the bauhaus

bauhaus

opportunities

timeline of events at the bauhaus

1925	<p>teachers and students address a joint letter to the thuringian government, declaring their intent to leave the bauhaus together</p> <p>official start of classes in dessau. all masters of form, except marcks, move to dessau, while former students, now junior masters, take over the workshops, abolishing the subdivision of the teaching staff into masters of craft and masters of form</p>
former students becoming junior masters	
classes held at another venue while waiting for the completion of the new facilities	classes are held at the municipal school of arts, crafts and manual trades pending completion of the bauhaus building, while the workshops are based in storerooms at a mail order firm
books published by the school	<p>the first of a series of bauhaus books appears</p> <p>the bauhaus in dessau switches to lower case in all its writings</p>
products made and sold	bauhaus ltd. is incorporated to market the products developed by the bauhaus
constant change in programme content - revised	1926
hosting events - increasing the school's social stature	<p>walter gropius criticises shortcomings in the workshops, which he attributes among other things to limited consideration for industrial mass production. the workshops are subdivided into teaching and productive sections</p> <p>topping-out ceremony for the bauhaus building, followed by celebration (festival in white) at the community and youth centre</p>
practical experimentation with the main aim of educating the designers of the future	the workshops move to the bauhaus building and the new constitution is issued. the government of anhalt recognises the bauhaus's new title of "hochschule für gestaltung" (institute of design). study courses lead to the bauhaus diploma. the bauhaus is an institute for design. its purpose is to shape the intellectual, crafts and technical abilities of creatively talented human beings to equip them for design work, particularly construction, and to perform practical experiments, notably in housing construction and interiors, and to develop models for industry and the manual trades
hosting events - increasing the school's social stature magazine produced by school	the bauhaus building is inaugurated in the presence of more than 1,000 guests from home and abroad, arousing major international interest. the first issue of the magazine "bauhaus" appears, and the first buildings completed on the törten estate are presented to the public.
1927	<p>the architecture department opens under the guidance of hannes meyer. the bauhaus magazine presents his latest projects</p> <p>béla bartók gives a concert in the hall, organised by the society of friends of the bauhaus. institution of free painting classes</p>
temporary free education	
hosting events - increasing the school's social stature	1928
interaction with other schools with the same or similar intent	<p>walter gropius asks to be relieved of his duties. beard-nose-heart festival at the bauhaus</p> <p>walter gropius's farewell party. a group of bauhaus members go to moscow where they visit the higher art and technical workshops (vkhutemas).</p> <p>hannes meyer criticises formalist tendencies at the bauhaus and gears it towards scientific principles and the needs of the common people rather than luxuries</p>
exhibitions of work done at school for public viewing - events	the bauhaus exhibits photos by its members. ernst kallai becomes editor of the magazine "bauhaus"
hosting constant debates	bauhaus members debate modern architecture, the bauhaus and vkhutein

bauhaus

opportunities

accepting private commissions to be done by teachers and students
travelling exhibitions of work produced at school
festivals - events - exhibitions
touring exhibitions

money made through projects are paid out to students

products made at school sold for financial independence

the reality of politics at school

focus on architecture - connection between the technology of building and aesthetic issues

revised constitution - no politics

merging workshops

events

exhibition of outsiders hosted at school

other schools follow their example

events

timeline of events at the bauhaus

1929	hannes meyer started as head of department of the bauhaus school. the school received two of its most significant building commissions - schools first profit
	an exhibition of young bauhaus painters goes on tour
	festival of metal
	bauhaus touring exhibition at the basle museum of trades and crafts
	the students become politically more extreme, the kpd (communist party) members among them join together to form kostufra - communist students group. 32,000 reichsmark in license revenues are paid out to the students through the bauhaus ltd
1930	developed in 1929, the bauhaus wallpaper is now available retail and becomes the school's most successful product. eduard heiberg teaches architecture at the bauhaus
	bauhaus carnival with political protests by students, bauhaus attacked in the right-wing press. a group of students start a study on the dessau housing master plan, which three bauhaus members continue after graduating
	hannes meyer is called to account for the growing politicisation of the bauhaus and dismissed by the city of dessau because of communist-oriented students step up their activities
	ludwig mies van der rohe is appointed new bauhaus director. he streamlines study courses and focuses more on architecture, notably the connection between the technology of building and aesthetic issues. workshop activities are slashed. mies van der rohe seeks to keep the bauhaus out of all political conflicts and expels the communist-oriented students
	the bauhaus gets a new constitution which forbids all political student activities
1931	the workshops and architecture department are merged to become the building and interior decoration department
	bauhaus concert
1932	oskar schlemmer paintings exhibited at the bauhaus
	initiated a motion for the closure of the bauhaus. the students petition newspapers and the president of the Reich.
	the bauhaus in berlin is ludwig mies van der rohe's private school
	architecture and design: the international style exhibition in new york, frank lloyd wright sets up the taliesin fellowship.
1933	almost 700 people throughout the building join in the bauhaus festival. each one of the masters design a department of their own.
	ludwig mies van der rohe dissolves the bauhaus at the start of the summer semester with the masters' consent.

governing principles:

to guide the design process of a successful integrating facility

practical principles to be implemented

Students trained to integrate industry and education

Students participate in the actual construction of buildings

Utilizing the facility as a type of incubation centre for students just leaving the university

Moving away from "expert culture" - including the public:

public space

exhibition space

public debates

restaurant

events

virtual access to knowledge

Developing a new lifestyle through architecture

Constant reinvention of the curriculum

Encouraging "vertical brigades" between the different years

A postgraduate facility

Unification of the different departments

The opportunities identified are re-evaluated and examined to understand how the Bauhaus achieved such success.

principles from bauhaus management

- have the dream for a more integrated facility
- set up a manifesto - unity between departments
- events organised by school
- physical skill development at school
- establish a constitution for the school
- encourage and administrate constant debates - both formal and informal
- accept private commissions - executed by lecturers and students
- develop a community within the faculty
- exhibitions of work produced at the school
- public presentations of research done at the school - making research more accessible to the industry
- work produced at school in exhibitions at other locations
- manage the school as a company
- formation of an alumni group/support structure - opportunity for the industry to give back to the school
- former students became junior masters
- books published by school
- products made at school are sold
- constant revision of programme content
- hosting social events
- practical experimentation
- regular interaction with other schools with similar intentions and goals
- host festivals as events
- money made from private commissions invested back into school
- revise constitution
- merging workshops
- exhibitions by others hosted by school
- assist other schools that follow the example

bauhaus

opportunities

what happened at the bauhaus

practical: course structure	students had to take a 6 month preliminary course at the bauhaus
practical: course content	course involved painting and form experimentation
workshops	3 years of workshop training by 2 masters: an artist and a craftsman
actual construction of buildings	studies in architectural theory and practice - working with the actual construction of buildings
social and intellectual interaction	day-to-day contact with some of the most important practicing artists of the time
marketing and image of the school	the school was masterfully marketed in germany, acquired reputation and an influence out of proportion to its physical reality.
events - social interaction	the school came to be known for its grand masked balls and kite processions, experimental light and music evenings, and "triadic" abstract ballets.
events - social interaction	these events unified many students from different ages and nationalities into a community - propagating an alternative way of life
intellectual interaction	gropius created a laboratory to teach and expand the existing "deutsche werkbund" theories of design
focus on the direct context - pretoria as canvas	what was new about the school was its attempt to integrate the artist and the craftsman, to bridge the gap between art and industry
actual construction of buildings	bauhaus was the antithesis of the arts and crafts movement - no more romance of hand made art in the countryside: its emphasis was urban and technological, and it embraced the 20th century machine culture
actual construction of buildings	the bauhaus manifesto proclaimed that the ultimate aim of all creative activity is "the building"
actual construction of buildings	students participated right from the start in building projects
social, intellectual and practical relationships	a modern glass, concrete and steel building was erected. gropius designed classrooms, dormitories and faculty housing that were grouped in a complete artistic community
merging the departments	in response to past criticism of the school's curriculum gropius emphasised the merger of the arts and industry - studios that produce home appliances, textiles, accessories and furniture
architecture that reflects the time and condition	end of ww1, beginning of a new era - wanted to create an architecture that reflects the time and condition

bauhaus

opportunities

what happened at the bauhaus

linking students to the industry through training	the school's philosophy was based on the idea that students must be trained to work with the industry
linking students to the industry through training	realization that the way architects, craftsmen and artists were educated would have to change to incorporate the integration between industry and education
actual construction of buildings	the bauhaus accepted commissions and produced buildings
actual construction of buildings - financial independence	an architectural school that was financially self sustainable
no specific programme social distinction abolished a concept	"the bauhaus was not an institution with a clear program. it was an idea. it was the first college in visual arts in which the social distinctions between the traditionally academic and non-academic disciplines were abolished and all categories of visual art had equal value in a complete whole. what happened was not so much the development of a style but the development of an artistic, social and educational concept."
achieved through social and intellectual interaction	some new methods based on specific types and standardization were employed not only to produce new architecture but to anticipate a new lifestyle through this architecture
practical: course content	a curriculum was established which included all relevant subjects such as planning, design, draftmanship, construction and town planning - the "design of life's processes"
established and determined through social and intellectual interaction	the concrete conditions in society and the factors determining architecture and its use formed the starting point for all planning and design
better interaction between students	students from various years worked together in "vertical brigades" on the design and erection of buildings
a postgraduate school	the majority of the new student intake at the bauhaus had already completed a course of studies and the bauhaus became a "postgraduate school"
practical: course content	"the studies of essentials" or the "collective satisfaction of the people's needs" changed to "the spatial implementation of intellectual decisions" in an aesthetically consummate fashion
workshops	practical work in the workshops was the core training element at the bauhaus
unification of the different disciplines	the students were called apprentices, journeymen and master craftsmen in accordance with artisan tradition
	crafts work was seen as an ideal unity of artistic design and material production

bauhaus

opportunities

design of the bauhaus

no formal structure initially - opportunity for development

no architectural department until 8 years after establishment

workshops

the workshops were integrated with the building's interior design

transparent building - showcasing architecture

building: the glass curtain wall suspended in front of the load-bearing framework defines the exterior of the workshop wing and openly shows the constructive elements

emphasis through the right use of materials and composition

the glass surfaces overlap the corners - creating the impression of lightness

functional logic and individual design of different parts

all parts of the bauhaus was separated according to their function and individually designed

hierarchy of space and separation of programmes for functional purposes

the two wings are asymmetrically - today: bauhausstrasse and gropiusallee

building can be approached from all sides - not only one route or sequence of experiences

no central viewpoint of the building - observer must move around entire structure to fully experience it

limited amount of defining elements on the building - accessible to all

main elements of building: the glazed, 3 storey workshop wing the block for the vocational school (3 storeys) with honest rows of windows 5 storey studio building with projecting balconies

inhabited bridge as part of the design

2 storey bridge for administration and architectural offices links the workshop wing with the vocational school

connecting or foyer spaces

a single storey building with a hall, stage and canteen - festive area - connects workshop wing with the studio building

possibility of private accommodation facilities

the studio building housed 28 studio flats for students and junior masters - each 20m²

sensitive design of "event spaces"

the festive area is defined by portals between the foyer and the hall, a folding partition between the stage and the canteen, ceiling design, colour design - creating spatial coalescence

pallet and aesthetic design of building - contrasts

dark windows in contrast to the light pallet of the colour design

quality of interior spaces

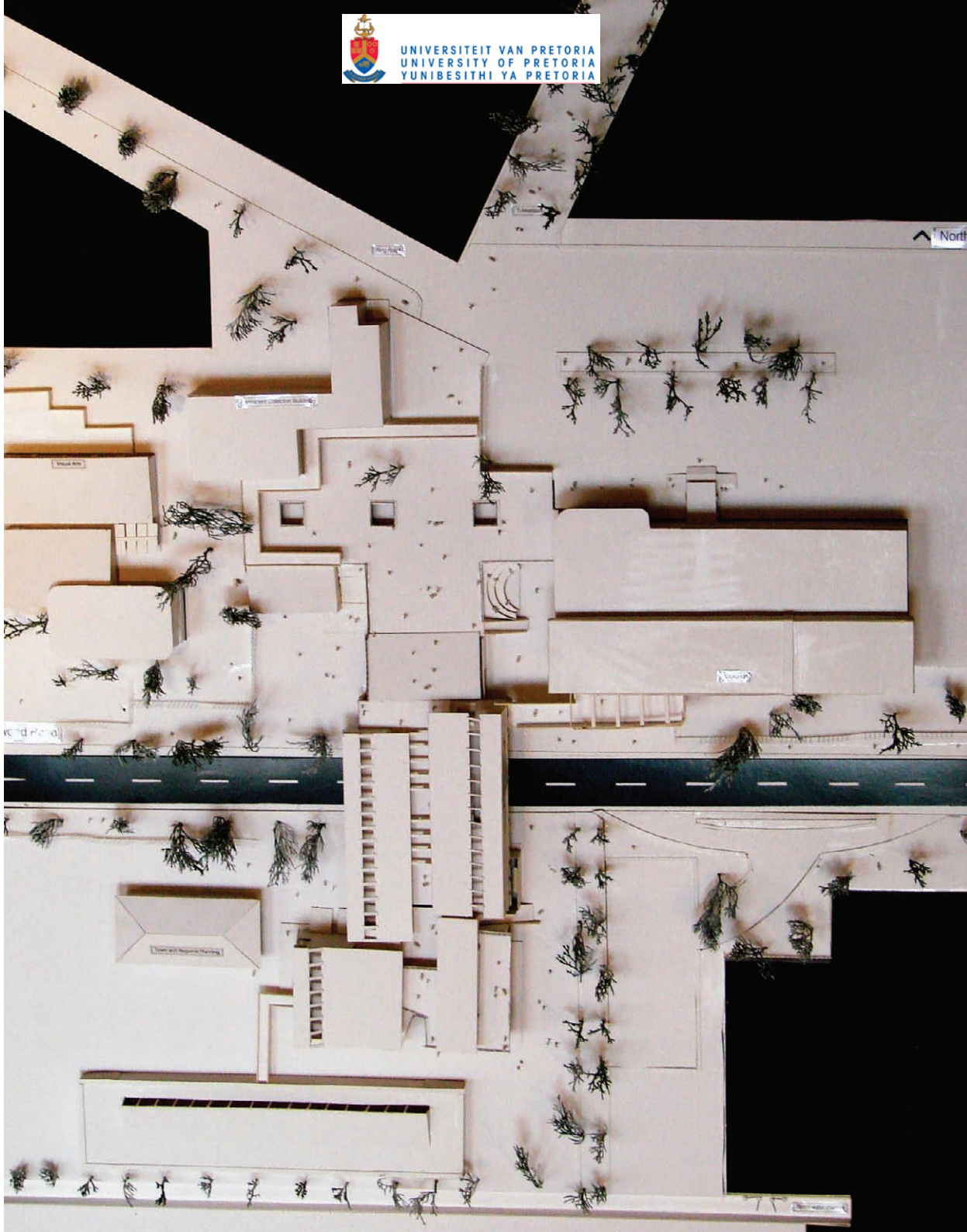
the construction of the building is accentuated through the effective colour design on the interior

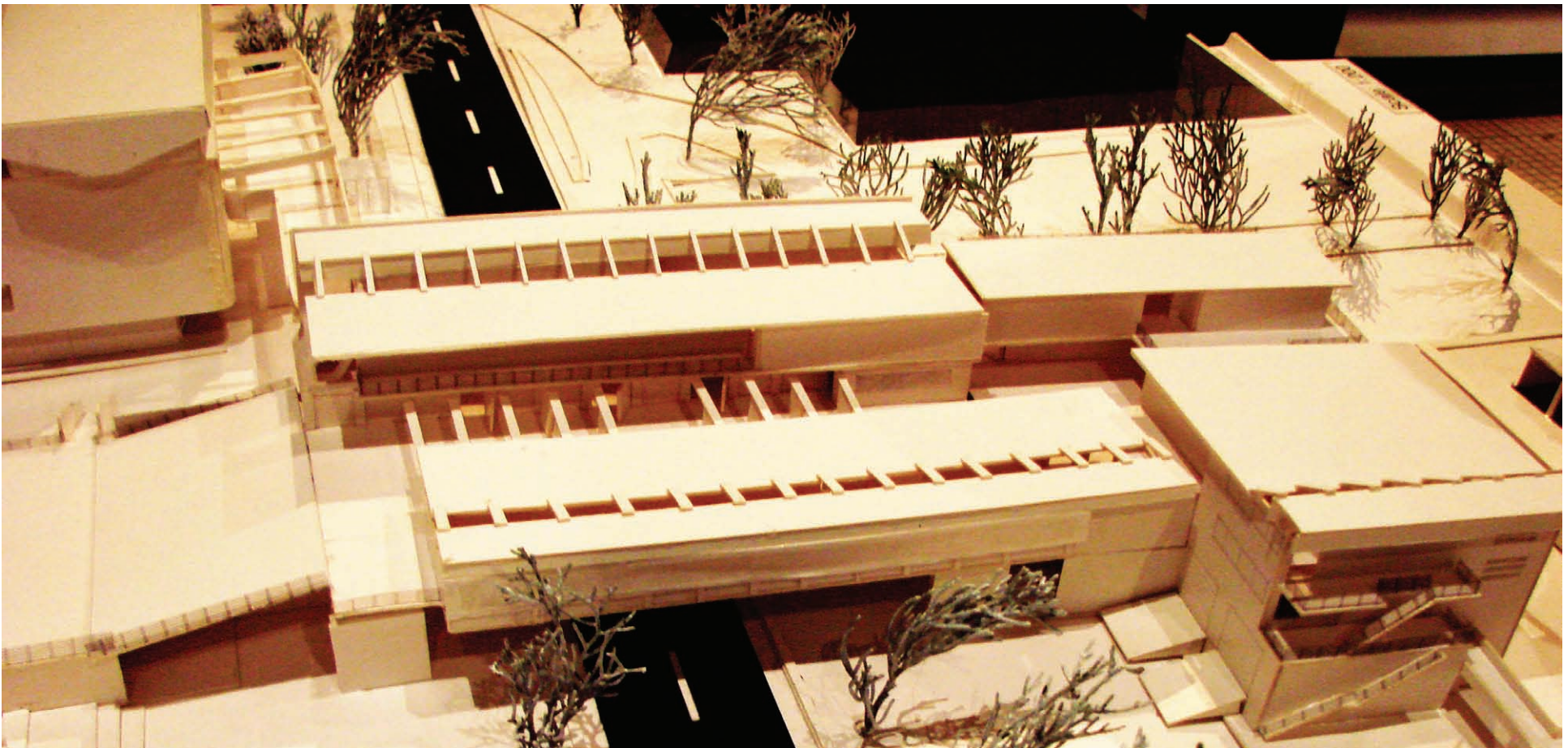
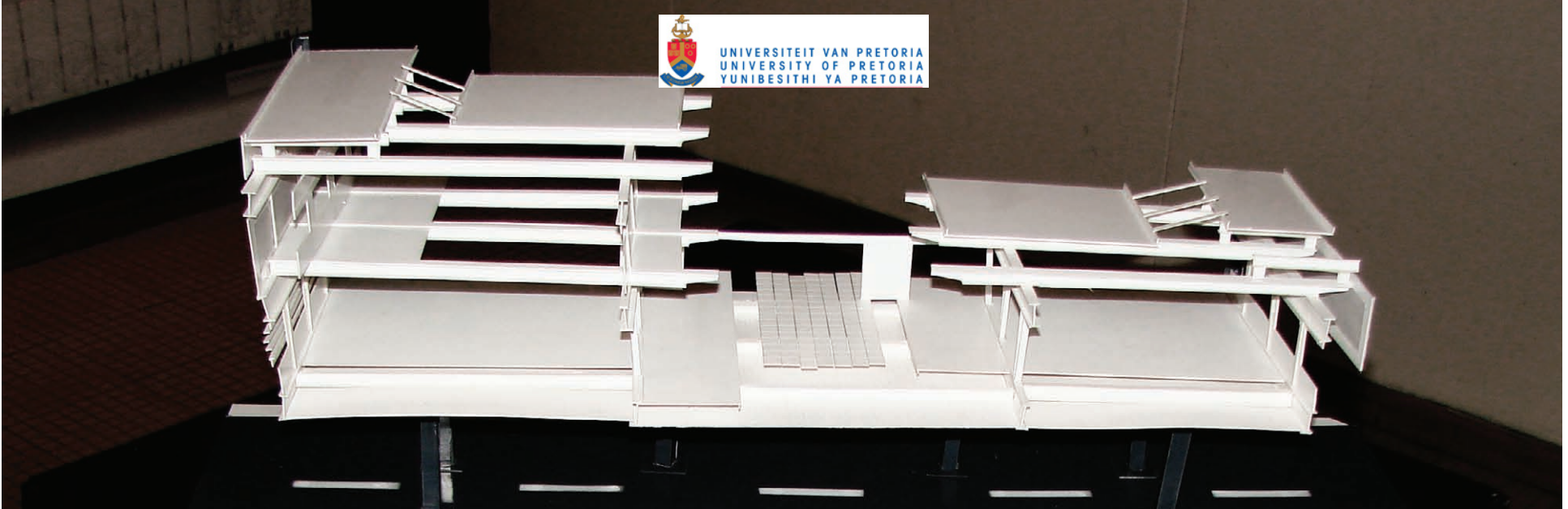
(The information in Appendix A was compiled from information obtained from a series of websites, as referenced (www.designhistory.org, www.froebelweb.org and www.bauhaus-dessau.de/). The analysis, opportunities identified and conclusions were reworked and the graphic presentations are done by the author.)



appendix **b**

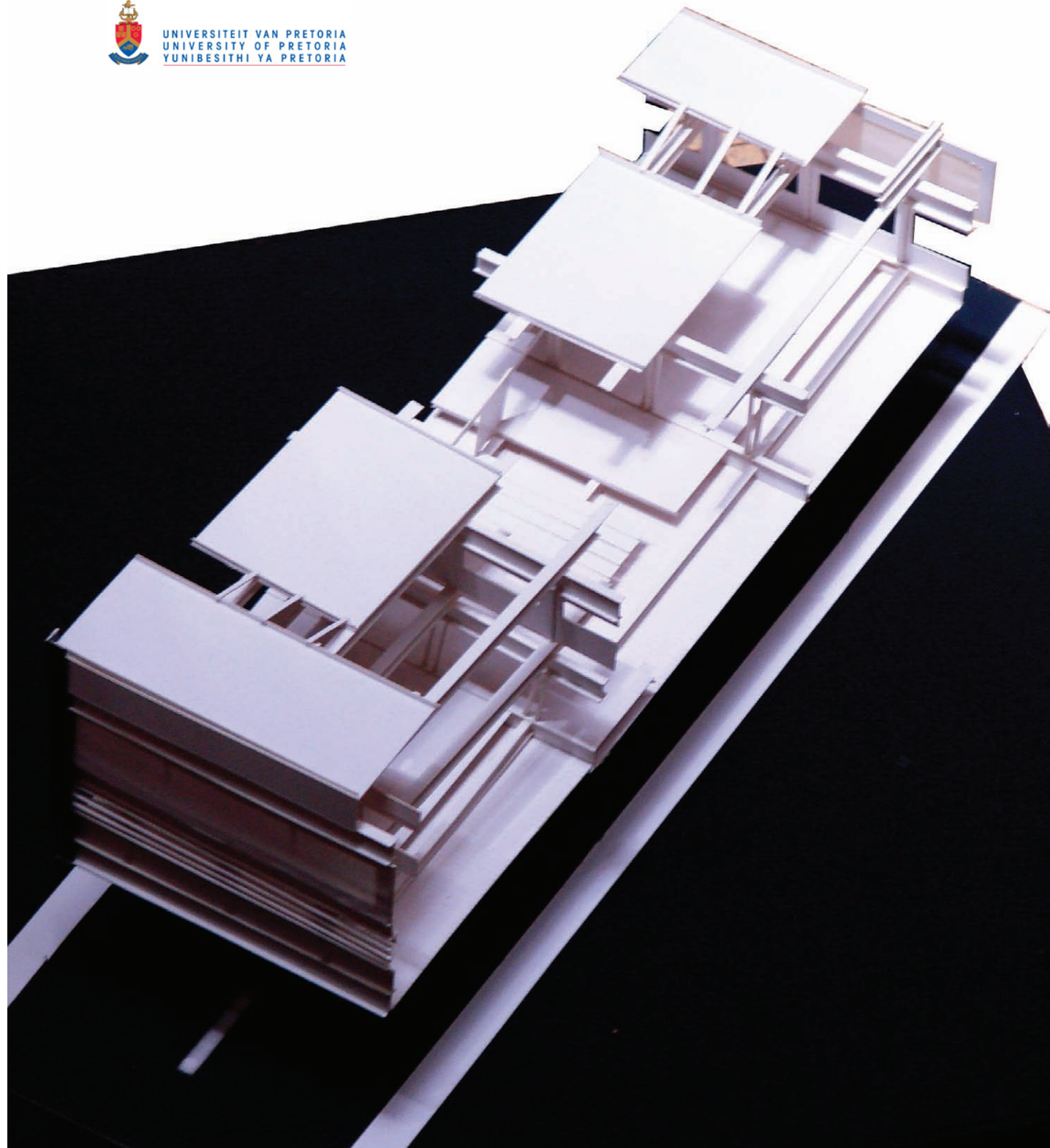
Exhibition Images

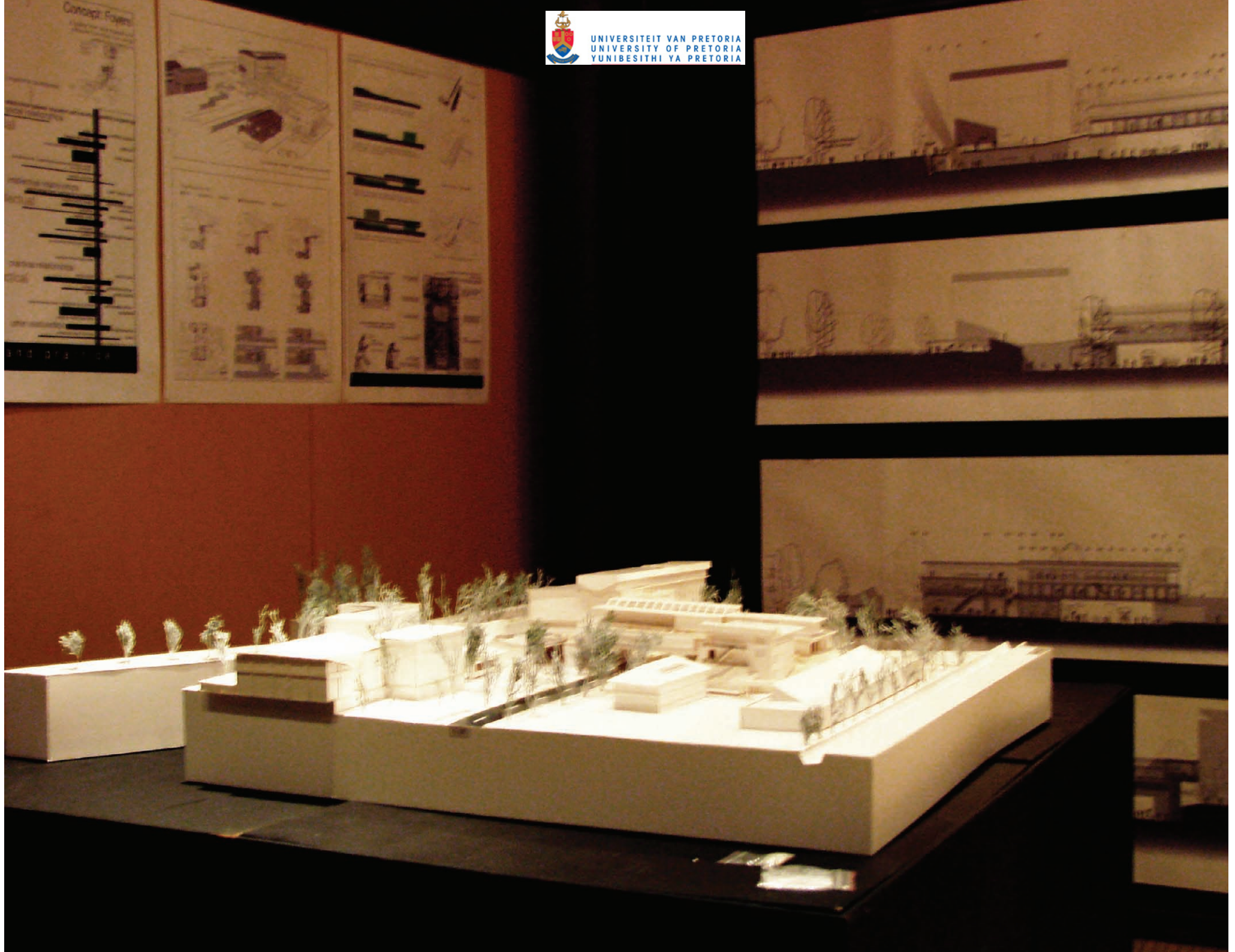






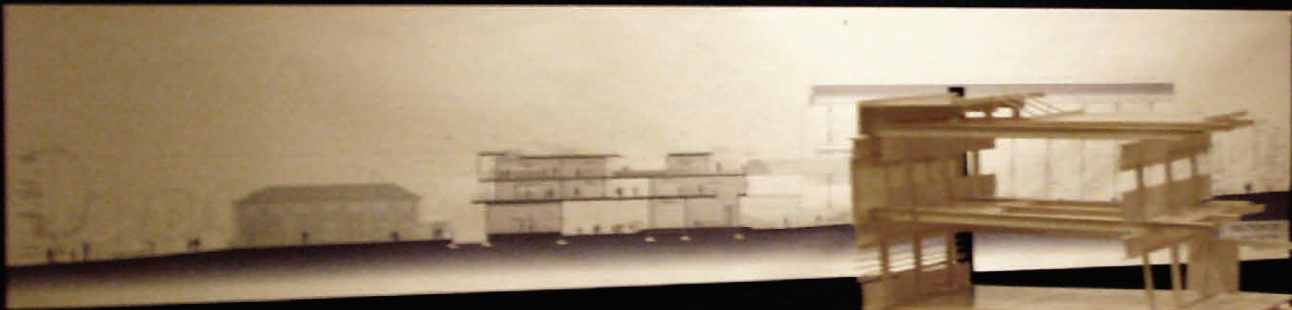
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View of northern street edge



View of circulation and exhibition space on bridge



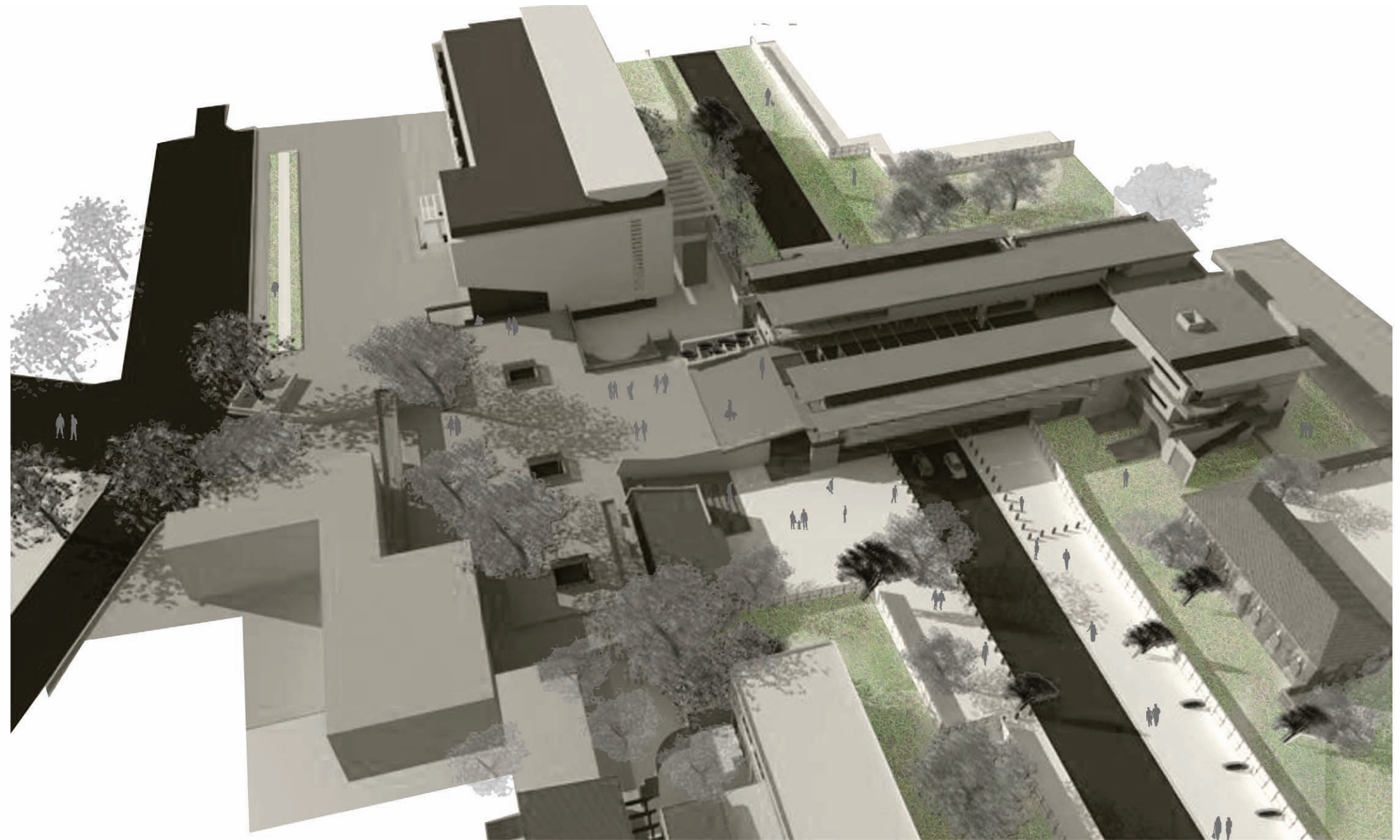
View from new Boukunde extension



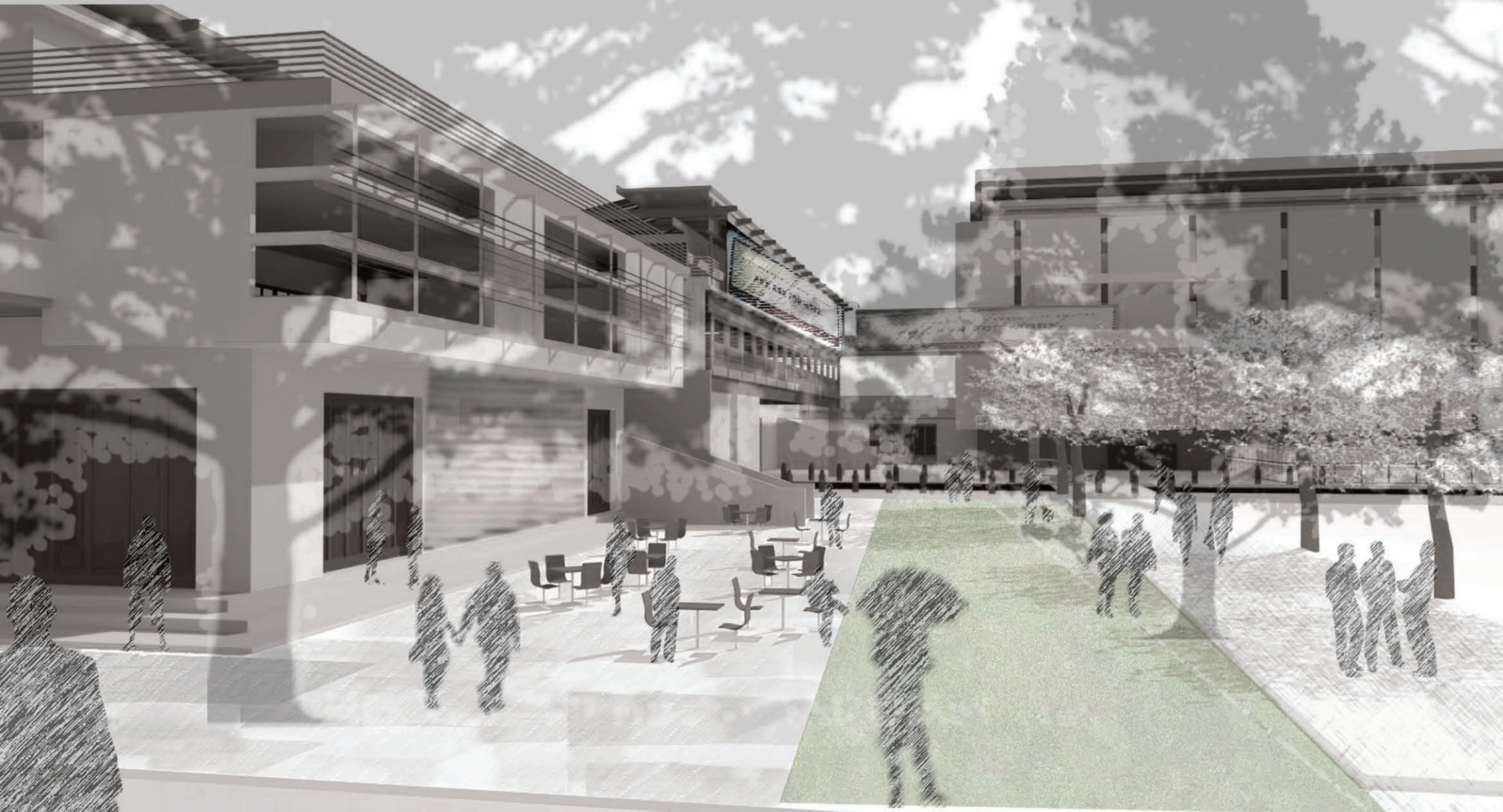
View of connection to Boukunde



Western view



Aerial perspective



Eastern facade and connection to Boukunde

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