GARE DU MUNDANEUM - CULTURAL MOORING POINT
CONTEXT & OBJECTIVES
PAUL OTLET’S MUNDANEUM: SYSTEM OF CARDS CLASSIFYING KNOWLEDGE

HIS GOAL FOR THE MUNDANEUM: LEAD TO CULTURAL UNDERSTANDING AND WORLD PEACE
RELEVANCE OF THE MUNDANEUM TODAY?

OBJECTIVES
MUNDANEUM IS TO BECOME A FRAMEWORK TO SUPPORT CULTURAL ACTIVITIES
IM NOT INTERESTED IN MAKING MUSEUMS...
BUT THE MUNDANEUM COULD ENHANCE PEOPLES LIVES ON A DAY TO DAY BASIS
THE SITE OF MIDI

GARE DU MIDI HAS 22 TRACKS

THE LARGEST STATION OF BELGIUM

THE TALLEST TOWER 150 METERS
THE LARGEST MARKET IN BELGIUM

PERHAPS THE LARGEST IN EUROPE
MARKET AREA

OVER 35000 M²
LINEAR FESTIVALS ALONG THE BRUSSELS RINGROAD (PENTAGON)
LINEAR FESTIVALS 2KM LONG
THE MUNDANEUM IS TO BECOME THE FRAMEWORK FOR CULTURAL ACTIVITIES

A MOORING POINT FOR LARGE SCALE CULTURAL ACTIVITIES

A MOORING POINT FOR THE MARKET AND OTHER LARGE SCALE EVENTS

THE MUNDANEUM AN INVESTIGATION INTO RELATIONSHIP BETWEEN INFRASTRUCTURE AND CULTURAL ACTIVITIES.
A SYMBIOSIS BETWEEN THE MARKET AND THE STATION
SITE PROPOSAL
MASTERPLAN TO INCLUDE THE TOWER

TOWER IS THE SYMBOL OF THE MUNDANEUM FROM A DISTANCE
BRUSSELS CAPITAL OF EUROPE MOTTO:
“UNIFIED IN DIVERSITY”
HOW CAN THE MUNDANEUM EXPRESS THIS?
THE GRID AS A SPATIAL ORGANISATIONAL TOOL

STEP 1 CONTINUE URBAN BLOCK OF CITY ALLOW CONNECTION ACROSS SITE
STEP 2: SPLIT URBAN BLOCK IN 1/4 INCREASE PERMEABILITY
STEP 3: CREATE A VOID TO DEFINE MASTERPLAN - MARKET - STATION HALLS
Mundaneum is to become the overlaying of different expressions of the grid at different scales all with their own internal logic.
DESIGNING WITH LIGHT

EXISTING BARRIER

UNDERGROUND
NO LIGHT

ABOVE MARKET

VOIDS IN GROUND
SOME LIGHT

ABOVE MARKET

DESIGNING WITH LIGHT
DESIGNING WITH LIGHT

ABOVE MARKET

22 TRACKS
POOR NATURAL LIGHT

CASCADING PIT
INCREASE LIGHT STRUCTURE?

ABOVE MARKET

THICKNESS
WAFFLE IS CREATED
LARGE SPANS ARE ACHIEVED
TUNNELS IN BRUSSELS ARE NOT NEW...
OPERATION 1: 300 X 224m VOID
SIZE FOR 23 PLATFORMS
OPERATION 2: CASCADING TRAIN HALL

TRAINS AND UNDERGROUND TRANSPORT AT DIFFERENT LEVELS

DEEPER IN THE GROUND THE FURTHER YOU CAN TRAVEL
OPERATION 3: STATION FRONT
OPERATION 4: THE WAFFLE, BRINGS LIGHT INTO STATION - MARKET ABOVE

24M WIDE, THE LENGTH OF A CENTRALISED MARKET STALL ARRANGEMENT WITH CIRCULATION ON TWO SIDES
OPERATION 5: SHAPING ANGLE OF WAFFLE FOR INCREASED LIGHT INTO STATION
OPERATION 7: MOORING POINTS ON POINT GRID

POINTS FOR SUPPORTING FREQUENT LARGE SCALE CULTURAL ACTIVITIES WITH SERVICES
AND DIMENSION OF VERTICAL CIRCULATION CORE 8X8m
OPERATION 8: RAMPS TO STATION BELOW - CONNECTED HALLS BELOW GROUND
CULTURE AND COLOUR

RED: CHINA:
RUSSIA:
WESTERN COUNTRIES:

CELEBRATION
COMMUNISM
AGGRESSION, DANGER, PASSION
SECONDARY

ORANGE: NETHERLANDS
GREEN: IRELAND
TODAY CULTURES ARE LESS PURE. CULTURES ARE MORE LIKELY TO BE INFLUENCED BY OTHERS, EXCHANGE IDEAS AND METHODS. CULTURES ARE MORE RICH, WITH MANY MORE POSSIBILITIES AND MORE COLOURS.
ARCHITECTURAL DESIGN
ESCAVATION FOR PLATFORMS - 50m DEEP
DESCENT FROM CITY TO CASCADING TRAIN PLATFORMS

CITY - HALLS - CONCOURSE - PLATFORMS
CONCOURSE WITH SHOPS
STRATA - EXPRESS THE ESCAVATION OF THE TRAIN HALL
PROGRAMME OF THE WAFFLE

OFFICES RUNNING IN SHORT DIRECTION

SEMI PUBLIC FUNCTIONS IN LONG DIRECTION (RESTAURANT, AUDITORIUMS, EXHIBITION SPACE

WHERE TWO FUNCTIONS MEET ARE THE MOORING POINTS, VERTICAL CIRCULATION
VERTICAL CIRCULATION OF MOORING POINTS
FACADE DESIGN

ALLOW FOR VIEWS FROM THE INTERIOR OF THE WAFFLE TO THE MARKET AND TO THE STATION BELOW

COLOURED PERFORATED ALLUMINIUM LOUVRE BOXES ARE PLACED STRATEGICALLY
THE FACADE IS DESIGNED TO BLOCK DIRECT SUMMER SUNLIGHT
MOORING POINTS SUPPORTING DIFFERENT SCALE CULTURAL ACTIVITIES

THEY PROVIDE ACCESS TO SEMI PUBLIC AREAS OF THE WAFFLE, ALSO FIRE ESCAPE

FACILITIES SUCH AS ELECTRICITY AND WATER FOR THE MARKET

PRIMARY COLOURS: SUGGESTION THAT THE MOORING POINTS PROVIDE THE FRAMEWORK FOR CULTURAL ACTIVITIES TO OCCUR: HENCE THE COLOURS MIX FROM HERE
PRIMARY COLOURS FOR COLOUR CODING

RED: VERTICAL CIRCULATION

BLUE: KIOSKS (INFORMATION BOOTH, POLICE STATION, TOILETS, MARKET AUDITORS OFFICE)

YELLOW: BACK OF HOUSE ACCESS TO WAFFLE
RAMPS ALLOW FOR TWO DIFFERENT FUNCTIONS OF THE MARKET AND ACCESS TO THE STATION TO OCCUR SIMULTANEOUSLY
STATION HALLS CONNECTED BELOW GROUND
DESIGN RULES FOR THE HALLS

GLASS FOR TRANSPARENCY INTO HALL

STRUCTURE

INNER LAYER FOR MODULATING LIGHT
CONTROLING INTENSITY OF LIGHT AND COLOUR
WARM COLOURS FOR STATIONARY ACTIVITIES - WAITING AREA - QUEUING FOR TICKETS
COOL COLOURS FOR TRANSITIONARY ACTIVITIES - CIRCULATION
WAITING HALL FACADE DESIGN
LIGHT ANALYSIS
WAITING HALL FACADE DESIGN
SUMMER AFTERNOON
WAITING HALL FACADE DESIGN
WINTER AFTERNOON
WAITING HALL FACADE DESIGN

DESIGN RULES:
1. START WITH POINT GRID OF LIGHT
2. MINIMISE SUMMER LIGHT WITH SMALL APERTURES
3. MAXIMISE WINTER LIGHT WITH LARGE APERTURES
4. COLOUR: WARM HUE FROM TRANSLUCENT ONYX MARBLE
5. COLOUR: COLD COLOURS POINTED AROUND SEATING
WAITING HALL FACADE DESIGN
MID JULY
NOON
WAITING HALL FACADE DESIGN
MID JULY
1PM
WAITING HALL FACADE DESIGN
MID JULY
2PM
WAITING HALL FACADE DESIGN
MID JULY
3PM
WAITING HALL FACADE DESIGN
MID JULY
4PM
WAITING HALL FACADE DESIGN
MID JULY
6PM
WAITING HALL FACADE DESIGN
MID JULY
7PM
WAITING HALL FACADE DESIGN
MID JULY
8PM
WAITING HALL FACADE DESIGN
LATE OCTOBER
11AM
WAITING HALL FACADE DESIGN
LATE OCTOBER
NOON
WAITING HALL FACADE DESIGN
LATE OCTOBER
1PM
WAITING HALL FACADE DESIGN
LATE OCTOBER
3 PM
POINT LIGHT SOURCE FOR WAITING HALL:
A REAL EXPERIENCE OF TIME PASSING BY  EXPRESSED BY MOVEMENT OF LIGHT ACROSS THE HALL

WAITING HALL FACADE DESIGN
LATE OCTOBER
3 PM
A BUILDING MUST TOUCH AT LEAST 3 SIDES OF THE PLOT

IF A BUILDING TOUCHES 4 SIDES - MAX HEIGHT IS 30m
IF A BUILDING TOUCHES 3 SIDES - MAX HEIGHT IS 45m
IF A BUILDING TOUCHES 4 SIDES IT CAN BE UP TO 60m BUT PLOT NORTH OF BUILDING MUST BECOME A SQUARE
A BUILDING CAN OCCUPY 2 PLOTS IF THERE ARE NO STREETS CROSSING FROM ADJACENT URBAN CONTEXT
THE END BUILDING WHERE THE TRAIN DESCEND BELOW CAN CREATE A 4 PLOT BUILDING
AN END BUILDING CAN HAVE A MAXIMUM HEIGHT OF 100m, SO AS NOT TO COMPETE WITH TOWER OF MUNDANEUM (150m)
NO BUILDING CAN CROSS THE 24m WIDE NORTH SOUTH ROADS

THE END BUILDING WITH UP TO 4 PLOTS MUST NOT OBSTRUCT THIS ROAD AT GROUND LEVEL
SOME BUILDING TYPES THAT CAN SUIT THE PLOT SIZE
EXPERIENCE OF LIGHT & SOUND
THANK YOU
ANDREAS LAMBREING
PS GRADUATION
NOV 5TH 1:00PM
ZAAAL B